



DMWM Response to Comments

District Solid Waste Management Plan Format, version 4.0

Agency Contact for this Package

Ernie Stall, DMWM, (614) 728-5356, ernest.stall@epa.ohio.gov:

Ohio EPA made the District Solid Waste Management Plan Format, version 4.0, available for public comment from January 12, 2016 to March 1, 2016. This document summarizes the comments and questions received during the comment period.

Ohio EPA reviewed and considered all comments received during the public comment period.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent manner. The name of the commenter follows the comment in parentheses.

COMMENTS CONCERNING APPENDIX B

Comment 1: **Definitions of urban and rural drop-offs. Should the definitions of urban and rural drop-offs be re-visited based on the availability of more data and the analysis of that data?** (GT Environmental, Inc.)

Response 1: *Ohio EPA believes this comment refers to the default population credits assigned to drop-offs for purposes of achieving Goal 1 of the state solid waste management plan.*

A number of years ago, Ohio EPA studied the use of drop-offs in an effort to determine whether the default credits assigned to drop-offs were justified or if the credits needed to be adjusted. Based on Ohio EPA's findings, the population credits assigned to drop-offs, particularly rural drop-offs, are generous. While that data is old, Ohio EPA doubts that a new study would show significantly different results than those from the original study.

Ohio EPA intends to have the newly formed Ohio Materials Management Advisory Council review the infrastructure goal when the council revises the state solid waste management

plan. How credits assigned to recycling opportunities is just one of the topics that will likely be discussed.

Comment 2: Regarding Identification Numbers for Recycling Opportunities, Haulers, Compost Facilities, etc. We suggest that Ohio EPA develop a uniform naming system rather than letting the districts devise their own. Doing so would make it easier to aggregate, sort, etc. statewide data if you (or anyone else) chose to do so in the future. We would suggest using the SWMD abbreviation in the name, plus the type of recycling opportunity, etc. (GT Environmental, Inc.)

Response 2: Format 4.0 now prescribes a system for identification numbers.

Ohio EPA appreciates the suggestion to structure identification system in a way that would allow Ohio EPA to use the identification numbers for statewide research. At this time, Ohio EPA does not have a means of using the identification numbers in that manner. For now, the identification numbers are intended to maintain consistency within a solid waste management plan. At this time, they won't be used to categorize or track programs outside of the solid waste management plan.

Ohio EPA's database for solid waste management plans allows the Agency to track program type. Ohio EPA can query the database to obtain statewide data.

Comment 3: Identify what constitutes an "Other Drop-Off." For example, should Districts identify all known locations that accept one or two materials, such as plastic bags or packing peanuts? (GT Environmental, Inc.)

Response 3: Ohio EPA intended for SWMDs to use this table to inventory publicly-available drop-offs that did not meet the minimum requirements to be a full-service or part-time drop-off (as defined in the 2009 State Solid Waste Management Plan). An example is a drop-off that collected less than 5 materials. Ohio EPA did not intend for SWMDs to list all locations where recyclable materials were collected (such as those mentioned by the commenter). After evaluating the need for the table, Ohio EPA determined that the table is not necessary and removed it.

Comments Concerning Table B-4

Comment 4: This table asks for all service providers and the types of services offered to each sector. Some Districts that operate their own facilities have significant amounts of information on all haulers. Consider adding a note in the instructions telling Districts to remove private construction, plumbing, and other companies that haul their own waste but do not provide collection services to residents, businesses, or industries.

Consider instructing SWMDs to exclude from this table public sector entities that delivered waste to disposal facilities from community clean-ups but do not provide regular collection services. (GT Environmental, Inc.)

Response 4: Ohio EPA added language to the instructions for Table B-4 that reads “This table will list recycling and trash collection service providers. List only those haulers that provide traditional collection services to residents and businesses. Omit entities that do not provide regular collection services. Examples of entities to omit are a company that hauls its own waste (such as a construction company) or public sector entities that haul waste from events (such as a county engineer’s office that transports waste from community clean-ups).”

Comment 5: Table B-4. Consider identifying how SWMDs should classify haulers that provide services to residential customers via dumpster rental but do NOT provide bin/bag collection (i.e. would this be considered “commercial” instead of “residential”?) (GT Environmental, Inc.)

Response 5: For the residential sector, SWMDS are meant to list companies that provide traditional trash collection/recycling services (i.e. curbside collection of trash and recyclables), and the table is structured to capture those companies. SWMDs that have companies with atypical services or that want to provide a more comprehensive inventory can include service providers that offer other types of services. However, in its plan, the SWMD may need to provide additional information (such as in footnotes) to explain the services offered by a provider that are not traditional collection services.

The service described in the comment seems more like a commercial program than a residential program, particularly if the dumpsters are used as temporary trash containers for projects, like home renovation.

Comment 6: **Table B-4. Consider changing heading “Curbside Recycling Services” to “Recycling Services” since many haulers may provide recycling pick-up to commercial and industrial sector businesses but do so via compactors/roll-offs vs. curbside collection.** (GT Environmental, Inc.)

Response 6: Ohio EPA made this change.

Comments Concerning Table B-5

Comment 7: **Table B-5. Identify whether Table B-5 should include tonnage for community programs that use registered composting facilities to manage yard waste (i.e. include, but account for double counting in an adjustment table).** (GT Environmental, Inc.)

Response 7: SWMDs can account for material collected through a community program and sent to a registered composting facility in one of two ways:

- *by associating the weight of material with both the community program and the composting facility and making an adjustment for double counting in Table E-4. This is the most straightforward way of accounting for the material; or*
- *by attributing the quantity to either the composting facility or the community’s program but not both.*
 - *attributing the quantity to the community’s program, then reduce the quantity for the composting facility by that amount and include a note or text to explain*
 - *attributing the quantity to the composting facility and not the community’s program and include a note or text providing the amount of material collected through the community’s program and which facility the material was sent to.*

Comment 8: **Table B-5. Identify whether Table B-5 should include food waste tonnage reported by haulers.** (GT Environmental, Inc.)

Response 8: *The instructions clarify that food waste tonnage reported by haulers should be listed in Table E-4 (Other Recycling Programs/Other Sources of Data). Ohio EPA corrects the quantities reported by owners/operators of composting facilities to remove the quantities of food waste delivered by haulers. Therefore, SWMDs will not need to make any corrections for double counting for the food waste hauler data.*

Comment 9: **Table B-5. This table has a section for mulching operations. Wood waste is often reported by facilities to SWMDs but NOT required on OEPA Compost Reports. Including mulching information in B-5 is not an issue, but may show as a discrepancy if OEPA attempts to compare OEPA Compost Reports with totals listed in the table. (GT Environmental, Inc.)**

Response 9: *Because facility owners/operators do not report quantities of wood waste used to produce mulch to Ohio EPA but SWMDs do, there is already a discrepancy between Ohio EPA's compost reports and SWMDs' data. Including mulching operations in the table is Ohio EPA's attempt to reconcile differences between quantities reported to Ohio EPA and quantities reported to SWMDs and to account for the sources of all materials a SWMD credits to its reduction/recycling rate.*

COMMENTS REGARDING APPENDIX C

Comments Concerning Table C-1

Comment 10: **The instructions first say it is safest not to delete columns, then they instruct users how to delete columns, which may be confusing. Perhaps a better approach would be to instruct SWMDs to hide columns if not needed, and then provide instructions for this. (GT Environmental, Inc.)**

Response 10: *Ohio EPA apologizes for this discrepancy and corrected it.*

Comment 11: **Review table labels (should "Reference Year" population be included?). (GT Environmental, Inc.)**

Response 11: *Ohio EPA included "Reference Year" in the title of the table.*

Comments Concerning Table C-2

Comment 12: **The table shows 20 years, but GT was under the impression that Format 4.0 discouraged SWMDs from projecting out that far. GT suggests only including 15 years in the table and giving SWMDs the option to include additional years if desired.** (GT Environmental, Inc.)

Response 12: *Ohio EPA allows SWMDs to limit projections to six years. That is different than discouraging SWMDs from projecting beyond 6 years or even beyond 15 years. A SWMD can project for as many years as it wants.*

A SWMD will use Appendix C to project population for more than just the years in the planning period. A SWMD will also use Appendix C to project populations for the years between the reference year and the first year of the planning period. Including 20 years ensures that all of those years are covered.

Comment 13: **Consider setting up the table to include 2010, 2015, 2020, etc. under the "Year" column. Then, build in the formulas for straight-line projection in the years between each five-year interval.** (GT Environmental, Inc.)

Response 13: *The workbook is structured such that a SWMD enters the reference and first years of the planning period on worksheet A. Links throughout the workbook will automatically populate the reference year, the four prior years, and the years in the planning period for other worksheets, including worksheet C-2.*

Comment 14: **“ODSA Population Projections: County Totals.” This is an older document than the ODSA annual population projections by County, City, Village, Township, so it may be necessary for SWMDs to normalize or adjust the statistics if they are using both resources to complete their population projections.** (GT Environmental, Inc.)

Response 14: *The method for projecting population provided in Appendix C is a default method, and the worksheets for Appendix C incorporate that default. Ohio EPA is aware that the default method may result in populations that are different than ODSA’s annual projections. Ohio EPA provided the default in an effort to make projecting population as easy as possible. In most cases, any differences between a SWMD’s projections caused by using the default method and ODSA’s projections should be minor. For that reason,*

Ohio EPA did not believe that the differences merited the effort needed to bring the projections in line with ODSA's projections.

A SWMD is not required to use Ohio EPA's default projection method. However, a SWMD wanting to use a different method or different data will need to alter the worksheets.

COMMENTS REGARDING APPENDIX D

Comment 15 **Excluded waste. Regarding the elimination of projections for excluded waste, GT understands that Ohio EPA is trying to remove unnecessary information, but does this (< 10% of total) capture what's needed? If excluded waste includes C&D, residual waste disposed at captive landfills, etc., then it seems the real issue is, "Will this waste potentially take up space at an MSW landfill?" It's very unlikely that coal combustion waste will ever go to an MSW landfill. Therefore, why require a SWMD to include it in their plan? (GT Environmental, Inc.)**

Response 15: *Ohio EPA agrees with this comment. Ohio EPA adjusted the workbook so that only excluded waste disposed at publicly-available landfills is considered when determining whether excluded waste disposed in the reference year was more or less than 10 percent of total waste disposed.*

Comment 16: **Adding/Deleting Rows in Tables. The instructions tell the user not to delete rows because of the formulas. Ohio EPA may consider instructing the user to "copy" the previous row when needing to add a row so the formulas will be carried to the new row.**

Also, Ohio EPA may consider including a button on these spreadsheet tables which would trigger a macro to automatically do the following: 1) copy the formulas on the row where the cursor is, 2) paste the formulas into a new row below the row where the cursor is. (This approach would be more for Excel neophytes to minimize mistakes. If Ohio EPA chooses this route, include only one row in each section of the tables, so each time a SWMD needed to add a row (because it had to enter more than one facility), they would click on the button. (GT Environmental, Inc.)

Response 16: *Ohio EPA is unable to deploy a macro at this time, but restructured how rows will be added/deleted. For a number of worksheets, Ohio EPA created tables that allow users to use the tab button to add new rows. When the new row is added this way, formulas are carried to the new row and total formulas are automatically updated to include the new row.*

In the instructions for using the workbook, Ohio EPA also provided instructions for manipulating the spreadsheets, such as inserting rows, copying formulas, etc.

Comment 17: **Table D-1. Clarify in the title of the table whether or not the table should include direct-hauled waste. (GT Environmental, Inc.)**

Response 17: *Ohio EPA made the recommended change.*

Comment 18: **Tables D-1 and D-2. Unless you all know some Excel tricks that we are not familiar with, I think you will have problems with these tables accurately calculating the totals using built-in formulas when the user needs to add rows to either one of these tables. Usually when a row is added to the bottom of a number of rows, cells from the newly added rows are not incorporated into the formulas which, in this case, calculate the sums. In other words, amounts entered into the added rows will not be included in the totals at the bottom of the table. The only way the totals will reflect accurately is if the rows are inserted into middle of existing rows (or the range) which is used in the formulas. (GT Environmental, Inc.)**

Response 18: *As was explained in Response 16, Ohio EPA changed how rows will be added/deleted. In the instructions for using the workbook, Ohio EPA also provided instructions for manipulating the spreadsheets, such as inserting rows, copying formulas, etc.*

Comment 19: **Table D-2. Instructions should state whether SWMDs should include special waste sent to treatment facilities such as Stericycle, Medassure of Indiana, or Liquid Waste Removal Processing. (GT Environmental, Inc.)**

Response 19: *There are a number of facilities in Indiana that take waste from Ohio but that are not landfill facilities. Historically, Ohio EPA has treated those facilities as landfill facilities and*

included the waste sent to them in the quantities of waste disposed in landfills. This is because the quantities are usually small and don't appreciably affect the total quantities of waste disposed.

SWMDs will account for waste sent to incinerators/energy recovery facilities in Table D-3. If the total quantity of waste incinerated/burned for energy recovery in the reference year is less than 10 percent of total waste disposed, then the SWMD doesn't need to account for the waste in its solid waste management plan. Supplemental Table 1 on worksheet D-4 will automatically calculate the percentage of total waste disposed that was incinerated and either include or exclude that waste as appropriate.

SWMDs do not need to account for infectious waste sent to treatment facilities as infectious waste is not solid waste.

SWMDs do not need to account for waste sent to facilities Indiana classifies as solid waste processing facilities-other (such as Liquid Waste Removal Processing). Any quantities managed at processing facilities that were subsequently disposed in landfills are already accounted for in the quantities landfilled.

Ohio EPA included instructions to explain how SWMDs should account for these facilities in their plans.

Comment 20: **Instructions for Table D-4. You could set up the tables so that entering the reference year for Table C-2 (again, we would recommend changing the numbers in this table to years, or include another column with the year - 2015, 2016, etc.) would populate all subsequent tables with the reference year. (GT Environmental, Inc.)**

Response 20: *For Table D-4 (now Table D-5 in Ohio EPA's version of the workbook), the reference year population is automatically populated from worksheet C-2.*

As was explained in Response 13, the workbook is structured such that a SWMD enters the reference and first years of the planning period on worksheet A. Links throughout the workbook will automatically populate the reference year, the four prior years, and the years in the planning period for other worksheets, including worksheet C-2.

Comments regarding Instructions for Table D-4, Analysis

Comment 21: There's good discussion here for analyzing the trend of generation. We have a couple of suggestions...first, we would suggest establishing a "benchmark" or threshold, beyond which would trigger the need for the analysis. We know that such a number (annual rate of change, percent change over five years, etc.) will likely be somewhat arbitrary, but it would be helpful to districts, and may result in no need to conduct the analysis for some districts. You could perhaps establish a number or threshold by examining the trends in several districts where you are confident that the rate of change has been relatively steady state.

This brings up another issue - the Format suggests comparing generation rates to other districts. Has the Planning Section compiled the statewide generation data for all districts? If not, seems like a very useful planning tool for districts to have. You could stratify the districts by population density, rural vs. urban, commercial NAICS entities, etc. so that you end up with several average generation rates based upon different characteristics within the districts. (GT Environmental, Inc.)

Response 21: After speaking with the interested party that submitted this comment, Ohio EPA understands that the comment is meant to address disposal, not generation.

Ohio EPA is supportive of streamlining the planning process to the greatest extent possible. Establishing a threshold as recommended by the commenter might be one way of doing that. However, as mentioned in the comment, any threshold established would be arbitrary. At this time, Ohio EPA isn't prepared to establish such as threshold. Ohio EPA does have a number of initiatives to undertake once Format 4.0 is finalized. Ohio EPA added establishing a threshold to that list of initiatives and will look into whether or not establishing such a threshold is feasible.

Ohio EPA annually publishes an Annual District Report Review Form for each SWMD annually. The document summarizes how waste was managed by the SWMD during the year and provides disposal, recycling, and generation rates for the SWMD. Ohio EPA has not compiled the

generation data for all 52 SWMDs into one document that can be used as recommended but should easily be able to.

Ohio EPA has a number of technical assistance projects the Agency intends to undertake once Format 4.0, is finalized. These projects will result in tools that SWMDs can use when preparing their plans. Developing a compilation of generation data for all SWMDs is a good recommendation. Ohio EPA has added that suggestion to the list of tools the Agency will look into making available to the SWMDs.

Comment 22: Instructions for Table D.4, Analysis (Industrial Waste). Same suggestion as above under residential/commercial waste. If the district industrial data by SIC has not been compiled and analyzed from the plans for the past 20+ years, we would suggest trying to get an intern to tackle this job (or even pitch it to a professor for one of his/her undergraduate students) to update the generation rates per employee per SIC that have been in use for many years. (GT Environmental, Inc.)

Response 22: By default, SWMDs will calculate industrial generation by adding together reported quantities of waste disposed and recycled. Format 4.0 does not require SWMDs to calculate generation using data from survey responses and estimated data for non-respondents (as is required by Format, version 3.0). Few, if any, SWMDs used the quantities derived by that method as the amount of industrial waste generated in the reference year. Consequently, at this time, Ohio EPA does not intend to use SWMDs' industrial data to develop average generation rates by SIC/NAICS code. If, after issuing Format 4.0, SWMDs believe that would be a useful tool to have available, then Ohio EPA will look into how to accomplish it.

Comment 23: Average Percentage vs. Rate of Change. This comment addresses the formulas in the Excel workbook contained in worksheet D-4 which calculate the average percentage change in disposal, and the average change in per capita disposal. We are assuming that these calculations are intended to achieve a number which represents the average rate of change from the beginning value to the ending value, so if you were to multiply the calculated number (percentage or per capita rate) by each year's disposal amount consecutively, starting with the first year, you would end up with the

disposal amount for year 5, or in this case, the reference year. However, applying the averages as calculated in the Workbook will not do this, even though the 5th year calculated amount might be close to the actual amount.

**In order to calculate a true rate of change, you would need to use the formula shown on this website:
<http://www.wikihow.com/Calculate-an-Annual-Percentage-Growth-Rate>**

This would simply provide a little more accuracy in terms of using historical data to make projections. (GT Environmental, Inc.)

Response 23: ***[NOTE: the worksheet that was labeled D-4 at the time Format 4.0 was made available for public comment is now D-5.]***

The statistics that are automatically calculated from the historical disposal data are intended to help SWMDs evaluate the historical data and determine how to project quantities to be disposed during the planning period. The statistics are not meant to be used to back-calculate the historical quantities. Provided the averages are representative of the historical trend, then using an average gives SWMDs an easy means of projecting future disposal. Ohio EPA chose to keep the averages as recommended methods of projecting quantities to be disposed.

SWMDs are not required to use any of the statistics automatically generated by the workbook. A SWMD can use whatever means of projecting quantities that it can justify, including the rate of change. However, the workbook is set up to use specific projection factors. Using a different projection factor will require the SWMD to change the workbook to accommodate that factor.

COMMENTS CONCERNING APPENDIX E

Comment 24: **The District appreciates OEPA allowing recovery projections to stay constant after six years. (Hamilton County Recycling and Solid Waste District)**

Response 24: *Ohio EPA appreciates this feedback. Ohio EPA strove to simplify developing a plan as much as possible. Allowing SWMDs to hold projections constant after six years is one of those simplifications. Ohio EPA understands the*

inaccuracies that result from projecting quantities. Holding the quantities constant after the sixth year allows SWMDs to provide projections for the 15 years required by statute. But, because they submit updates to their plans by the fifth year of the planning period, SWMDs will already have updated projections for the sixth year before it occurs.

Comment 25: **The Format reads that quantities from a third party source should be held constant. The District recommends changing this language to account for population/jobs outlook, etc.** (Hamilton County Recycling and Solid Waste District)

Response 25: Ohio EPA originally intended to instruct SWMDs to keep the quantity of material to be recycled by third party sources as a constant percentage of waste to be generated. However, because SWMDs now will project quantities to be disposed and recycled and add those quantities to arrive at quantities to be generated, the intended method wasn't feasible.

The instructions for projecting industrial recovery in the version of Format 4.0 made available for public comment recommend holding quantities for non-program sources constant unless another quantity or projections can be justified. In the past, SWMDs have applied arbitrary increases to project industrial generation. Under Format 4.0, any projected increases must be based on data.

Ohio EPA made the recommendation to hold quantities constant in response to feedback from SWMDs. A number of SWMDs indicated that they didn't have any influence on quantities from third party sources (such as buybacks, scrap yards, etc.) and either didn't see how it made sense to try to project quantities for them or didn't have any way of developing projections for them. The current recommendation gives SWMDs the option of holding quantities constant or developing justifiable projections.

Comment 26: **Instructions, Page E-1. In the middle of the page, the heading says, "Table D.1: Commercial Survey Results". Perhaps this should say "Table E-1..." instead.** (GT Environmental, Inc.)

Response 26: Ohio EPA made this correction.

Comment 27: **SIC Codes. GT was under the impression that NAICS codes would be used in Format 4.0.** (GT Environmental, Inc.)

Response 27: *Format 4.0 now organizes businesses by NAICS codes.*

Comment 28: **Table E-2. I'm anticipating that this table may not have enough columns for some of the large districts. If so, you probably need to include some instructions to address this.** (GT Environmental, Inc.)

Response 28: *As was indicated in Responses 16 and 18, Ohio EPA will provide instructions for manipulating the tables, such as inserting rows and columns, copying formulas, etc.*

Comment 29: **Table E-2. Showing the adjustments for each entity (the horizontal adjustment cells) as well as the adjustments for each material (the vertical adjustment cells) was a major time-consuming endeavor that did not seem to improve our understanding of the management of the recycling from a planning standpoint. Completing the table required us to enter all raw data into the table, then go back survey by survey and notate all adjustments that were made. It was essentially re-doing the ADR. Some fine-tuning of this table would be welcomed.** (GT Environmental, Inc.)

Response 29: *Ohio EPA incorporated the vertical and horizontal adjustments to facilitate managing data and record keeping. How SWMDs evaluate reported quantities to eliminate double counting has always been somewhat of a black box. Format version 3.0 didn't formalize that evaluation or the adjustments. Since many more SWMDs are achieving Goal 2 in their solid waste management plans, avoiding double counting has become more of an issue. The horizontal and vertical adjustments were Ohio EPA's attempt to provide a more structured means of accounting for the evaluation.*

In order to simplify completing worksheets E-1 through E-3, Ohio EPA removed the horizontal adjustment cells. Therefore SWMDs will complete adjustments only by material for those three tables. However, for worksheet E-4, SWMDs will still make both horizontal and vertical adjustments.

Since the SWMD received data by source and by material and performed the steps of evaluating data reported by each

source when preparing the annual district report, then the SWMD should be able to replicate those steps for the solid waste management plan using its records. As more SWMDs use Format 4.0 and Ohio EPA sees how Format 4.0 plays out, if multiple SWMDs find that presenting adjustments as required is too burdensome, then Ohio EPA will look into adjusting the tables to simplify them.

Ohio EPA understands that there are a number of tables in Format 4.0 that ask for information in ways SWMDs are not used to providing. This may require SWMDs to adapt how they keep records. In the meantime, if it is not able to provide information as required in Format 4.0., then the SWMD should work with Ohio EPA to determine how to adapt tables to accommodate the SWMD's data. Ohio EPA simplified the process of putting a plan together as much as possible. However, there will be some components of the process will be more complicated than in the past. Accounting for double counting adjustments may be one of those.

Comment 30: **Table E-3. Clarify whether this table should include all data reported to OEPA (scrap tires, Rumpke commercial, Rumpke residential, etc.) or only commercial box stores. (GT Environmental, Inc.)**

Response 30: Table E-3 is meant to provide data for just commercial entities (big box stores) that submit data to Ohio EPA and that the SWMD uses for its plan. Ohio EPA updated the instructions to reflect this and renamed this table "Data Reported to Ohio EPA by Commercial Businesses (big box stores)" to make it more clear.

Comment 31: **The District recommends consolidating tables E-1 – E-4 into one table for residential/commercial recovery. As we do not organize our survey data by source of data, this required additional time to break down the data in a way that is not beneficial to our organization. If OEPA opts to keep the tables as drafted, it is recommended to inform all solid waste districts of this change now so they can organize their survey data accordingly. (GT Environmental, Inc.)**

Response 32: Ohio EPA broke data out into these four tables to facilitate tracking and evaluating the data SWMDs provide about material recovered for recycling. The tables also provide a structured means of ensuring that material quantities are not

counted twice and identifying quantities that need to be scrutinized further. It is difficult to evaluate quantities of recycled materials when the quantities from all sources are lumped together. If, for example, a plan shows a larger than expected quantity of metals for the residential/commercial sector and the majority of that quantity was reported by a scrap yard, it would be possible to determine that from Table E-2. However, if the quantities from all sources had been combined into one table, it would not be possible to identify the source.

Ohio EPA understands that there are a number of tables in Format 4.0 that ask for information in ways SWMDs are not used to providing. This may require SWMDs to adapt how they keep records. In the meantime, if it is not able to provide information as required in Format 4.0., then the SWMD should work with Ohio EPA to determine how to adapt tables to accommodate the SWMD's data. Ohio EPA simplified the process of putting a plan together as much as possible. However, there will be some components of that process that may be more complicated than in the past. Accounting for quantities recovered/recycled may be one of those.

Comment 33: **Table E-5. Do the numbers at the top of the table represent years? If so, we would suggest labeling them as such. Also, you could populate the years from a previous table. (GT Environmental, Inc.)**

Response 33: This commenter might have reviewed an earlier version of the workbook. In Ohio EPA's current version of the workbook, Table E-5 does not have any columns for years.

Regardless, as was explained in Responses 13 and 20, the workbook is structured such that a SWMD enters the reference and first years of the planning period on worksheet A. Links throughout the workbook will automatically populate the reference year, the four prior years, and the years in the planning period for other worksheets.

Comments Concerning Table E-6

Comment 34 **The way data is categorized in Table E-6 makes it difficult to project recycling tonnage moving forward because it is categorized by data source rather than program. For example, the following screen shot shows E-6 completed for SWACO:**

Program/Source of R/C Recycling Data	Quantities (Tons)
Scrap Yards	33,564
Processors	57,473
MRFs*	11,539
Ohio EPA Retail Data	39,679
Ohio EPA Scrap Tire Data	18,833
Household Hazardous Waste Collection	170
Residential Curbside Recycling	64,937
Residential Curbside Yard Waste Collection	51,337
Drop-Offs	9,523
Organics Diversion**	187,510
Total	474,566
	474,566

For example, tires collected by SWACO’s programs would show up under Ohio EPA Scrap Tire Data; this does not allow SWACO to plan for the amount of tires they would specifically need to manage. Another issue is that the adjustments made to the quantities in earlier tables in Section E misrepresent the totals from each source in Table E-6. For example, MRFs were actually responsible for accepting 86,000 tons, but the table only reflects MRFs managing 11,539 tons. This is because the tonnage was counted under other programs, such as curbside recycling and drop-offs. (GT Environmental, Inc.)

Response 34:

Table E-6 is meant to account for all material quantities being credited to the residential/commercial sector. Therefore, SWMDs are to list all programs/sources that quantities are associated with. Furthermore, the quantities that should be entered into the table are those that were corrected for double counting (in Tables E-1 through E-4). Ohio EPA encourages SWMDs to attribute quantities to programs/services when possible. However, SWMDs receive quantities from sources that can’t be attributed to specific programs/services.

Ohio EPA recommends that SWACO provide two listings for scrap tires in Table E-4 - one for scrap tires collected by SWACO through the Authority’s programs and one for scrap tire data provided by Ohio EPA. SWACO would then correct the quantity of tires provided by Ohio EPA in Table E-4 to

eliminate double counting (i.e. reduce Ohio EPA's quantity by the quantity of tires associated with SWACO's program). Those two entries and their corrected quantities would carry forward to Table E-6.

This is similar to how data from SWACO's commercial survey and data from commercial businesses provided by Ohio EPA would be treated. If SWACO receives a survey from one of the businesses Ohio EPA receives data from, then SWACO would make an adjustment to subtract that business's data from either Table E-1 or E-3.

Comment 35: **Breaking out data by source (Scrap yards, processors, MRFs, OEPA retail data, etc.) for historical years is extremely time consuming and essentially required us to go through all of the steps done when completing an ADR. After completing the exercise for Table E6a1, the following tables did not provide helpful analysis due to differences in how data was recorded/reported each year. For example, Ohio EPA has added more stores to its MRF report each year. Tonnage seems to increase, but the real reason is more stores reporting, not more tonnage per store. Additionally, some SWMDs may have used predominantly generator data for one ADR and switched to using broker/processor data, which would show in these tables as huge increases/decreases for certain categories while their overall tonnage might be very stable. I think the idea of this table is helpful, but I think it would be improved if the table showed tonnage over a period of years for categories such as curbside recycling, drop-off recycling, HHW, appliance recycling, etc. instead of a mix of programs AND reporting entities. (GT Environmental, Inc.)**

Response 35: *Since the SWMD received data by source and performed the steps of evaluating data reported by each source when preparing the annual district report, then the SWMD should be able to replicate those steps for the solid waste management plan using its records.*

Ohio EPA recommends that SWMDs attribute quantities with programs/services rather than reporting entities whenever possible. For example, SWMDs should attribute quantities to curbside services rather than to the MRF/processor that received the material. However, SWMDs have data supplied by third party sources that cannot be attributed to specific programs. An example is data from surveys. Surveying is

not a program. Surveying is a means of getting data from the entities that have programs. To associate all quantities with programs, Table E-6 would have to list each company that submitted a survey. That isn't feasible or desirable. The only other way to account for those quantities is to combine them into one listing for a source.

One of the reasons for evaluating historical quantities is because of the issues raised by the commenter - to determine the stability/lack of stability for quantities, to identify reasons for large increases/decreases, and to decide how to use what the SWMD knows about historical quantities to project future quantities. If quantities have fluctuated significantly and/or the SWMD is unable to identify reasons for fluctuations, then the SWMD can choose to hold the quantity associated with a source (such as MRFs, scrap yards, etc.) constant at the reference year value, at an average quantity, or some other quantity the SWMD determines is appropriate. However, before making that decision, SWMDs need to make a good faith effort to evaluate historical data.

Ohio EPA strove to simplify putting a solid waste management plan together as much as possible. However, there are some components that may be more complicated than in the past and may require SWMDs to adjust how they keep records. If a SWMD is not able to provide data as laid out in Format 4.0, then it should contact Ohio EPA to discuss alternative ways of presenting data.

COMMENTS CONCERNING APPENDIX F

Comment 36: **Table F-1. Clarify whether utility companies are to be included. Also, is it important to have this information broken down by SIC/NAICS? If not, consider eliminating this portion of the table.** (GT Environmental, Inc.)

Response 36: NAICS code 22 is one of the codes that Ohio EPA recommends SWMDs survey for the industrial sector (see Appendix R of Format 4.0). The recommendations in Appendix R are not requirements. SWMDs can choose whether or not to survey industries in all of Ohio EPA's recommended codes. However, Ohio EPA recommends that SWMD that survey industrial generators focus on surveying industries from the list in Appendix R.

One of the reasons Ohio EPA recommended surveying code 22 is because that code includes coal burning power utilities. Those utilities generate large quantities of flue gas desulfurization (FGD) waste. SWMDs that survey those utilities may be able to capture quantities of FGD waste that are recycled. Unfortunately, however, any excluded waste (such as excluded fly and bottom ashes) utilities report cannot be counted toward a SWMD's reduction/recycling rate.

Using the Format, version 3.0, SWMDs organized industrial survey responses by SIC code. Ohio EPA understands that some survey respondents will not know their NAICS codes (and maybe not their SIC codes). If it cannot organize survey responses by NAICS code, then the next best option is to organize them by SIC code. If the SWMD cannot organize survey responses by NAICS code or SIC code, then the SWMD should contact Ohio EPA to discuss alternative ways of organizing data. One possible means would be to enter each survey response on a separate line. Another means would be to combine surveys from similar business types together (such as all responses from auto manufacturers, all responses from furniture manufacturers, all responses from food product manufacturers, etc.).

Ultimately, the plan needs to organize survey responses in a way that quantities can be evaluated to determine if they make sense. The most logical way to do that is by business type using either NAICS or SIC codes.

Comment 37: **Table F-3. GT understands the need to provide for the elimination of double-counting, but it would be ideal if this information did not need to be entered twice. Could at least the top part of this table be populated from F-1 and/or F-2? Also, Tables F-1 and F-2 won't provide the necessary information to eliminate double-counting...districts will need to go back to individual industrial surveys to see where the industry took recyclables. (GT Environmental, Inc.)**

Response 37: Ohio EPA was unable to identify what portion of Table F-3 could be populated from Tables F-1 and/or F-2. All three tables capture data from different sources and, therefore, do not share common data.

If a SWMD receives surveys from both industrial generators and the entity that took that generator's recyclables, Ohio

EPA is not aware of another means of identifying waste that might have been counted twice (i.e. other than reviewing each individual industrial survey). So, completing Tables F-1 and F-2 will require SMWDs to review surveys returned by industrial generators. One way of avoiding having to adjust for double counting is to survey either industries or the entities that process/receive recyclables, but not both. Having to correct for double counting is necessary when a SWMD surveys both industries and entities that receive the industries' recyclables.

Further, the SWMD should already have evaluated and corrected data for double counting when completing the annual district report for that year. So, the SWMD should be able to recreate those adjustments for the plan using records for the annual district report.

Comment 38: **Comments made regarding Appendix E, adjustments, and the time consuming nature of completing horizontal/vertical adjustments are applicable for Appendix F as well. (GT Environmental, Inc.)**

Response: *As was explained in response 29, Ohio EPA removed the horizontal adjustments from most of the tables. However, Ohio EPA retained both adjustments for Table F-3. As was mentioned in response 29, Ohio EPA will revisit these tables if multiple SWMDs find it difficult to complete the tables as structured.*

Comment 39: **Instructions for Table F-5. Does the following statement come out of the State Plan: "If the SWMD met the industrial reduction/recycling goal of 66 percent during the reference year, then it is acceptable to project a constant quantity of industrial material to be recovered at the reference year quantity throughout the planning period." If this is not in the State Plan, then would it be more beneficial to require SWMDs to show continued improvement instead of saying it is acceptable to show stagnant recycling quantities? (GT Environmental, Inc.)**

Comment 40: **Format states that SWMDs that met the 66% recycling goal during the reference year may project a constant quantity to be recycling throughout the planning period. Consider instructing SWMDs to review which projection makes more sense: a constant tonnage or a constant recycling percentage. (GT Environmental, Inc.)**

Response 39 &
Response 40:

Neither of the statements mentioned in Comments 39 and 40 are from the 2009 State Solid Waste Management Plan.

Ohio EPA originally intended to instruct SWMDs to keep the quantity of material to be recycled as a constant percentage of waste to be generated. However, because SWMDs now will project quantities to be disposed and recycled and add those quantities to arrive at quantities to be generated, the intended method isn't feasible.

Ohio EPA eliminated the statement identified in Comments 39 and 40. In its place, Ohio EPA included instructions for projecting quantities to be recovered through industrial services and sources.

Comment 41:

Instructions for Table F-5, Page F-13. We understand that making valid projections is hard - there's no good solution that will work for everyone. However, for the longer term, the Agency might consider requiring more detailed, program-specific information from districts. For example, if you require SWMDs to quantify the amount of reduction/recycling which occurred from each program along with metrics to define the scope of the programs, Ohio EPA could begin building a database of programs with expected diversion rates for each one. SWMDs could then use this data when making projections. This may not be a high priority, however, it could be very helpful to SWMDs. (GT Environmental, Inc.)

Response 41:

This is a great recommendation. As was mentioned in Response 21, Ohio EPA has a number of technical assistance projects the Agency intends to undertake once Format 4.0, is finalized. One of the items on this list is to compile data that SWMDs can use to develop projections. Ohio EPA has not determined how best to compile that data, but will look into it once Format 4.0 has been issued.

Comment 42:

Same comment for previous tables - include the years across the top of each column and have them populated from previous tables. (GT Environmental, Inc.)

Response 42:

Ohio EPA believes this comment refers to the tables on worksheet F-5a. The column headings will be prepopulated from the table on worksheet F-5 from the column "Program/Source of Industrial Recycling Data". The

workbook will automatically populate the years for the five rows in each table on worksheet F-5a.

Comment 43: In addition, GT found the set up like the one below to be more helpful in this analysis than the original Table F-5a1, F-5a2, and F-5a3 (GT Environmental, Inc.)

Year	2010	2011	2012	2013	2014	2010-2014 Average
Total Recycling	160,158	176,760	370,691	347,712	178,368	246,738
Annual % Change		10%	110%	-6%	-49%	16%
Tonnage Change/Year		16,602	193,931	(22,979)	(169,344)	4,553

Response 43: The table above calculates annual percent change and annual tonnage change based on the total amount of industrial material recovered through all industrial programs and sources. The intent of tables F-5a1 through F-5a3 is for SWMDs to analyze historical recovery through individual programs/sources of data. SWMDs are to use that historical analysis combined with any changes that they will make to programs to project quantities to be recovered through the program during the planning period. Projecting quantities as recommended in the table above does not allow SMWDS to do that. The table above may be useful for conducting the diversion analysis in Appendix H.

Comment 44: The District used SIC versus NACIS to report industrial recovery projections as most industries surveyed did not know their NACIS code. The District recommends that OEPA allow either SIC or NACIS. (Hamilton County Recycling and Solid Waste District)

Response 44: Ohio EPA organized industrial survey responses by NAICS code at the request of SWMDs. The workbook is set up as a default. If a SWMD prefers to organize survey responses by SIC instead, then the SWMD can alter the worksheet to do so. The intent of using NAICS codes is to organize industrial survey responses by industry type. That can be accomplished by using either NAICS codes or SIC codes.

Comment 45: The Format reads that quantities from a third party source should be held constant. The District recommends changing this language to account for population/jobs outlook, etc. (Hamilton County Recycling and Solid Waste District)

Response 45: *As was explained in Responses 39 & 40, Ohio EPA originally intended to instruct SWMDs to keep the quantity of material to be recycled by third party sources as a constant percentage of waste to be generated. However, because SWMDs now will project quantities to be disposed and recycled and add those quantities to arrive at quantities to be generated, the intended method isn't feasible.*

The instructions for projecting industrial recovery that are in the version of Format 4.0 made available for public comment recommend holding quantities for non-program sources constant unless another quantity or projections can be justified. In the past, SWMDs have applied arbitrary increases to project industrial generation. Under Format 4.0, any projected increases must be based on data.

Ohio EPA made the recommendation to hold quantities constant in response to feedback from SWMDs. A number of SWMDs indicated that they didn't have any influence on quantities from third party sources (such as buybacks, scrap yards, etc.) and either didn't see how it made sense to try to project quantities from them or didn't have any way of developing projections for them. The current recommendation gives SWMDs the option of holding quantities constant or developing justifiable projections.

COMMENTS CONCERNING APPENDIX G

Comment 46: **Historical Trends, Analysis. We understand the desire to move away from the Format serving as a "cookbook", but as mentioned in a previous comment, if you want districts to analyze the data in a certain way or look at specific factors which may have influenced trends, Ohio EPA could consider requiring it instead of recommending it. It might save you some writing when you put together the NBAO. Also, you might get a better product from the districts if they know they have to evaluate certain factors, etc. (GT Environmental, Inc.)**

Response 46: *Ohio EPA agrees that making appropriate portions of Format 4.0 required instead of recommended could potentially increase consistency among solid waste management plans and simplify reviewing plans. However, Ohio EPA does not want requirements to result in SWMDs having to do more work than is warranted for their situations. As it refines Format 4.0, Ohio EPA will look into what portions to require versus what portions to recommend.*

Comment 46: **Excluded Waste. We are currently working on a plan in a district which has over 20 percent of the in-district disposal in MSW landfills characterized as exempt waste. Even though districts cannot count this material towards any of the goals, it does take up landfill volume and the law does say, "Reduce reliance on landfilling." You might consider encouraging districts to look at these exempt wastes more carefully (if disposed in MSW facilities) and explore ways of diverting some of it. (GT Environmental, Inc.)**

Response 46: Ohio EPA appreciates this commenter's interest in furthering Ohio's goal of diverting waste from landfills. At this time, however, Ohio EPA is hesitant to involve SWMDs in the management of excluded waste. Ohio EPA already has concerns about excluded wastes, particularly construction and demolition debris (C&DD), being credited to reduction/recycling rates. The Agency does not want to further complicate the issue at this time.

Perhaps addressing excluded wastes disposed in municipal solid waste landfills could become a state-level initiative in a state solid waste management plan. Ohio EPA and the Construction and Demolition Association of Ohio recently launched a voluntary, third party program for certifying C&DD recyclers. The program is administered by the Recycling Certification Institute and is intended to foster more recycling of C&DD material by ensuring that recycling is done at legitimate facilities. This may make diverting C&DD from municipal solid waste landfills more feasible.

The newly formed Materials Management Advisory Council (MMAC) will be holding its first meeting in April 2016. It is likely that one of the group's first tasks will be to review the 2009 State Plan. If the MMAC opts to update the 2009 State Plan, then addressing excluded waste could be a topic of discussion.

COMMENTS CONCERNING APPENDIX H

Comment 47: **The planning exercise required in this appendix is very good. The concern we have is there is no benchmark for what is acceptable for each analysis. As the Agency knows, there is a vast difference in district make-up, finances and budget to conduct a plan update. The smaller rural districts may not have enough budget to**

conduct a significant planning effort. In larger districts, the lack of information and data may prevent a valid quantitative analysis from occurring. Again, the intent of this appendix is much appreciated from a planner's point of view and if a district was starting from scratch, the analysis contained in this appendix would be very important, however, some most districts have been operating for 25 plus years. Improvements in programs have mostly occurred from "low hanging fruit" evaluations. The Agency should consider providing a minimum level of effort required to meet the analysis requirements much like the Agency sets for programing throughout the format. This section is considered the 800 pound gorilla in the plan process and can be overwhelming to districts to understand. We have three (3) 4.0 plans going on right now and two of them are large districts that are spending large amounts of money and time trying to make a good faith effort to completing the 13 analyses. (GT Environmental, Inc.)

Response 47:

Ohio EPA appreciates that SWMDs desire for Format 4.0 to establish a minimum level of effort for conducting the analyses in Appendix H. Ohio EPA is reluctant to establish such a level primarily because Ohio EPA doesn't want to decide for a SWMD what the best way to conduct the analyses is. What is most applicable will likely be different from one SWMD to another. It may not be necessary for a SWMD to do as in-depth an analysis of one factor as it is for another SWMD. An example is the industrial sector analysis. A rural SWMD with a small industrial sector will likely spend limited time on that analysis. Another example is the processing capacity analysis. Most SWMDs have access to adequate processing capacity for recyclables making that analysis simple. A few SWMDs do not and will have to spend more time on the analysis. Setting a minimum could require some SWMDs to do more analysis than is required given their circumstances.

Ohio EPA understands the length of Appendix H can make it appear overwhelming. However, if each analysis is considered individually, Appendix H is much less intimidating. Ohio EPA tried to provide as much direction as possible to assist SWMDs that are not accustomed to analyzing their programs to the level required by Format 4.0. That is the purpose behind all of the prompts in Appendix H. Those prompts provide examples of things to consider and ways of thinking. They are suggestions, not requirements.

The answer to any one prompt isn't what is important. What is important is that SWMDs uses the analyses to obtain the information needed to make decisions. Further, conducting 13 separate analyses may not be necessary. Some of the analyses overlap – such as the commercial sector and waste composition analyses. So, a SWMD may be able to perform more than one analysis at the same time.

Overall, Ohio EPA believes Format 4.0 simplifies how plans are developed by: limiting projections to six years; providing the workbook to make managing data easier; eliminating duplicative and unnecessary components; providing examples for how to complete portions of Format 4.0, etc. Further, Ohio EPA will provide SWMDs with data, such as the disposal capacity analysis. Ohio EPA made many of those simplifications to give SWMDs more time to do strategic planning.

Ohio EPA strongly recommends that each SWMD involve its Planner in the Division of Materials and Waste Management in the analyses, at least at the outset. The Planner will be able to help the SWMD prioritize which analyses are more important than others given the SWMD's circumstances. The Planner will also be able to help the SWMD obtain information needed to conduct the analyses.

Comment 48: **Order. Nothing very important here, but it just seems a little odd that Appendix H occurs after Appendices E and F, for instance, but H is used to develop the projections in E and F. (GT Environmental, Inc.)**

Response 48: *Ohio EPA strove to order the appendices in a way that made the most logical sense. One of the first steps in preparing a plan is to enter all of the historical data in the workbook. SWMDs will need to use that data to conduct the evaluations in Appendix H. Most of the historical data is captured in Appendices B through G. So, it made sense to Ohio EPA to have those be the first appendices. No matter how the appendices are organized, a SWMD will have to work backwards and forwards though the appendices when completing a plan. That is a function of how the appendices are interrelated.*

Comment 49: **Metrics, Benchmarking, etc. We recognize this is planning, and planning many times ends up being more about words than numbers. But we support quantifying and measuring/comparing with metrics whenever**

possible, especially since the Format is expecting districts to benchmark against other districts. Doing so will be much easier with some type of numbers. You suggest using this approach in the instructions in the discussion about calculating performance of drop-offs (i.e., pounds collected per capita). We would encourage you to come up with a minimum set of metrics which all districts are required to calculate for their analyses, then they can add more as they see fit. For parameters or factors which are not easily quantified, maybe setup a "yes/no" matrix that districts would have to fill out for each analysis. We realize the danger in this is that districts could complete the metrics and the matrices, but then not examine the special circumstances of their district which may need to be addressed. As stated above, we know there is an effort to move away from the cookie-cutter approach. But I think what we're suggesting might be worth the risk because: 1) it will allow a much easier comparison across districts, 2) districts will very clearly know elements of the analyses which they have to provide, and 3) it should improve the quality of the analyses and the conclusions. This approach may not require much work on your part - you've already got metrics in the instructions...it would simply be a matter of listing them under "Required Measures" instead of "Potential Measures". (GT Environmental, Inc.)

Comment 50: Lots of good ideas. There are many good ideas in this appendix for doing the analyses. Again, we would encourage you to consider first requiring districts to answer a list of questions, and then list additional (potential) questions which may be used to further evaluate the subject matter. (GT Environmental, Inc.)

*Response 49 &
Response 50:*

Ohio EPA is intrigued by this idea. However, without a concrete example of how such a matrix would look, Ohio EPA is not sure how to proceed with this suggestion. Structuring the analyses in Appendix H, as recommended, could be time consuming. In the interest of completing and issuing Format 4.0 as expediently as possible, Ohio EPA has chosen not to devote time to restructuring the analyses at this time.

After issuing Format 4.0, Ohio EPA will look into refining Appendix H. If the Agency is able to develop a matrix or

some other structured tool for conducting the analyses, Ohio EPA will issue a revised version of Format 4.0.

Comment 51: **The District combined the commercial and industrial analyses into one analysis to avoid duplication. The District suggests allowing solid waste districts to have this option depending on their unique circumstances.** (Hamilton County Recycling and Solid Waste District)

Response 51: *As was explained in Response 47, conducting 14 separate analyses may not be necessary. Some of the analyses overlap. So, a SWMD may be able to perform multiple analyses concurrently.*

Comment 52: **Since these analyses will be new for many, it might be beneficial to include a sample outline.** (Hamilton County Recycling and Solid Waste District)

Response 52: *Ohio EPA interprets this to mean providing a checklist for the triggers/questions in Appendix H. Ohio EPA understands that some SWMDs may be overwhelmed by the analyses in Appendix H or not know how to prioritize which triggers/questions to focus on. An outline or checklist might be one way to simplify how the analyses are presented. Ohio EPA will look into whether this is possible after issuing Format 4.0.*

COMMENTS CONCERNING APPENDIX J

Comment 53: **Table J-1b2. SWMDs with robust drop-off programs will show very low access percentages if they also have significant curbside coverage. For example, SWACO has more than 100 drop-offs but only has an access percentage of 1.96% because most drop-offs do not get an access credit because they are also located in areas with curbside recycling programs. While we understand not giving a population credit of more than 100% for a specific community, it seems this calculation method might make drop-off programs seem insignificant and expendable. Non-subscription curbside is obviously the preferred programming for political subdivisions, but in areas with very high multi-family housing units, such as the City of Columbus, this population credit strategy really downplays the importance of drop-offs and how many people rely on them as their sole residential recycling opportunity. This issue suggests that the method of calculating access (or opportunity) for areas**

having both curbside and drop-off recycling should be re-visited. (GT Environmental, Inc.)

Response 53: Ohio EPA understands that the current system of assigning population credits to recycling opportunities is frustrating and may need to be revisited. In the meantime, however, SWMDs are able to credit the entire population of a community with non-subscription curbside recycling services. That population includes people that live in multi-family housing units but that cannot use the curbside program. To be more accurate, access to non-subscription curbside recycling services should be based on the population of the people that live in the households served by the service. Ohio EPA structured the default population credit as the entire population of the community to simplify assigning population credits to curbside recycling programs. This avoids SWMDs having to figure out how many people live in households served by the curbside service. While a SWMD may not get “credit” for a drop-off that is located in a community that has curbside recycling, the drop-off is serving residents that do not have access to recycling through the curbside program even though they are counted as though they do. Depending upon the number of residents that live in multi-family units not served by a curbside service, the current default credits may work to a SWMDs’ benefit (not necessarily SWACO) for purposes of achieving Goal 1. This would be true if the SWMD has a high population housed in multi-family units. The downside of the current defaults is that SWMDs may choose not provide drop-offs to those residents that can’t use the curbside service.

The infrastructure goal (Goal 1) is a goal, not a limitation on what recycling opportunities can and should be available. Recycling opportunities that don’t qualify for credit are often needed and worthwhile to provide. Further, as stated in the 2009 State Solid Waste Management Plan, Ohio may eliminate the infrastructure goal in a future revision of the state plan. That would make the credits assigned to recycling opportunities a moot issue. For now, however, Ohio EPA believes that the way credits are assigned to non-subscription curbside recycling programs balances out the limits on how many credits a SWMD can receive for a community.

As was explained in Response 1, Ohio EPA conducted a study of how many people can reasonably be expected to

use a drop-off recycling site. The results of that study showed that the default population credits assigned to many drop-offs are generous. Redefining default credits for drop-offs would likely result in lower default credits. Some SWMDs, particularly those in rural areas, might then have to provide even more drop-offs than currently required in order to achieve Goal 1. Many SWMD already feel as though they provide unnecessary drop-offs in order to achieve Goal 1.

COMMENTS CONCERNING APPENDIX K

Comment 54: **Table K-1. Table does not count tonnage reduced via incineration.** (GT Environmental, Inc.)

Response 54: Quantities reduced via incineration or other methods of volume reduction will be accounted for in Table E-4 (for residential/commercial waste) or Table F-3 (for industrial waste).

As was explained earlier, SWMDs can eliminate waste incinerated/burned for energy recovery from their plans (i.e. from total waste generated) if that waste was less than 10 percent of total waste disposed in the reference year. If a SWMD doesn't account for waste incinerated, then the SWMD will not credit the volume reduction achieved from burning that waste to its recycling/reduction rate. According to Ohio EPA's research, using data for 2014, no SWMDs will have to account for incinerated waste and, therefore, volume reduction from incinerating waste.

COMMENTS CONCERNING APPENDIX L

Comment 55: **The District recommends eliminating Appendix L. While it is important to examine programs through the lens of behavior change and key audiences, it became apparent when writing this Appendix that there was duplication with the program analyses in Appendix H. The District suggests incorporating these into the appropriate analyses in Appendix H. Appendix L did not yield any recommended program changes; they were made as a result of Appendix H analyses.** (Hamilton County Recycling and Solid Waste District)

Response 55: As was explained in Responses 47 and 51, SWMDs do not have to conduct 13 (14 including the education/outreach analysis) separate analyses if they can address analyses

concurrently. The point isn't to conduct 14 separate analyses. The point is to consider all 14 factors.

Ohio EPA moved the analysis portion of the Appendix L to Appendix H to consolidate all of the analyses into one appendix. Ohio EPA also moved the listings of the conclusions, actions, and priorities arising from the education and outreach analysis to Appendix I for the same reason. However, given that the outreach and education goals of the 2009 State Plan are the major new initiatives, Ohio EPA felt as though dedicating a separate appendix to those goals is justified. Thus, SWMDs will describe their education and outreach programs and their outreach priorities in Appendix L. These programs will constitute the SWMD's outreach and education plan.

COMMENTS CONCERNING APPENDIX N

Comment 56: We encourage you to include instructions for categories SWMDs will be putting into WARM that do not correspond with categories reported on ADR, such as the following: (GT Environmental, Inc.)

ADR Material	WARM Model Category
Dry Cell Batteries	Mixed Metals
Lead-Acid Batteries	Mixed Metals
Household Hazardous Waste	Exclude
Appliances/ "White Goods"	Mixed Metals
Electronics	Personal Computers
Ash	Exclude
Toys, Rigid Plastics, Accessories	Mixed Plastics
Textiles	Carpet, commingled?
Commingled Recyclables (Mixed)	Mixed Recyclables
Non-Ferrous Metals	Aluminum Cans
Plastics	Mixed Plastics
Food	Food Waste (non-meat)
Wood	Branches
Glass	Glass

Scrap Tires	Tires
Ferrous Metals	Steel Cans
All Other Paper	Mixed Paper (General)
Corrugated Cardboard	Corrugated Containers
Yard Waste	Yard Trimmings

Response 56: Ohio EPA appreciates the suggestions for instructing SWMDs on how to account for materials from the ADR in WARM. Ohio EPA updated the instructions to incorporate most of those suggestions.

COMMENTS CONCERNING APPENDIX O

Comment 57: **Table O-2. For historic years, instruct SWMDS whether the actual waste tons should be used, or whether the revenue should match the totals reported on quarterly fee reports. We put the correct “Total Generation Fee Revenue” in the cell and calculated the “Waste Disposed (tons)” cell by dividing the revenue by the generation fee schedule (\$/ton). (GT Environmental, Inc.)**

Response 57: It is most important that revenues in Table O-2 match revenues reported on quarterly fee reports. In their quarterly fee reports, SWMDs that collect generation fees report both dollars and tons by facility. Ideally, multiplying the quantities on which generation fees were paid (as reported in the quarterly fee report) by the per ton fee will result in (or come close to) the total dollars reported. If that is not the case, then the SWMD will need to:

- either manipulate the quantities for “Waste Disposed” (by dividing the total revenue from generation fee by the per ton fee as mentioned by the commenter); or*
- remove the formula that automatically calculates fee revenue (in the column for “Total Revenue from Generation Fee” and enter the actual amounts of revenue.*

Comment 58: **Table O-7. Please review the categories include in this table and make sure the most recent line items are in O-7. The QFR line items have changed from 2010 to 2015, so some categories on historical reports will not align exactly, and SWMDs will need to enter on the most appropriate line. (GT Environmental, Inc.)**

Response 58: *The categories in Table O-7 in Ohio EPA’s most recent version of the workbook match those on the quarterly fee report form.*

The instructions for Format 4.0 now include the following table to identify how line items from older quarterly fee reports forms should be incorporated into Table O-7:

Where reported on old QFR form	Where to report in Table O-7	Comments
1. Plan Monitoring/Prep		
a. District Staff	Line 2.a.1 - Personnel	
a. Legal	Line 1.c - Other	
b. Consultant Costs	Line 1.a - Plan Preparation Line 1.b – Plan Monitoring	Allocate consultant costs to the two line items as appropriate
2. Plan Implementation		
a. Legal Fees	Line 2.a – Other	
b. Facility Operation, Landfill	Line 2.c – Landfill Closure/Post-Closure	
g. Recycling Collection, Collection Drives	Line 2.e.5 – Other Collection Drives	
m. Education/Awareness, District Staff	Line 2.g.1,	Use the column for District Expenses
m. Education/Awareness, Contracted Agencies/Services	Line 2.g.1,	- Use the column for Public contracts if the SWMD has a contract with a public entity to provide education Use the column for Private Contract if the SWMD has a contract with a private entity to provide education

Comment 59: **Budget projections using quarterly fee report line items versus District program numbers (like in Format 3.0, Table VIII-5) will lose some detail and may not be as clear for Districts to track or explain. We suggest that you review the requirements in H, I, and O to ensure that the Format is requesting adequate information on how individual initiatives will be funded (total \$ per year), and where that will show up in the budget (Line Item #, Category/Program). (GT Environmental, Inc.)**

Response 59: *Ohio EPA has encountered multiple instances where SWMDs account for expenses in their solid waste management plans much differently than in their quarterly fee reports. In some cases, total costs between both sources match, but how expenses are allocated to programs is different. That is partially due to differences between line items SWMDs include in their plans and line items in the quarterly fee report. Organizing the financial tables in Appendix O to match the tables in the quarterly fee reports is intended to help overcome this.*

SWMDs are encouraged to provide additional details regarding their expenditures. To do this, a SWMD can add tables to Appendix O, provide footnotes to Table O-7, or provide details in text.

Comment 60: **It is extremely difficult to project expenses over a 15-year period. OEPA seems to recognize the difficulty in projecting numbers for this long of period, as solid waste districts are allowed to keep recovery constant after 6 six years (and recognizes the fact that solid waste districts will be updating their Plan every 5 years). The District suggests allowing the same accommodation for financial projections, as long as a solid waste district doesn't have a large capital project planned after 6 years. (Hamilton County Recycling and Solid Waste District)**

Response 60: *The introductory instructions for Appendix O do direct SMWDs to project revenues and expenses for the first six years of the planning period and hold them constant beginning in the seventh year.*

Comment 61: **The financial tables (Appendix O) are organized to match the quarterly financial reports. This can be interpreted that OEPA will compare the quarterly financial reports with the Plan projections. There should be an acknowledgement that Appendix O are projections and may change based on actual revenues and actual costs. As you are aware, it is very difficult to project the costs of products or services 3-5 years in the future. (Hamilton County Recycling and Solid Waste District)**

Response 61: *As was explained in Response 59, Ohio EPA organized Table O-7 to match the expense table in the quarterly fee report to improve consistency between the two sources.*

Ohio EPA understands that projecting costs is difficult and that difficulty is compounded the further into the future projections are made. Ohio EPA also understands that actual costs and estimated costs will rarely be the same. Further, Ohio EPA recognizes that it is not possible to predict all potential expenditures in a solid waste management plan. While Ohio EPA does monitor SWMDs' quarterly fee reports, the Agency generally looks for new and significant changes to expenditures that are not accounted for in the plan. Ohio EPA generally does not focus on changes in expenditures that are expected in the course of doing business.

Ohio EPA believes that SWMDs should compare how much they thought programs would cost (as projected in the plan) to how much those programs actually cost. Ohio EPA encourages SWMDs that currently do not perform that exercise begin to do so. Ohio EPA tried to foster that analysis by including a section in the ADR form focused on identifying changes. Ohio EPA also included requirements in Format 4.0 for SWMDs to compare projected financials in the current plan to actual financials and use that comparison to develop better projections.

COMMENTS CONCERNING CHAPTER 2

Comment 62: **Table 2-3. There are three lines provided to include the percent of population for the county, largest city, and unincorporated areas. Based on the available tools, projections are county-wide. To calculate a different percentage for the largest city than the county, projections would need to be made at the city level. Please clarify what SWMDs are asked to calculate in this section, and note that the calculation will not match other tables (access credit appendix tables) if population is projected at a rate different than on a county-wide scale. (GT Environmental, Inc.)**

Response 62: *Table 2-3 was meant to show how both each county's population will change but also how population distribution throughout the county will change over time – whether people are projected to move from urban to rural areas, from rural to urban areas, or remain the same. The changing distribution of the population may affect the types of and how many recycling opportunities need to be available. Table 2-3 may have been ill-conceived as a means of illustrating this.*

Ohio EPA removed the table from the workbook but retained instructions for describing population distribution in the instructions for Chapter 2.

Comment 63: **In Chapter 2, please specify in the instructions that the “Profile of Waste Management Infrastructure” should only include in-district facilities, and exclude drop-off locations and compost facilities.** (GT Environmental, Inc.)

Response 63: Ohio EPA moved the Profile of Waste Management Infrastructure from Chapter 2 to Chapter 4. This profile is meant to describe the solid waste management infrastructure within the SWMD (excluding recycling services). SWMDs will account for in-district composting facilities in this profile but not for curbside recycling or drop-off recycling services.

COMMENTS CONCERNING CHAPTER 3

Comment 64: **Tables for historical residential, commercial, and industrial waste were not included in the draft workbook.** (GT Environmental, Inc.)

Response 64: 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.

There are a number of instances where the instructions refer to providing tables, figures, charts, or other illustrations. Ohio EPA did not create templates for all of those. SWMDs are encouraged to tailor the information and data presented the chapters to the needs of its local constituents.

GENERAL COMMENTS

Comment 65: **Please check all cell links and formulas. GT found multiple instances throughout the Excel workbook where links and formulas needed adjustments. We can point these out if needed.** (GT Environmental, Inc.)

Response 65: Ohio EPA has made numerous corrections to links and formulas since the workbook was first made available. Ohio

EPA will continue to correct the worksheets as the Agency becomes aware of issues.

Comment 66: **The spreadsheets have been invaluable and have saved a lot of time.** (Hamilton County Recycling and Solid Waste District)

Response 66: *Ohio EPA appreciates the positive feedback regarding the workbook. Ohio EPA continues to make changes to the workbook in an effort to automate and simplify it as much as possible.*

Comment 67: **The District appreciates that OEPA is providing the data for Appendix M.** (Hamilton County Recycling and Solid Waste District)

Response 67: *Ohio EPA appreciates this feedback. Providing data for Appendix M is one of a number of initiatives Ohio EPA intends to undertake to assist SWMDs obtain information needed for plans.*

End of Response to Comments