

Arkansas Department of Environmental Quality
Guidelines for Needs Assessment
for
Regional Solid Waste Management Districts



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for
Regional Solid Waste Management Districts**

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Regional Needs Assessment

A district-wide Needs Assessment is required of all Regional Solid Waste Management Districts (RSWMDs). The purpose of the Needs Assessment is to provide a basis to aid in the development of a comprehensive Statewide Solid Waste Management Plan and to accurately identify each Regional Solid Waste Management District's (RSWMD's) efforts to protect the state's public health and environmental quality through the planning and management of solid waste within its borders. A study of the origin and destination of waste is critical for an adequate understanding of the necessary collection systems, recycling and composting facilities, waste-to-energy programs, disposal facilities, and beneficial uses of recovered materials.

The Needs Assessment is not a solid waste management plan, but is a critical component in solid waste planning. Based upon the current needs, short-term and long-term regional planning and timelines can be implemented to address deficiencies in collection, recycling, and disposal of solid waste generated.

Please match and number your responses to each numbered question as listed on each Element's guidance sheet, included herein.

The Four Elements of a Needs Assessment are:

1. **Plan Area** – This element calls for a comprehensive evaluation of the RSWMD geographic area. It includes demographic data, and the cities and counties within the boundaries of the plan area.
2. **Administrative Structure** – This element identifies the way in which the Board of Directors conducts its business, involves the general public in its operations, creates and adopts rules and regulations governing the RSWMD (Administrative Procedures), and how it funds the RSWMD's operations.
3. **Waste Origin, Composition, and Characterization** – This element identifies the various types and volumes of solid waste generated within the plan area.
4. **Waste Collection, Recycling, and Disposal** – This element identifies the adequacy of the collection system for the entire RSWMD service area, as well as available facilities for the recycling, composting, disposal, and waste-to-energy of the waste generated within the district and/or transported into or out of the district.

This comprehensive process identifies a RSWMD's, and consequently the State's, strengths and weaknesses. Each district's Needs Assessment will be folded into a Statewide Needs Assessment that will provide the framework for establishing Arkansas' waste diversion goals, as well as evaluating the disposal capacity within the state and will be used during the development of the ten-year Statewide Solid Waste Management Plan, to become effective in 2013.

Statutory Basis for Regional Needs Assessment

Below is the statutory basis for the requirement of a regional Needs Assessment by the RSWMDs:

ACA §8-6-716. Regional Needs Assessment.

(a)(1)(A)(i) Each regional solid waste management board created pursuant to this subchapter shall prepare a regional Needs Assessment evaluating the solid waste management needs within its District. Provided, however, that such assessments need not include an evaluation of the need for landfills where a private industry bears the expense of operating and maintaining the landfill solely for the disposal of wastes generated by the industry or wastes of a similar kind or character.

(ii) Such assessment shall be submitted for Arkansas Department of Environmental Quality review, and the Director of the Arkansas Department of Environmental Quality shall approve or disapprove it within ninety (90) days after submission.

(B)(i) The assessments for boards created pursuant to §8-6-703 shall be due every four (4) years.

(ii) The department may, at its discretion, stagger the due dates by random selection so that approximately one fourth (1/4) of the districts will submit a Needs Assessment each year.

(C)(i) The department will notify in writing the regional solid waste management districts of the date on which their Needs Assessments are due.

(ii) The board may obtain an extension of that deadline from the director.

(D) A board created pursuant to §8-6-703 in a region having a projected solid waste disposal capacity of less than five (5) years or in a region having no landfill for solid waste disposal shall prepare and submit a regional Needs Assessment annually, with the first Needs Assessment due on June 30, 1995, and with updated assessments due on June 30 of each year thereafter.

(E) Any board which submitted the biennial Needs Assessment due on January 31, 1995, under prior law, shall prepare and submit its next Needs Assessment on June 30, 1996, with updated assessments due on June 30 of each year thereafter.

(2) The assessment shall include, at the minimum, the following:

(A) An evaluation of the amount of solid waste generated within the district and the amount of remaining disposal capacity, expressed in years, at the solid waste disposal facilities within the District that are permitted under the Arkansas Solid Waste Management Act, §8-6-201 et seq.;

(B) An evaluation of the solid waste collection, transportation, and disposal needs of all localities within the

district; and

(C) An evaluation and balancing of the environmental, economic, and other relevant factors which would be implicated by acceptance of solid waste from beyond the boundaries of the District.

(b) Each board shall update its regional Needs Assessment, at the minimum, every four (4) years.

(c) At a time not later than five (5) years before the disposal capacity in a region reaches its projected capacity, the board shall develop a request for proposals to increase the District's projected capacity for solid waste disposal within the District in accordance with its regional Needs Assessment.

(d) No landfill shall receive solid waste from beyond the District boundaries when projected solid waste disposal capacity within the District is less than five (5) years, except as may be otherwise specified pursuant to this subchapter.

(e) No owner or operator of a landfill serving a limited area of a District shall be required to increase the landfill's service area to accommodate the needs of the District.

Definitions

Beneficial Fill means materials for use in filling low areas, improving drainage or stabilizing slopes or embankments. However, placement of beneficial types of fill material into a prepared hole may not be considered 'beneficial,' but may constitute unpermitted disposal. Projects that incorporate the use of beneficial fill material shall generally be completed within less than 60 days. Beneficial fill material includes asphalt, brick, concrete, ceramics, and uncontaminated soil or dirt. Additional materials may be considered by the Director on a case-by-case basis prior to initiation of fill activity.

Commercial solid waste means all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding household and industrial waste.

Composting means the deliberate aerobic, biological decomposition of yard waste or other solid waste, resulting in a stable humus-like product.

Construction and Demolition (C&D) waste means any and all material and debris that might result from the construction or demolition of any building or other manmade structure including but not limited to single and multifamily dwellings, commercial buildings, road and highway construction and repair, remodeling and additions to existing structures and roofing. Materials may include (but are not limited to) dimensional lumber, roofing materials, bricks, concrete blocks, siding, gypsum (drywall), masonry, metal, cardboard, concrete with and without rebar, fill materials (including earth, gravel and stone), glass, and any other material that may be used in any construction project or may be salvaged from any demolition project.

Construction and Demolition Recycling Facility (C&DRF) means a facility that provides for the extraction from mixed construction and demolition waste of recoverable materials.

Disposal site or Disposal facility means any place at which solid waste is dumped, abandoned, or accepted or disposed of for final disposition by incineration, landfilling or any other method.

Hauler means a person engaged in the business of collection or transportation of solid waste for disposal, transfer or storage. A hauler does not include an individual person transporting non-commercial waste to a permitted facility.

Household waste means any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).

Illegal Dumping means depositing solid waste for disposal at a site which is not a permitted solid waste disposal facility.

Industrial solid waste means solid waste generated as a result of manufacturing or industrial processes that is not a hazardous waste regulated under Subtitle C of RCRA or as defined by Regulation Number 23, Sections 260.10 and 261.3, of the Pollution Control and Ecology Commission. Such waste may include, but is not limited to, waste resulting from the following manufacturing or industrial processes: Electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.

Landfill or landfill unit means a discrete area of land or an excavation that is permitted by the Department under these regulations and receives solid waste for disposal, and that is not a land application unit, surface impoundment, injection well or waste pile, as those terms are defined under 40 CFR 257.2.

Material Recycling Facility or MRF means a facility engaged solely in practices related to the management or diversion of source separated recoverable materials from the waste stream including storage, processing, marketing or reuse of recovered materials. Such term shall not include a solid waste recovery or handling facility provided; however, that any solid waste generated by such facility shall be subject to all applicable laws and regulations relating to such solid waste.

Medical waste means a waste from health care related facilities which if improperly treated, handled or disposed of may serve to transmit an infectious disease(s).

Municipal solid waste landfill unit means a discrete area of land or an excavation that receives household waste, and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under 40 CFR 257.2. A municipal solid waste landfill unit also may receive other types of RCRA subtitle D wastes, such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste and industrial solid waste. Such a landfill may be publicly or privately owned. A municipal solid waste landfill unit may be a new municipal solid waste landfill unit, an existing municipal solid waste landfill unit or a lateral expansion.

Municipality means a city of the first class or city of the second class or an incorporated town.

Open burning means the combustion of solid waste without:

1. Control of combustion air to maintain adequate temperature for efficient combustion,
2. Containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion, and
3. Control of the emission of the combustion products.

Operator means, for the purposes of this regulation, the person(s) responsible for the overall operation of a solid waste management facility or part of a facility. This definition shall not be construed to have the same meaning as a solid waste facility operator as defined and used in Regulation Number 27, Licensing of Operators of Solid Waste Management Facilities and Illegal Dumps Control Officers.

Owner means the person(s) who owns a solid waste management facility or part of a facility.

Recycling means the systematic collection, sorting, decontaminating, and returning of waste materials to commerce as commodities for use or exchange by separating or diverting an item or items from the solid waste stream for the purpose of processing it or causing it to be processed into a material product, including compost, in order to provide for the final disposition of the material product in a manner other than landfilling or incineration.

Solid waste means any garbage, or refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved materials in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permit under 33 U.S.C. 1342, or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923).

Solid Waste Authority means a special unit of local government formed as a partnership to provide residents with integrated solid waste services.

Solid waste management plan means a plan developed according to the provisions of the Solid Waste Management Act, A.C.A. '8-6-201 et seq., and guidelines of the Department, and which is subject to approval by the Department.

Solid waste management system means the entire process of storage, collection, transportation, processing, treatment, and disposal of solid waste, and includes equipment, facilities and operations designed for solid waste management activities, including recycling, source reduction, and the enforcement of solid waste management laws and ordinances.

Solid waste recovery facility (WRF) means a solid waste handling facility that provides for the extraction from mixed solid waste of recoverable materials, materials suitable for use as a fuel or soil amendment, or any combination of such materials. Due to the similarity of functions, WRF operations are required to meet all permitting requirements for transfer stations, including obtaining a certificate of need from the Regional Solid Waste Management District.

Solid waste processing facility means a composting facility, transfer station, solid waste recovery facility or other facility that handles or processes solid waste.

Source separated recovered materials means the recovered materials that have been separated from the solid waste stream at the point of generation or at a solid waste materials recovery facility. The term does not require that various types of recovered materials be separated from each other and recognizes solid waste, per industry standards and practices, may be included in recovered materials.

Transfer station means any facility used to manage the removal, segregation, processing, and transfer of solid waste from collection vehicles and containers, and from other private and commercial vehicles to greater capacity transport vehicles.

Waste Diversion means any combination of waste prevention (source reduction), recycling, reuse and composting activities that reduces waste disposed at landfills or incinerators.

Yard waste means grass clippings, leaves, and shrubbery trimmings.

Element Number 1

“Plan Area Structure”

Guidance Document

The Plan Area defines the area for Solid Waste Planning including the information on demographics. Review of this information is critical in determining issues that need more attention for future solid waste planning purposes.

1. **Demographics** – this item will help define the recipients of solid waste services and will determine the number of users located in the planning area.

1.1. **Map of District** – Provide a map of the RSWMD. Include the entire jurisdictional area.

See Appendix A.

1.1.1. Site the Class 1 cities on this district map.

See Appendix A.

1.1.2. Site the locations of permitted landfills, transfer stations, recycling facilities, and composting sites on this district map.

See Appendix A.

1.2. **Census Data** – the University of Arkansas Institute for Economic Advancement (IEA) website has a link to the Census Data Center (<http://www.aiea.ualr.edu/csdc.html>). It includes all 2010 census data for the State. Please use this data to provide the following:

1.2.1. Current population of the jurisdictional area (*Current county census data is provided in this document under Element 3*); The total population for Clark, Garland and Hot Spring Counties is 151,942.

1.2.2. Population change for the jurisdictional area from 1990 to 2010; 120,949 (1990) to 151,942 (2010)

1.2.3. Estimated population change for the plan area from 2010 to 2020; 151,942 (2010) to 164,303 (2020)

1.2.4. Current housing occupancy statistics for the jurisdictional area.

	<u>Total</u>	<u>Housing Units</u>		<u>% Occupied</u>
		<u>Occupied</u>	<u>Vacant</u>	
Clark County	10,385	8,783	1,602	84.6%
Garland County	50,548	40,994	9,554	81.1%
Hot Spring County	<u>14,332</u>	<u>12,664</u>	<u>1,668</u>	88.4%
Total	75,265	62,441	12,824	83.0%

Element Number 2

“Administrative Structure”

Guidance Document

The Administrative Structure of the RSWMD is essential to understanding how the District functions on a daily basis, how decisions are made by the Board and the staff, what other entities and/or individuals are involved in the decision-making process, and how the District is funded.

2.1 Board Composition

2.1.1 Elected Officials – Provide a list of the name and public entity represented by the current Board Members, the years of service on the Board, and any solid waste related certifications they may hold.

- *Clark County Judge Ron Daniell – Serving since January 2003
- *Garland County Judge Rick Davis – Serving since January 2011
- *Gurdon Mayor Clayton Franklin – Serving since March 2001
- *Hot Spring County Judge Bill Scrimshire – Serving since January 2005
- *Malvern Mayor Steve Northcutt – Serving since January 1999

2.1.2 Appointed Members – Provide a list of the name and public entity represented by current Board Members who are appointed by a mayor or county judge. List the years they have served, and whether or not a copy of their appointment papers and minutes of the meeting approving them by the city and/or county are in the District’s files.

- *Arkadelphia City Manager Jimmy Bolt – Serving since March 2005 (Appointment Confirmed)
- *Hot Springs City Manager David Watkins – Serving since June 2012 (Appointment Confirmed)

2.1.3 Advisory Boards – Provide a list of each advisory board, commission, or other entity, public or private, that provided information and/or input into the decision-making mechanism of the Board of Directors.

Southwest Central RSWMD Recycling Advisory Committee Members

Clark County – Arkadelphia Sanitation Director Donny Manning, Gurdon Mayor Clayton Franklin, Okolona Mayor James Cox

Garland County – Hot Springs Deputy City Manager Bill Burrough, GCDES Director Paul Thompson

Hot Spring County – HSCSWA Director Angela Loy, Fred Smith

2.1.4 Board Meetings - Provide the following information regarding the District’s Board Meetings:

2.1.4.1 How often does the Board meet?

The Board meets on the third Wednesday of the months of January, March, May, July, September and November.

2.1.4.2 Where does the Board meet?

West Central Arkansas Planning & Development District, Inc. offices located at 1000 Central Avenue, Hot Springs.

2.1.4.3 How is the public notified of the meetings?

The public is notified through newspaper publications in THE DAILY SIFTINGS HERALD (Arkadelphia), GURDON TIMES, THE SENTINEL RECORD (Hot Springs) and MALVERN DAILY RECORD.

2.1.4.4 Is an agenda provided to the public prior to scheduled Board meetings?

The agenda is provided to the public through the individual Board members one week prior to each scheduled Board meeting.

2.2 **Public Participation** - This section analyses the relationship between the Board and the public and what steps the District takes to bridge any gap in communication. Provide the following information regarding systematic input from the public:

2.2.1 Does the Board allow time during each meeting for public to address the Board?

The public can address the Board at the conclusion of each Board meeting under “New Business”.

2.2.2 Describe how the public is engaged in the decision-making process of the Board?

The public is engaged through each individual Board member’s local entity meetings. Any information concerning activities of the Southwest Central RSWMD regarding member entities is coordinated individually respective of the effect of the decision-making process by the Board.

2.2.3 What mechanisms are used by the District to involve the public, industrial sector and business sector, and to inform them of Board activities? Are formal mechanisms in place?

The public is involved through each individual Board member’s local entity meetings and through the Recycling Advisory Committee’s formal mechanism to review issues which would require review/approval by the SWCRSWMD Board.

2.2.4 Describe the Certificate of Need procedures for obtaining public input regarding a solid waste facility’s request for a new permit or renewal of an existing permit.

See Appendix B.

2.3 **District Administrative Staff** - This section analyses the relationship between the Board and the staff that performs the required solid waste functions.

2.3.1 List all staff that is in the direct employment of the RSWMD.

The Southwest Central RSWMD does not have any direct employees.

- 2.3.2** Include the name, title, whether full or part-time, number of years, and any certifications held that relate to solid waste issues.

2.4 **Contractors, Consultants, Service Providers, and Volunteers** - This section discusses the private consultants, service providers, and volunteers that provide information/services on a regular basis to the District Board and/or staff.

- 2.4.1** What administrative functions are 'farmed-out' or contracted to consultants?

Administrative/Fiscal Management Services are provided by West Central Arkansas PDD, Inc..

- 2.4.2** What non-administrative functions are 'farmed-out' or contracted to consultants?

SWCRSWMD Recycling Center Operation is provided by the City of Hot Springs.

Engineering Services are provided by B & F Engineering, Inc., Hot Springs.

Legal Counsel Services are provided by Arnold, Batson, Turner & Turner, P.A., Arkadelphia.

Recycling/Waste Reduction Education Services are provided by Julie Dickson, Hot Springs.

Audit Services are provided by Jordan, Woosley, Crone & Keaton, Ltd., Hot Springs.

- 2.4.3** Does a formal contract exist between the District and the contractor for the purpose of providing services?

All services are formally contracted on an "as needed" basis.

- 2.4.4** What is the length of term of the contract?

All contracts are on-going until terminated by the Board of Directors' review on an "as needed" basis.

- 2.4.5** From the contractor, complete an inventory of staff that is involved in solid waste administration. Include the name, title, whether full or part-time, number of years in position, and any certifications held that relate to solid waste issues.

West Central Arkansas Planning & Development District, Inc.

Dwayne Pratt, Executive Director, part-time SWCRSWMD, employed since 1992.

Tim Driggers, Project Coordinator, part-time SWCRSWMD, employed since 1995.

Mary Jane Hazen, Administrative Coordinator, part-time SWCRSWMD, employed since 2004.

Joyellen Rosamond, Finance Manager, part-time SWCRSWMD, employed since 1996.

- 2.4.6** List volunteer programs currently in place. Identify how they function within the District.

There are no formal Southwest Central RSWMD Volunteer Programs currently in place.

2.5 **Solid Waste Authorities**

2.5.1 If any, please list any solid waste authorities that operate within the RSWMD.

The Hot Spring County Solid Waste Authority operates independently within the SWCRSWMD.

2.5.2 List their Board members and the city/county they represent.

Hot Spring County Solid Waste Authority Board of Directors

Mark Badgwell, representing Hot Spring County

Gregory Crain, representing Hot Spring County

Kurt Crawford, representing Hot Spring County

D. R. "Buddy" Wallis, representing Hot Spring County

Jerry L. Dodd, representing Hot Spring County Economic Development Committee

Mitchell Burnett, representing City of Donaldson

Doyle Cannon, representing City of Friendship

2.5.3 Discuss their function and how that relates to management of the District.

The Hot Spring County SWA is responsible for the oversight of all Hot Spring County Solid Waste Policy, except for the City of Malvern, internal to but independent of the Southwest Central RSWMD.

2.5.4 Are there any authority members that serve on the District's Board?

No.

2.5.4.1 If so, please list them and the public entity they represent.

2.6 Administrative Procedures and Other Documents

2.6.1 Are the RSWMD's current Rules, Regulations, and Procedures approved by the Board? Effective date?

The Southwest Central RSWMD Board of Directors approved the SWCRSWMD "By Laws" on 4-19-95.

2.6.2 Have they been filed with the Arkansas Secretary of State? How was the public involved in development of the District's Rules, Regulations, and Procedures?

The Southwest Central RSWMD "By Laws" have not been filed with the Arkansas Secretary of State. The public was involved in the development of the "By Laws" through the local member entities review.

2.6.3 Append a copy of the district's approved Rules, Regulations, and Procedures. Include any amendments.

See Appendix C.

2.7 Administrative Funding

RSWMDs fund their operations using a variety of methods as described in Arkansas statutes. Funding is also supplied to the Districts via the Solid Waste Management and Recycling Grants Program and the Waste Tire Program.

2.7.1 Provide the following information regarding how the district is funded and the percentages of that funding source when compared to the entire district budget. In the following manner, list the most recent annual funds received from ADEQ for administrative purposes:

a. Recycling Grants -	\$28,153
b. Waste Tire Grants -	\$0
c. Other grants (identify Source) _____	\$0
d. Total administrative funds from Grants	\$28,153

Next, list all administrative fees levied and collected by the District.

<u>Source</u>	<u>Most Recent Annual Dollar Amount</u>	<u>% of total</u>
ADEQ GRANTS (from d above)	\$28,153	20.7%
Local Sources:		
Hauler Licensing	\$3,850	
Taxes	\$0	
Per Capita Fee	\$0	
Assessment/Tipping	\$103,960	
Collection Fee	\$0	
Other*	\$0	
Total Local Revenue	\$107,810	79.3%
Total Annual Funds	\$135,963	<u>100 %</u>

2.8 RSWMD Budget

2.8.1 Provide a copy of the most recent annual budget for the RSWMD.

See Appendix D.

2.8.2 Who approves the annual operating budget for the district?

The Southwest Central RSWMD Board of Directors approves the Operating Budget.

2.9 Public Education and Support

- 2.9.1** Provide information on the programs and resources utilized by the district to provide education to the general public.

The SWCRSWMD Recycling Advisory Committee coordinates all Public Education Program information utilized throughout the District. The SWCRSWMD prints informational brochures that are distributed through the local member entities. The brochures utilized include both comprehensive information about the SWCRSWMD and the promotion of Household Hazardous Waste Collection Events held semi-annually within the District. Also, the SWCRSWMD employs a Recycling/Waste Reduction Educator available “year round” for presentations in area schools.

See “Appendix E” for examples of brochures.

- 2.9.2** How is the public informed of the goals and objectives, as well as achievement of the goals?

The SWCRSWMD Recycling Advisory Committee coordinates through the local member entities.

- 2.9.3** How is the public informed of the services, available facilities, and programs of the District?

The SWCRSWMD Recycling Advisory Committee coordinates through the local member entities.

- 2.9.4** How is the public involved in the planning and participation of events and programs supporting the district’s goals and objectives?

The SWCRSWMD Recycling Advisory Committee coordinates through the local member entities.

2.10 Programs for Elimination of Illegal Dumping and Open Burning

- 2.10.1** Explain the RSWMDs programs, enforcement efforts, and public education initiatives to eliminate open burning and burn barrels within the District.

The SWCRSWMD works with the local member entities on an “as needed” basis to provide technical support when required.

- 2.10.2** Provide information on current illegal dump site locations and what programs the District has in place to eliminate these sites.

The SWCRSWMD works with the local member entities on an “as needed” basis to provide technical support when required.

- 2.10.3** Provide the names of all licensed Illegal Dump Control Officers within the RSWMD.

The SWCRSWMD works with the local member entities “as needed” to coordinate individual entity Illegal Dump Control within the District.

Element Number 3

“Waste Origin, Composition, and Characterization”

Guidance Document

Under this element, RSWMDs are asked to identify the quantities and makeup of waste generated within the District. Identifying the quantities and types of waste in the waste stream is an important step in planning for the waste management processes of waste reduction, recycling, re-use, waste to energy, and planning for adequate disposal capacity for the District.

3 Waste Categories - Provide a spreadsheet or table categorizing solid waste as being generated by residential households and commercial entities, as well as waste generated by industries within the District.

3.1 Residential and Commercial Waste Estimation - can be estimated utilizing a per capita generation rate. The most recent information provided by EPA indicates that household and commercial waste (known as municipal solid waste or MSW) is produced at a rate of 4.43 pounds per person per day.

Based on the current estimated per capita generation rate, the Southwest Central RSWMD should generate a total of 122,841 tons MSW into the waste stream (151,942 X 4.43 (lbs.) X 365 (days) / 2000lbs).

Waste Disposed in District Designated Landfills (based on actual 2011 waste receipt records)

<u>Facility</u>	<u>Class 1 Waste</u>	<u>Class 4 Waste</u>
Clark County Class 4	N/A	3,303 tons
Garland County Class 4	N/A	87,233 tons
Waste Management, Inc.	<u>103,960 tons</u>	<u>(inclusive)</u>
Total	103,960 tons	90,536 tons

3.2 Municipal Solid Waste Makeup - can be computed by utilizing the percent of material commonly found in the waste stream and the populations for each county of the state. This information, found on the website for the U.S. Census Bureau, Population Division, is provided on following pages.

2011 Estimated MSW Waste Stream Composition by Material (122,841 tons)

<u>Waste Type</u>	<u>Percent of Waste Stream</u>	<u>Tons</u>
Paper and Paperboard	28.5	35,010
Food Scraps	13.9	17,075
Yard Trimmings	13.4	16,461
Plastics	12.4	15,232
Metals	9.0	11,056
Rubber and Textiles	8.4	10,319
Wood	6.4	7,862
Glass	4.6	5,651
Other	3.4	4,175

3.3 Industrial Waste Generation - Industrial Waste generation rates can differ significantly from one locale to another.

3.3.1 Each RSWMD should conduct a survey of the large industrial waste generators within their District. All estimations of industrial volumes should be based upon the results gained from individual surveys done by the District.

See “Appendix F” for detail on approximately **20,636 tons** of Industrial Waste generated.

3.3.2 Each District should develop a method to identify generators and provide a survey form for completion by the facility.

The Industrial Waste Generators within the SWCRSWMD were identified by utilizing the 2012 Arkansas Manufacturers Directory to determine companies with more than 100 employees. The “provided” Survey Forms were utilized.

3.3.3 These generators might be identified based upon number of employees (such as more than 100 employees), estimated volume waste produce by the facility (such as more than 50 tons per year), or other factors determined by the RSWMD. The Arkansas Industrial Foundation publishes an annual directory of manufacturers. Provide the following for each Generator:

3.3.3.1 Generator Name and its location.

3.3.3.2 Types of waste generated

3.3.3.3 Latest annual volume of industrial waste (exclude waste considered commercial waste)

3.3.3.4 Latest annual types and volumes of materials recycled by the Generator

The Information obtained under this Element will then be used by the RSWMDs and the state to determine the amount of material available in each city and county. It will demonstrate the concentration of waste generation within each District and the potential need for facilities strategically located to manage the waste stream. It can become the basis for planning for future opportunities to divert waste from landfills through recycling, composting, or waste-to-energy facilities strategically located within the RSWMD, surrounding areas, or throughout the State.

2010 Total MSW Waste Stream Composition by Material (tons)

<u>Waste Type</u>	<u>Percent of Waste Stream</u>
Paper and Paperboard	28.5%
Food Scraps	13.9
Yard Trimmings	13.4
Plastics	12.4
Metals	9.0
Rubber and Textiles	8.4
Wood	6.4
Glass	4.6
Other	3.4

Utilizing the population and estimated volume of waste generated by each person on a per day basis (4.43 lbs.), the amount of waste within a RSWMD can be predicted.

A plan area with 200,000 people could be expected to generate 161,695 tons of MSW, not including industrial waste from large manufacturing facilities.

Example: $200,000 \times 4.43 \text{ (lbs.)} \times 365 \text{ (days)} / 2000\text{lbs} = 161,695 \text{ tons of MSW}$

Each material of the waste stream can then be estimated, such as 46,083 tons of Paper and Paperboard.

Example: $161,695 \text{ tons MSW} \times 28.5 \% \text{ percent of waste stream} = 46,083 \text{ tons.}$

Table 1. Annual Estimates of the Resident Population for Counties of Arkansas: April 1, 2010 to July 1, 2011

Geographic Area	April 1, 2010		Population Estimates (as of July 1)	
	Census	Estimates Base	2010	2011
Arkansas	2,915,918	2,915,921	2,921,588	2,937,979
Arkansas County	19,019	19,019	18,994	18,892
Ashley County	21,853	21,853	21,840	21,692
Baxter County	41,513	41,513	41,527	41,536
Benton County	221,339	221,339	222,924	227,556
Boone County	36,903	36,903	36,914	37,051
Bradley County	11,508	11,508	11,501	11,482
Calhoun County	5,368	5,368	5,331	5,144
Carroll County	27,446	27,446	27,533	27,512
Chicot County	11,800	11,800	11,799	11,721
Clark County	22,995	22,995	22,959	22,858
Clay County	16,083	16,083	16,070	15,880
Cleburne County	25,970	25,970	26,000	25,901
Cleveland County	8,689	8,689	8,697	8,672
Columbia County	24,552	24,552	24,498	24,401
Conway County	21,273	21,273	21,275	21,270
Craighead County	96,443	96,443	96,705	98,315
Crawford County	61,948	61,948	61,997	61,944
Crittenden County	50,902	50,902	50,913	50,525
Cross County	17,870	17,866	17,834	17,781
Dallas County	8,116	8,116	8,092	8,072
Desha County	13,008	13,008	12,986	12,763
Drew County	18,509	18,509	18,517	18,467
Faulkner County	113,237	113,237	114,021	116,342
Franklin County	18,125	18,125	18,128	18,047
Fulton County	12,245	12,245	12,242	12,296
Garland County	96,024	96,022	96,218	97,124
Grant County	17,853	17,853	17,893	17,988
Greene County	42,090	42,090	42,171	42,720
Hempstead County	22,609	22,609	22,590	22,541
Hot Spring County	32,923	32,923	32,938	32,881
Howard County	13,789	13,789	13,817	13,886
Independence County	36,647	36,647	36,724	36,861
Izard County	13,696	13,696	13,671	13,419
Jackson County	17,997	17,997	17,972	17,866
Jefferson County	77,435	77,435	77,317	76,246
Johnson County	25,540	25,540	25,578	25,742
Lafayette County	7,645	7,645	7,636	7,516
Lawrence County	17,415	17,415	17,421	17,178
Lee County	10,424	10,424	10,423	10,326
Lincoln County	14,134	14,134	14,100	14,006
Little River County	13,171	13,171	13,137	12,996
Logan County	22,353	22,353	22,334	22,290
Lonoke County	68,356	68,354	68,658	69,341
Madison County	15,717	15,720	15,707	15,776

Marion County	16,653	16,653	16,633	16,573
Miller County	43,462	43,462	43,530	43,759
Mississippi County	46,480	46,480	46,332	45,966
Monroe County	8,149	8,149	8,121	8,075
Montgomery County	9,487	9,487	9,486	9,433
Nevada County	8,997	8,997	8,984	9,017
Newton County	8,330	8,330	8,339	8,264
Ouachita County	26,120	26,120	26,129	25,880
Perry County	10,445	10,445	10,464	10,405
Phillips County	21,757	21,757	21,671	21,442
Pike County	11,291	11,291	11,296	11,259
Poinsett County	24,583	24,583	24,551	24,514
Polk County	20,662	20,662	20,664	20,610
Pope County	61,754	61,754	61,875	62,331
Prairie County	8,715	8,715	8,713	8,618
Pulaski County	382,748	382,750	383,581	386,299
Randolph County	17,969	17,969	17,970	18,017
St. Francis County	28,258	28,258	28,165	27,970
Saline County	107,118	107,120	107,636	109,526
Scott County	11,233	11,233	11,279	11,272
Searcy County	8,195	8,195	8,186	8,036
Sebastian County	125,744	125,744	125,853	127,127
Sevier County	17,058	17,058	17,147	17,293
Sharp County	17,264	17,264	17,255	17,380
Stone County	12,394	12,394	12,431	12,603
Union County	41,639	41,639	41,535	41,427
Van Buren County	17,295	17,295	17,300	17,083
Washington County	203,065	203,065	204,061	207,521
White County	77,076	77,076	77,332	78,167
Woodruff County	7,260	7,264	7,265	7,229
Yell County	22,185	22,185	22,202	22,060

(X) Not applicable.

Note: The April 1, 2010 Population Estimates base reflects changes to the Census 2010 population from the Boundary and Annexation Survey (BAS) and other geographic program revisions. It does not reflect changes from the Count Question Resolution program. All geographic boundaries for the 2011 population estimates series are defined as of January 1, 2011.

Suggested Citation:

Table 1. Annual Estimates of the Resident Population for Counties of Arkansas: April 1, 2010 to July 1, 2011 (CO-EST2011-01-05)

Source: U.S. Census Bureau, Population Division

Release Date: April 2012

Element Number 4

“Waste Collection, Recycling, and Disposal”

Guidance Document

There should be an evaluation of the collection, recycling and disposal system in place within the District. This should demonstrate the level of services provided, type of services provided, and the associated costs of those services. The effectiveness and convenience of collection services for all residents should be evaluated, as well as providing information for RSWMD planning.

Additionally, this element will provide a very clear outline of the current infrastructure (facilities and transportation) status in various Districts throughout the State.

In order to have consistent information, all data provided should be from January 1-December 31, 2011.

4.1 **Existing Solid Waste Management Facilities** -This item will provide a description and available handling capacity on all existing facilities used in management or disposal of solid waste within the District.

See Appendix G.

- 4.1.1** **Landfills** - While landfills have historically been the primary depository of solid waste collected within the state, more and more RSWMD's are looking for alternatives to land disposal.
- 4.1.2** Each RSWMD should identify all facilities within the jurisdiction that is utilized for management of Solid Waste, including waste to energy facilities, C&D Recycling facilities, Recycling centers, as well as landfills.
- 4.1.3** A map locating each type of facility should be provided. (see Element 1.1.2)
- 4.1.4** Each landfill should be listed and information on volumes received, source of waste (in District vs. out of District), remaining life/capacity, expansion plans, projected closure date.
- 4.1.5** Recognizing that landfill operators charge different customers different tipping fees based upon contract terms, volume, and special handling requirements, the “gate rate” for each material accepted should be provided.

4.2 **Transfer Stations** play a significant role in providing economical transport of collected waste to final disposition. Transfer stations also provide local disposal options for waste materials not collected by Collection Company.

See Appendix G.

- 4.2.1** Identify each transfer station and the services provided at the transfer station should be listed (such as types of material accepted for disposal, recycling, composting.).
- 4.2.2** A map should be provided depicting the location of all transfer stations within the RSWMD. (see 1.1.2)

4.2.3 For each transfer station, the facility that the collected material is sent to should be identified (such as landfill, material recovery facility, compost site).

4.3 **All other facilities** utilized for management of collected waste should be identified.

See Appendix G.

4.3.1 The list of facilities might include Material Recovery Facilities (recycling centers), compost facilities, C&D recovery facilities or waste-to-energy facilities.

4.4 **For each facility**, identify the amount and type of material handled, service area serviced, and service charge to customers utilizing facility.

See Appendix G.

4.4.1 Provide a listing of each existing facility, including the following information:

4.4.1.1 Name of Facility

4.4.1.2 Physical Address or description of Location of the Facility

4.4.1.3 Contact Information

4.4.1.4 Type of Facility (ie: Class I Landfill, Class 3 Landfill, Class 4 Landfill, Transfer Station, Recycling Facility, etc.)

4.4.1.5 Remaining Capacity of the disposal facilities, in years and cubic yards, using the most recent Annual Engineering Inspection Report. These reports are available on ADEQ's website.

http://www.adeg.state.ar.us/solwaste/branch_technical/permitted_facils/permit_list.asp

4.5 **Solid Waste Collection Systems** - This item will provide a description and available capacity of the collection/transportation systems in place in the District.

4.5.1 Provide a table of the existing solid waste collection systems within the RSWMD.

Southwest Central RSWMD Collection Systems

Clark County provides curbside collection for residents in the unincorporated areas with once weekly pick-up for approximately 1,580 accounts billed monthly (\$8.00) directly to serviced residents.

The City of Arkadelphia provides curbside collection for approximately 3,700 accounts within City limits twice weekly billed monthly (\$15.00) mandatory on water bill.

The City of Gurdon contracts with Walker Sanitation to provide curbside collection for approximately 1,100 accounts within City limits once weekly billed monthly (\$10.00) mandatory on water bill.

Garland County provides containers curbside for residents in the unincorporated areas with once weekly pick-up by private industry contractors for approximately 24,000 accounts billed monthly (\$13.50) directly to serviced residents.

The City of Hot Springs provides curbside collection for approximately 12,500 accounts within City limits once weekly billed monthly (\$11.50 or \$18.00, dependent on container size) mandatory on water bill. Curbside collection of bulky items is available free bi-weekly to all residents within City limits. Compost is made available to all City residents free of charge as "is produced".

The Hot Springs Village P.O.A. provides curbside collection for approximately 9,000 accounts once weekly billed bi-monthly (\$30.00 or \$40.92) mandatory on water bill.

Hot Spring County provides 11 convenience stations for drop off of Class 1, Class 4 and recyclable materials for approximately 32,923 residents with operation costs paid for by a dedicated sales tax.

The City of Malvern contracts with WM to provide curbside collection for approximately 3,279 accounts within City limits once weekly billed monthly (\$10.02) mandatory on water bill.

- 4.6 Collection Service Providers** - Identify the type of service provided, service area, frequency of collections, contractual arrangement (individual or exclusive contract), and method of revenue collection (from individual or contract with government entity).
- 4.6.1** Determine the cost of services for residential services (garbage, recycling, bulky waste, yard waste, and other services).
See **Section 4.5.1**.
 - 4.6.2** Each collection company should provide the number of accounts (residential, commercial, and industrial).
See **Section 4.5.1..**
 - 4.6.3** Include the volume of material delivered to end point facility (landfill, transfer station, recycling center, compost center, etc).
See **Section 3.1**.

4.7 Waste Hauler/Transporter Information - Please Provide the following information for each Waste Hauler/Transporter:

See Appendix H.

- 4.7.1** Name of Hauler/Transporter
- 4.7.2** Contact Information
- 4.7.3** Hauler Equipment List and Hauling Capacity.

4.7.4 Detailed map showing coverage area served by the hauler. (This map should provide coverage on a street level of detail.)

4.7.5 Type(s) of materials transported, including commercial and industrial wastes.

4.8 Import/Export Status - This item will provide information about the waste that is generated within the jurisdictional area of the District and shipped out for management or disposal. Additionally, this item will provide information about waste generated outside the jurisdictional area of the District and shipped into the District for management or disposal.

4.8.1 Provide a list of the types and estimated annual volume of waste generated within the jurisdictional area of the District and shipped out of the District and/or out of state for management or disposal.

See **Section 3.1** for total Class 1 solid waste (103,960 tons) shipped to Waste Management, Inc. facilities located in Pulaski County and Jefferson County for year 2011.

4.8.2 Provide a list of the types and estimated annual volume of waste imported into the District for management or disposal.

N/A

4.8.3 Provide a list of haulers that pick up Arkansas generated waste in District and transport it out of state for disposal.

N/A

“Executive Summary”

E.1 The executive summary should provide an overall evaluation of the current state of solid waste within the RSWMD, thereby satisfying the requirements of A.C.A. § 8-6-716.

E.2 It should identify areas where planning is needed to address capacity issues within the district. It should evaluate the need for landfill capacity, as well as the need for recycling facilities, C&D recovery facilities, waste to energy facilities, compost facilities, as well as other opportunities to divert waste from landfills.

E.3 It should give an overview of the transportation effectiveness within the district including adequacy of transfer stations in meeting strategic movement of waste to landfills within the district, as well as out of district/state disposal locations.

E.4 The summary should also include any recommendations for regulatory and statutory changes needed for the safe and environmental protection of the state’s natural resources.

E.5 The adequacy of funding within the RSWMD should be discussed for future needs of the district.

The Southwest Central Regional Solid Waste Management District 2013 Needs Assessment Report is intended to meet all State of Arkansas requirements with regard to the planning and management of solid waste within the boundary area of Clark, Garland and Hot Spring Counties.

The Solid Waste Management System in the SWCRSWMD is actively functioning in the manner that the legislation that was originally drafted had intended. The “regional” concept is a departure from the customary approach of all municipalities and counties dealing with Solid Waste Management alone. The SWCRSWMD has reflected the willingness of the member entities to approach solid waste issues in a fashion that can be beneficial to both the individual members and reap benefits for the collective body as well. The members are united in the fact that they cooperate as a group to determine the best possible solution for disposal of Class 1 solid waste, because there is no Class 1 landfill located within District boundaries. Also, the cooperation is well evidenced with the continued growth of operations of the SWCRSWMD Recycling Center, the development of the E-Waste Recycling Program and the success of the Household Hazardous Waste Collection events held to date. By maintaining communication and regular meetings among the officials of the member entities, actions and policies of the SWCRSWMD Board of Directors will be a reflection of the collaboration on key Solid Waste Management issues. Also, the SWCRSWMD will seek to broaden the scope of views and concerns it considers on Solid Waste Management issues by involving and informing the residents of the District about the issues faced by the member entities. The SWCRSWMD Recycling Advisory Committee currently serves as the primary avenue to gather public input on these issues.

In order to assess the needs of the SWCRSWMD for the purpose of completing the 2013 Needs Assessment Report, the area, identity and quantity of solid waste, collection services and disposal facilities have been reviewed and analyzed. The role of the District in the development and implementation of disposal services is to continually evaluate the disposal capacity to insure that sufficient capacity is available to serve the needs of the District. The identity and quantity of solid waste has not substantially changed within the District in recent years. The SWCRSWMD has no Class 1 disposal capacity, yet the District does have capacity need, as evidenced by the 103,960 tons identified as being disposed of during 2011. Beginning October 1, 2006, the SWCRSWMD has contracted with Waste Management of Arkansas, Inc. for the disposal of Class 1 waste in one of the WM landfill sites located in Jefferson County, Pulaski County and Yell County. A new Agreement has extended this relationship through September 30, 2019, at WM landfill sites located in Jefferson County and Pulaski County. The SWCRSWMD has a Class 4 landfill located in Clark County with permitted capacity of approximately 2 years and a Class 4 landfill located in Garland County with permitted capacity of approximately 3 years. The SWCRSWMD Board of Directors continues to explore the long-term disposal capacity needs of the District and the possibility of siting a Class 1 landfill within District boundaries.

The SWCRSWMD currently does not play an active role in the transportation issues of the individual member Solid Waste Management Systems. The District involvement is limited to technical assistance as required by the individual jurisdictions. The District does not anticipate significant transportation related issues or needs in the near future.

The SWCRSWMD currently does not anticipate any recommendations for regulatory or statutory changes needed for the environmental protections of the State’s natural resources in the near future.

The SWCRSWMD Board of Directors continues to evaluate the adequacy of funding for both short-term and long-term needs of the District. This review includes the level of funding available to be generated from within the District through the self-imposed assessment fee and the level of funding available through grant programs at the Arkansas Department of Environmental Quality.

Appendices

Appendix A – Map / Facility Listing

Appendix B – Certificate of Need Review Program

Appendix C – SWCRSWMD By Laws

Appendix D – Budget Information

Appendix E – Informational Brochures

Appendix F – SWCRSWMD Industrial Waste Generation Surveys

Appendix G – SWCRSWMD Solid Waste Management Facilities Surveys

Appendix H – SWCRSWMD Waste Hauler/Transporter Surveys