



Volume II

Regional Solid Waste Management Plan

2022 to 2042 Planning Period

Submitted to Deep East Texas
Council of Governments
Board for Approval: 7/22/2021

EXECUTIVE SUMMARY

In accordance with Texas Health and Safety Code 363, Subchapter D and Texas Administrative Code Chapter 330, Subchapter 0, the enclosed report serves as the Deep East Texas Council of Governments' (DETCOG) Regional Solid Waste Management Plan. This plan is an update to the previously approved plan from May 2007.

This plan update details the region's current and planned municipal solid waste (MSW) management procedures, objectives and goals, recommendations, and strategies for achieving goals through the planning period of years 2022 to 2042. The plan update follows TCEQ guidance using the Regional Solid Waste Management Plan Volume I and Volume II forms and the plan is divided into four sections.

Geographic Scope,

Planning Periods,

Plan Content,

and Required Approvals.

To aid in gaining accurate and current data for use in this plan, an MSW survey was prepared and submitted to all public and private solid waste generators, collection organizations, and landfills within the DETCOG region. The survey aimed to gather MSW operations and practices, waste hauler and landfill information, and recycling and scrap operations data. DETCOG Staff also conducted interviews of County Judges, City Managers, Public Works Directors, Landfill Operators and Solid Waste Collection Operators. Additional plan data and information were obtained through various sources, which included TCEQ's Municipal Solid Waste in Texas: A Year in Review 2019, Data Summary and Analysis, and recent TCEQ annual solid waste reports.

Following the receipt of MSW surveys and data collection a draft plan was prepared by DETCOG Staff and distributed to the DETCOG Regional Solid Waste Advisory Committee (RSWAC) for their review. The RSWAC met on July 19, 2021, to discuss the region's results, review plan drafts and revisions, and approve plan for distribution. A public meeting was conducted on July 21, 2021 to present the plan to the general public and solicit any comments for inclusion in the report. The plan was formally adopted by the DETCOG Board of Directors on July 22, 2021.

Through plan development and review, the RSWAC and the DETCOG board developed a series of regional goals and objectives to present within the plan. Regional goals and objectives will be periodically evaluated for effectiveness and suitability over the planning periods. The following statements are the regions objectives for the full planning period between years 2022 and 2042.

Achieve a 5% reduction of solid waste entering landfills by 2032 and a 10% reduction by 2042.

Develop a regional plan to properly dispose of E-Waste

Encourage proper disposal of household hazardous waste (HHW).

Decrease improperly disposed tires within the region.

Volume I Section I outlines the geographic scope of the region, Section II details the regions goals, waste minimization and recycling efforts, and the commitment to the management of MSW facilities, and Section III demonstrates the plan's approval.

Volume II Sections I and II of the plans outline the geographic scope of the region and establish the short, intermediate, and long-range planning period for the full plan between 2022 to 2042.

Section III Outlines various subsections detailing the status and adequacy of waste management activities as well as recommendations, incentives, and barriers to achieving waste minimization, and reuse, recycling, and resource recovery. Section IV demonstrates the plan's approval by the general public, RSWAC, and the DETCOG Board.

ACKNOWLEDGEMENTS

This Regional Solid Waste Management Plan was funded through grant money provided by the Texas Commission on Environmental Quality (TCEQ), from distribution through the Deep East Texas Council of Governments (DETCOG).

Deep East Texas Council of Governments would like to acknowledge and thank all participating parties involved in the planning and development of this regional solid waste management plan. The following is a list of key organizations and participants involved in the development of this plan.

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Regional Organization Information

Table 1. Organization Information

Name of Council of Government	Deep East Texas Council of Governments (DETCOG)
Mailing Address	1405 Kurth Dr. Lufkin, Tx 75904
Website	www.DETCOG.gov
Phone Number	936-634-2247
Email Address	info@detcog.gov

Section I. Geographic Scope

Table I.I. Geographic Scope

I.A. Names of Member Counties in the Entire Planning Region	Angelina, Houston, Nacogdoches, Newton, Polk, Sabine, San Augustine, San Jacinto, Shelby, Trinity, Tyler
I.B. Geographic Planning Units Used in the Regional Implementation Plan	<input type="checkbox"/> Small geographic areas such as census tracts or city boundaries for the most detailed data collection and manipulation; <input type="checkbox"/> Planning areas to be used for the assessment of concerns and the evaluation of alternatives. These planning areas shall be aggregations of small geographic areas; <input type="checkbox"/> County boundaries for the summarization and presentation of key information; or <input checked="" type="checkbox"/> The entire planning region

Section II. Planning Periods

Table II.I. Planning Periods

<p>II.A.1. Current and Historical Information</p>	<p>2020 DETCOG utilized data from both 2020 and 2021 for the current information. DETCOG gathered data via subject matter experts in the region as well as surveys. The topics in the surveys included MSW Collection, Disposal, Recycling, Composting, Illegal Dumping and general feedback.</p>
<p>II.A.2. Short-range Planning Period</p>	<p>2022-2027 DETCOG will continue to maintain the current activities cited in II.A.1. In addition, DETCOG will look for new opportunities to divert materials from our region’s landfills. Those opportunities include education and data collection.</p>
<p>II.A.3. Intermediate Planning Period</p>	<p>2028-2032 DETCOG will continue to maintain the activities listed in both II.A.1. and II.A.2. Since many of these activities are ongoing tasks. In addition to those mentioned, DETCOG will look for new funding opportunities to increase recycling efforts around the region.</p>
<p>II.A.4. Long-range Planning Period</p>	<p>2033-2042 DETCOG will continue to maintain the activities listed in II.A.1, II.B.2 and II.C.3. In addition, the region and State of Texas is in need of better infrastructure to process materials for recycling.</p>
<p><input type="checkbox"/> Check box if additional details provided in <i>Attachment II.A.</i></p>	

Section III. Plan Content

III.A. Demographic Information

Table III.A.I. Residential Waste Generation

Year	Growth Rate per Year	Current Population/Population Projection*	Landfill Disposal (Tons)**	Disposal Rate (lbs./Person/Day)	Recycling (Tons)***	Recycling Rate (lbs./Person/Day)	Residential Waste Generation (Tons)
Current	0.20%	348,273	849,530	13.37	22,467	0.35	827,063
2022	0.12%	348,839	850,910	13.37	22,504	0.35	828,406
2027	-0.04%	349,796	851,808	13.34	22,527	0.35	829,281
2032	-0.19%	348,033	846,395	13.33	22,384	0.35	824,011
2037	-0.26%	344,246	836,110	13.31	22,112	0.35	813,998
2042	-0.28%	339,664	823,974	13.29	21,791	0.35	802,183

Sources:
 *Calculations based on Texas Demographic Center Projections
 **2020 TCEQ MSW Landfill Reports
 ***DETCOG Surveys of Recycling Centers in Region

Table III.A. II. Commercial Waste Generation

Year	Description of significant commercial activities affecting waste generation and disposal in the area.	Expected increase or decrease to Commercial Waste Generation
2022	There is very little reason to expect a significant increase in Commercial activities that will lead to an increase in waste when you examine the entire 11-County Deep East Texas Council of Governments (DETCOG) Region. So far, the Covid Pandemic has caused a 1,500 net loss in jobs in the region.	No expected increase or decrease in Commercial Waste Generation.
2027	No significant commercial activities affecting waste generation and disposal in the region over this 5-year planning period.	No expected increase or decrease in Commercial Waste Generation.
2032	No significant commercial activities affecting waste generation and disposal in the region over this 5-year planning period.	No expected increase or decrease in Commercial Waste Generation.
2037	No significant commercial activities affecting waste generation and disposal in the region over this 5-year planning period.	No expected increase or decrease in Commercial Waste Generation.
2042	No significant commercial activities affecting waste generation and disposal in the region over this 5-year planning period.	No expected increase or decrease in Commercial Waste Generation.

Table III.A.III. Industrial Waste Generation

Year	Description of significant industrial waste activities affecting waste generation and disposal in the area.	Expected increase or decrease to Industrial Waste Generation
2022	There is very little reason to expect a significant increase in Industrial activities that will lead to an increase in waste when you examine the entire 11-County Deep East Texas Council of Governments (DETCOG) Region.	No expected increase or decrease in Industrial Waste Generation.
2027	There is very little reason to expect a significant increase in Industrial activities that will lead to an increase in waste when you examine the entire 11-County Deep East Texas Council of Governments (DETCOG) Region.	No expected increase or decrease in Industrial Waste Generation.
2032	There is very little reason to expect a significant increase in Industrial activities that will lead to an increase in waste when you examine the entire 11-County Deep East Texas Council of Governments (DETCOG) Region.	No expected increase or decrease in Industrial Waste Generation.
2037	There is very little reason to expect a significant increase in Industrial activities that will lead to an increase in waste when you examine the entire 11-County Deep East Texas Council of Governments (DETCOG) Region.	No expected increase or decrease in Industrial Waste Generation.
2042	There is very little reason to expect a significant increase in Industrial activities that will lead to an increase in waste when you examine the entire 11-County Deep East Texas Council of Governments (DETCOG) Region.	No expected increase or decrease in Industrial Waste Generation.

III.B. Estimates of Current and Future Solid Waste Amounts by Type

Table III.B.1. Current and Future Solid Waste Amounts by Type

Table III.B.1							
Current and Future Solid Waste Amounts by Type							
Waste Type	Number of Landfills Accepting Waste Type	Percent of Total Tons Disposed	Current Year (2020)	2027 Projection (tons)	2032 Projection (tons)	2037 Projection (tons)	2042 Projection (tons)
Municipal	4	74.03%	628,880	630,566	626,559	618,946	609,962
Brush	1	0.08%	651	653	649	641	631
Construction or Demolition	3	10.89%	92,498	92,746	92,157	91,037	89,715
Litter	0	0.00%	-	0	0	0	0
Class 1 Non-Hazardous	1	2.62%	22,229	22,289	22,147	21,878	21,560

Table III.B.I - Continued							
Current and Future Solid Waste Amounts by Type							
Waste Type	Number of Landfills Accepting Waste Type	Percent of Total Tons Disposed	Current Year (2020)	2027 Projection (tons)	2032 Projection (tons)	2037 Projection (tons)	2042 Projection (tons)
Classes 2 and 3 Non-Hazardous	2	8.56%	72,722	72,917	72,454	71,573	70,534
Incinerator Ash	0	0.00%	-	0	0	0	0
Treated Medical Waste	0	0.00%	-	0	0	0	0
Municipal Hazardous Waste from CESQGs	0	0.00%	-	0	0	0	0
Regulated Asbestos-Containing Material (RACM)	0	0.00%	-	0	0	0	0
Non-RACM	0	0.00%	-	0	0	0	0
Dead Animals	3	2.55%	21,638	21,696	21,558	21,296	20,987
Sludge	3	0.86%	7,325	7,345	7,298	7,209	7,105
Grease Trap Waste	1	0.01%	93	93	93	92	90
Septage	0	0.00%	-	0	0	0	0
Contaminated Soil	1	0.00%	32	32	32	31	31
Tires (split, quartered, shredded)	4	0.04%	381	382	380	375	370
Pesticides	0	0.00%	-	0	0	0	0
Other (identify other types reported as Attachment III.B.)	1	0.36%	3,081	3,089	3,070	3,032	2,988
Totals:	4	100.00%	849,530	851,808	846,395	836,110	823,974

Note: Survey responses and TCEQ 2020 annual report were used to determine tonnage information for each corresponding waste type. Waste disposal projected out in five-year increments using the law of growth equation with region cumulative growth rate as used in Table III.A.I.

Check box if additional details provided in *Attachment III.B.*

III.C. Description of Current and Planned Solid Waste Management Activities

Table III.C.I. Current Solid Waste Management Activities in the Region

Activity	Description
Generation	<p>Municipal solid waste (MSW) is managed within the region by individual cities and/or counties through local ordinances and guidelines. Waste is generated at the source, which is predominately municipal, based on region surveys, TCEQ Fiscal Year 2020 Annual Solid Waste reports, and the Municipal Solid Waste in Texas: A Year in Review 2019 Data Summary and Analysis. MSW makes up approximately 74% of the generated waste type in the region followed by construction and demolition waste at approximately 11% and Classes 2 and 3 Non-hazardous at 8.6%. The remaining waste types generated in the region individually account for 2.6% or less.</p>
Source Separation	<p>City-wide or county-wide source separation does not currently exist, and surveyed municipalities and private institutions within the region did not indicate any programs or ordinances in place to develop large-scale source separation. Municipalities that operate recycling and/or material diversion programs rely on individual residential and/or commercial volunteer source separation and disposal at proper locations within the city and/or county. The City of Lufkin operates a drop off area for recyclable paper and cardboard at their recycling center. The City of Nacogdoches operates a drop-off area for cardboard behind the City Library. San Jacinto County has drop-off locations for Cardboard and Metals at each of their four Precinct Citizens Transfer stations.</p>
Collection	<p>MSW is managed within the region by individual cities and/or counties through local ordinances and guidelines. Collection of waste predominately begins at residential or commercial collection containers ranging in sizes from standard dumpsters to roll-off trailers. Surveyed municipalities and private institutions indicated various frequencies for collection depending on waste unit type and container size. The majority of survey responses indicated single-family homes and apartments and/or living communities have waste collected from containers weekly. Collection of commercial, industrial, construction, and bulky wastes depended more on the source and container size, and surveys indicated collection rates anywhere from weekly, bi-weekly, or more as needed. Generally, smaller municipalities have elected to cancel solid waste collection and disposal operations and contracted with one of several private collection companies operating within the region. Cities and private companies generally work on multi-year contracts for waste collection on an agreed renewal frequency. Private collection companies collect and dispose MSW in the nearest permitted facility. The Cities of Lufkin, Nacogdoches, Trinity, Woodville, and Newton pick up their respective city's MSW and dispose of it in the nearest permitted</p>

Activity	Description
	<p>facility. Surveyed response from the region (Attachment III.C.I) suggested the majority of collection from private haulers is handled by Pineywoods Sanitation but other much smaller private haulers are utilized throughout the region.</p>
Handling	<p>Surveyed municipalities and private institutions within the region did not indicate any MSW handling facilities.</p>
Storage	<p>Surveyed municipalities and private institutions within the region did not indicate any MSW storage facilities.</p>
Transportation	<p>Six transfer stations operate in the region. The Pineland Transfer Station Facility (Registration No. 40054), City of San Augustine Transfer Station Facility (Registration No. 40024), City of Woodville Transfer Station Facility (Registration No. 40013) and the Tyler County Transfer Station (Registration No. 40038) all transfer waste to the Angelina County Landfill. Pineywoods Sanitation (Registration No. 40318) has a Transfer Station under construction in Crockett, Texas that will send its waste to the Angelina County Landfill. The Pro Star Waste (Waste Connections) Transfer Station (Registration No. 40277) in Goodrich sends its waste to the Pro Star Waste (Waste Connections) Landfill in Polk County. The R&J Recycling and Disposal Transfer Station (Registration No. 40277) transfers its waste to the Sabine Parish Landfill in Zwolle, Louisiana. The region also contains fourteen Low Volume Transfer Stations and twenty-one Citizens Collection Stations. The facilities operate at low tonnage and serve to assist disposal efforts and lower traffic at the nearest permitted landfills.</p> <p>The DETCOG region is all “rural” with sixty-five percent of its population living outside incorporated cities. Smaller municipalities that do not operate a landfill will transfer the waste outside the city to the nearest permitted facility. Collection and transport from smaller municipalities is carried out mostly by private haulers, but city staff may operate collection and transportation equipment in other cases. A couple of smaller municipalities indicated in the region survey that their MSW waste is transferred outside of the source city to the nearest permitted landfill. Additional information on waste transport is contained in Attachment III.C</p>
Processing	<p>The region has eight processing facilities. There are the six transfer stations that were mentioned previously. The City of Nacogdoches Grease Treatment Facility (Registration No. 43007) is no longer in operation. The Composting business A-Y Wood Products (Registration No. 100154) in Joaquin is not taking any additional materials</p>
Treatment	<p>Surveyed municipalities and private institutions within the region did not indicate any solid or liquid waste treatment operations</p>

Activity	Description
Resource Recovery	<p>Surveyed municipalities and private institutions within the region did not indicate any resource recovery operations. Current recycling operations collect material and transfer recyclable material outside of the region for resource recovery.</p>
Disposal of Solid Waste	<p>MSW is managed within the region by individual cities and/or counties through local ordinances and guidelines. Collection of waste predominately begins at residential or commercial collection containers. In many of the cities within the region, both city and private collection activities operate concurrently. Municipalities generally collect the majority of the waste in the city and dispose of waste in the cities or nearest landfill. Private haulers operate on contracts with the municipalities and will collect and dispose of waste in the nearest permitted facility. The region has four available landfills for disposal that range in size from the Western Waste of Texas Newton Complex, largest in the region, to the Polk County Landfill, smallest in the region. From the surveys two of landfills within the region indicated 20 years or more of remaining life. Two landfills indicated fifteen years or less; the Angelina County Waste Management Center (MSW Permit No. RN101947323) with fourteen-point-three years remaining, but more adjacent land that could be permitted, and the Polk County landfill (MSW Permit No. RN102668654) with fifteen-point-six years remaining. There is also a permit application under consideration by TCEQ for the Peach Creek Environmental Park (MSW Permit No. RN110843042) in southern San Jacinto County. This combination of facilities gives the overall region adequate disposal storage through the long-term planning period. Additional information on individual municipality annual tonnage and remaining landfill life is contained in Attachment III.C.</p>

Table III.C. II. Planned Solid Waste Management Activities in the Region

Activity	Description
Generation	Based on responses from municipalities and private institutions surveyed in the region, no significant change is expected in waste generation.
Source Separation	Based on responses from municipalities and private institutions surveyed in the region, no significant change is expected in current source separation methods.
Collection	Based on responses from municipalities and private institutions surveyed in the region, no significant change to waste collection is expected. Private hauler contracts may expire, or be established, for individual municipalities within the region and minor changes in the waste collection could be expected.
Handling	Based on responses from municipalities and private institutions surveyed in the region, waste handling is not expected to begin for any municipality or landfill within the region during the planning periods
Storage	Based on responses from municipalities and private institutions surveyed in the region, waste storage is not expected to begin for any municipality or landfill within the region during the planning periods.
Transportation	Based on responses from municipalities and private institutions surveyed in the region, no additional MSW transfer stations - other than the one being constructed in Crockett - is expected to be added during the planning periods.
Processing	Based on responses from municipalities and private institutions surveyed in the region, no significant change is expected in waste processing.
Treatment	Based on responses from municipalities and private institutions surveyed in the region, waste treatment is not expected to begin for any municipality or landfill within the region during the planning periods.
Resource Recovery	Based on responses from municipalities and private institutions surveyed in the region, no significant change is expected in resource recovery.
Disposal of Solid Waste	Based on responses from municipalities and private institutions surveyed in the region, MSW disposal will continue similar to current methods. It appears there will be more than necessary landfill capacity in the region with the Angelina County Waste Management Center (MSW Permit No. RN101947323) having expansion capacity and also a permit application under consideration by TCEQ for the Peach Creek Environmental Park (MSW Permit No. RN110843042) in southern San Jacinto County.
<input checked="" type="checkbox"/> Check box if additional information of solid waste management activities is provided as Attachment III.C.	

III.D. Description and Assessment of the Adequacy of Existing Solid Waste Management Facilities & Practices, and Household Hazardous Waste Programs

Table III.D.I. Adequacy of Existing Facilities and Practices

Program	Facility Adequacy	Practices Adequacy
Resource Recovery	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No, description of facility inadequacy provided in <i>Attachment III. D.</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No, description of practice inadequacy provided in <i>Attachment III. D.</i>
Storage	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, description of facility inadequacy provided in <i>Attachment III. D.</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, description of practice inadequacy provided in <i>Attachment III. D.</i>
Transportation	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, description of facility inadequacy provided in <i>Attachment III. D.</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, description of practice inadequacy provided in <i>Attachment III. D.</i>
Treatment	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, description of facility inadequacy provided in <i>Attachment III. D.</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, description of practice inadequacy provided in <i>Attachment III. D.</i>
Disposal	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, description of facility inadequacy provided in <i>Attachment III. D.</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, description of practice inadequacy provided in <i>Attachment III. D.</i>
Household Hazardous Waste Collection	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No, description of facility inadequacy provided in <i>Attachment III. D.</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No, description of practice inadequacy provided in <i>Attachment III. D.</i>
Household Hazardous Waste Disposal	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No, description of facility inadequacy provided in <i>Attachment III. D.</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No, description of practice inadequacy provided in <i>Attachment III. D.</i>

III.E. Assessment of Current Source Reduction and Waste Minimization

Sludge reduction is not a priority of communities with waste treatment facilities in the DETCOG Region. There is an abundance of land in the region being used for non-food production agricultural purposes where the nutrients sludge provides are desirable. This makes sludge disposal much less of a burden than it might be in metropolitan areas.

Several of the cities and counties in the DETCOG Region have either shut down or limited their paper, cardboard, plastics and glass recycling programs due to the low value of the recyclable materials and the high cost of delivering the materials to the reprocessing facilities. Significantly higher prices paid for those materials will be necessary before those programs will be restarted. The exceptions are in Polk and San Jacinto County where their recycling programs are still active in accepting cardboard and paper. Their close proximity to reprocessing facilities in the Houston area make transportation costs less prohibitive.

Assessment of current source reduction and minimization efforts, including activities to reduce sludge, and efforts to reuse or recycle waste is provided as *Attachment III.E.*

III.F. Identification of Additional Opportunities for Source Reduction and Waste Minimization, and Reuse or Recycling of Waste

Table III.F.I Additional Opportunities for Source Reduction and Waste Minimization, Reuse and Recycling of Waste

Category of Activity (Source Reduction and Waste Minimization, Reuse or Recycling of Waste)	Opportunity Name	Brief Description
Waste minimization / Material Reuse	C&D Waste reduction	Incentivize and/or coordinate with Architect/Engineers within region to push LEED certification. Incentivize and/or coordinate with Contractors to reduce C&D waste coming into landfills and encourage material reuse or use of salvaged materials when possible.
Waste Minimization / Reuse / Recycle	Reduce, process, and reuse yard waste	Encourage citizens and aid municipalities to compost and chip/grind yard waste into reusable mulch or fertilizer.
Reuse / Recycle	Increase diversion of E-Waste	Partner with commercial vendors to develop regional Electronic Equipment collection, transportation, and disposal plan.
<input type="checkbox"/> Check box if additional information of opportunities and source reduction and waste minimization, reuse and recycling of waste is provided in <i>Attachment III. F.</i>		

III.G. Recommendations for Encouraging and Achieving a Greater Degree of Source Reduction and Waste Minimization, and Reuse or Recycling of Waste

Table III.G.I. Recommendations for Greater Source Reduction and Waste Minimization, and Reuse or Recycling of Waste

1. Encourage development of processing facilities either in the region or nearby that can take paper, newspaper, cardboard, #1 & #2 Plastics and turn them into reusable materials. Encourage the development of new ways to reuse materials made from recovered paper, newspaper, cardboard, #1 & #2 Plastics
2. Municipalities to partner with local ISDs and higher education facilities to increase awareness, provide further education on reuse and recycling, and develop shared recycling methods or material collection and storage.
3. Provide additional drop off facilities and/or containers throughout the region to lower operation costs in collecting materials.
4. Create a region-wide materials recovery facility to aid in collection, separation, and processing for transfer to end-users for resource recovery.
5. Develop additional tire processing facilities within the region that can process tires material reuse and waste reduction. Increase number of municipality clients to accept tires and avoid improper disposal.
6. Seek partnerships or new ventures for waste energy plants to develop facility within region.
<input type="checkbox"/> Check box if additional details are provided in <i>Attachment III.G.</i>

III.H. Identification of Public and Private Management Agencies and Responsibilities

- A list of public and private solid waste management agencies and their responsibilities that affect and impact solid waste management in the planning region is provided as *Attachment III.H.*

III.I. Identification of Solid Waste Management Concerns and Establishment of Priorities for Addressing Those Concerns

Table III.I Solid Waste Management Concerns and Priorities

Solid Waste Management Concern	Priorities to Address the Concern
Lack of regional and city level plan to properly dispose and/or recycle Electronics.	Provide more region-wide education to residents and commercial operations on the hazards and dangers of improperly disposing Electronic Equipment. Municipalities to partner and aid in commercial vendors Electronic Equipment recycling and disposal methods. Provide drop off locations and/or specialized containers accepting E- Waste to aid in residents properly disposing of electronics.
Continued improper disposal of tires in the region	Provide added facilities to handle scrap tire processing. Develop facilities to process and recycle material from tires. Provide funding to assist cities in collecting and transporting illegally dumped tires around the city and surrounding countryside.
Continued improper disposal of household hazardous waste.	Provide more region-wide education to residents and commercial operations on the hazards and dangers of improperly disposing HHW. Provide more facilities with the capabilities to store, process, or transfer HHW and offer more clean-up days or community days to drop off materials.
Increase diversion of recyclable material.	Work with municipalities and schools to provide literature, informational webinars, brochures/inserts to reach a broader range of citizens.
<input type="checkbox"/> Check box if additional details are provided in <i>Attachment III.I</i>	

III.J. Planning Areas and Agencies with Common Solid Waste Management Concerns that Could be Addressed Through Joint Action

Table III.J.I Planning Areas and Agencies with Common Solid Waste Management Concerns

Solid Waste Management Concern	Names of Planning Areas and Agencies that Could Address the Concern via Joint Action(s)
Lack of electronic recycling and disposal within the region.	Based on annual distribution of funds from TCEQ, assist funding for cities/counties to incentivize creation of resource recovery facilities in the DETCOG Region. In the DETCOG Counties that have sustainable recycling programs provide PSAs, mail information, TV commercials, etc. to educate on the need to recycle and advertise locations of easy drop-off. DETCOG to provide grants for cities to add recycling facilities, additional drop-off locations.
Continued improper disposal of tires in the region.	Based on annual distribution of funds from TCEQ, assist funding for additional facilities to accept and process disposal of tires. Cities and counties to provide education and awareness on the proper disposal of tires and offer incentives to avoid illegal dumping.
Continued improper disposal of household hazardous waste (HHW)	Based on annual distribution of funds from TCEQ, assist funding for cities to provide PSAs, mail information, TV commercials, etc. to educate on the dangers of improper disposal of Household Hazardous Waste (HHW). DETCOG/TCEQ Grants to provide funds for cities to introduce additional community clean up days or provide standing facilities for easy HHW drop off.

III.K. Identification of Incentives and Barriers for Source Reduction and Waste Minimization, and Resource Recovery, Including Identification of Potential Markets

Table III.K.I Incentives and Barriers for Source Reduction and Waste Minimization, and Resource Recovery

Source Reduction and Waste Minimization	
Incentive: Spare Tire Ordinances	State, region, or city-wide spare tire ordinance to mitigate illegal disposal and provide governing body the ability to seek financial compensation for illegal dumping to aid in cleanup or future funds for processing facility.
Barrier: Only the largest Cities & Counties in the DETCOG Region have Ordinance Enforcement capabilities	The Cities of Lufkin, Nacogdoches, Crockett, Center, Diboll, Woodville and Livingston already have code enforcement departments. Our largest Counties, Angelina, Nacogdoches and Polk and smaller cities would have to adopt the ordinances and create enforcement units. The additional burden of creating the ordinances and expense of operating those units makes their creation unlikely.
Resource Recovery	
Incentive: Make materials recovery economically attractive	Funding is needed to aid in the creations of a region-wide material recover facility or facilities. Lack of recycling in area is attributed to required diversion and transportation of recyclable material. Facility would increase recycling and provide opportunity for resource recovery that does not exist.
Barrier: Transportation expense of recovered materials	Even with region-wide materials recovery facilities the cost of transporting materials to them effectively decreases the value of recovered materials.
Potential Markets	
Incentive: Reduce transportation cost and collection barriers by attracting tire processing and recycling facilities to located in the region	Having tire processing facilities located in the region would lower the cost of transporting tires to be processed. It would also make tire disposal more convenient to businesses and individuals by giving them more opportunities to dispose of tires than just the one or two tire collection days a year we now have in a few of the cities and counties in the region. Large quantity of tire generators and improper disposal makes area a prime target for additional processing companies to benefit while decreasing tire waste and providing recyclable material.
Barrier: The return on recovered materials is too low to justify the cost of tire materials recovery.	Historically the value of materials recovered from used tires has been too low to justify the cost of establishing and operating more than one or two tire materials recovery facilities in Texas. So far research has not led to new uses for the rubber and steel found in them that would increase the value of those recovered materials.

III.L. Regional Goals and Objectives, Including Waste Reduction Goals

Table III.L.I Regional Goals and Objectives

<p>Goal #1: Achieve a 5% reduction of solid waste entering landfills by 2032 and 10% by 2042.</p>	<p>Objective 1.A. Increase diversion rate at landfills and look for local partners and ways to reuse or process waste locally.</p> <p>Objective 1.B. Incentivize and coordinate with contractors and new development within the region to push for Construction and Demolition waste reduction, increased material reuse, or use of salvaged material.</p> <p>Objective 1.C. Encourage composting, chipping, and/or grinding of yard waste for reuse as mulch and fertilizer.</p>
<p>Goal #2: Encourage proper Electronic Disposal and Recycling in the region</p>	<p>Objective 2.A. Partner municipalities with local commercial electronic vendors to develop joint regional Electronic Equipment disposal and recycling plan.</p> <p>Objective 2.B. Educate citizens on the hazards of disposing of electronics in their local dumpsters or collection stations.</p> <p>Objective 2.C. Provide permanent containers designated for Electronic Equipment collection within cities or increase number of community collection days in the region that accept Electronic Equipment.</p>
<p>Goal #3: Decrease improperly disposed tires within region.</p>	<p>Objective 3.A. Develop model scrap tire ordinances for Counties or Cities to aid in incentivizing proper scrap tire disposal.</p> <p>Objective 3.B. Gather and distribute information on scrap tire processing facilities in or near the DETCOG Region.</p> <p>Objective 3.C. Educate citizens on the tire collection facilities within or near the DETCOG Region.</p>
<p>Goal #4: Increase Public Education and Local Enforcement in the Region on Illegal Dumping</p>	<p>Objective 4.A. Provide model ordinances on Illegal Dumping and Enforcement to educate and provide training for the Counties and Cities in the Region.</p> <p>Objective 4.B. Provide environmental enforcement training to educate and provide training to the entire region (enforcement, prosecution, judicial and public).</p> <p>Objectives 4.C. Gather and make available educational materials, and provide training, on the impact illegal dumping has in our region.</p>

<p>Goal #5: Increase the appropriate disposal of Household Hazardous Waste (HHW) in the Region</p>	<p>Objective 5. A. Encourage public/private partnerships to share cost burden and provide Household Hazardous Waste (HHW) services.</p> <p>Objective 5.B. Educate the municipalities on ways to gather and dispose of HHW and the unwanted results of improperly disposed HHW.</p> <p>Objective 5.C. Gather and distribute information for the public on the importance of the proper disposal of HHW.</p>
<p>Goal #6: Citizen Collection Stations and Small Transfer Stations</p>	<p>Objective 6.A. Determine if new or expanded facilities are needed within the region.</p> <p>Objective 6.B. Promote the development of transfer and citizen collection stations in areas of need.</p> <p>Objective 6.C. Encourage open and free markets within the region for solid waste collection, disposal and recycling.</p>
<p>Goal #7: Encourage and support the development of Local Solid Waste Management Plans in the Region</p>	<p>Objective 7.A. Coordinate with Counties and Cities developing Local Solid Waste Management Plans to integrate them into the Regional Plan.</p> <p>Objective 7.B. Promote development of local programs to enforce Municipal Solid Waste (MSW) regulations and permit requirements.</p> <p>Objective 7.C. Provide information to develop Local Solid Waste Plans in accordance with Texas Health & Safety Codes.</p>
<p>Goal #8: Encourage Tech Studies in the Region</p>	<p>Objective 8.A. Encourage Multi-Discipline approaches to Solid Waste Technical Studies in the Region.</p> <p>Objective 8.B. Provide information for projects to collect data, analyze issues and needs, elevate alternative solutions, collect public input, and recommended actions to assist in making solid waste management decisions on a local level.</p> <p>Objective 8.C. Encourage Solid Waste Tech studies to not only consider Technological aspects, but also the Environmental Impact and Sociological Sustainability.</p>

III.M. Advantages and Disadvantages of Alternative Actions

<p>Are alternative actions being considered in this plan for the regional area?</p>	<p><input type="checkbox"/> Yes. Provide details in <i>Attachment III.M.</i></p> <p><input checked="" type="checkbox"/> No. No further action required.</p>
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III.N. Recommended Plan of Action and Associated Timetable for Achieving Specific Goals and Objectives

Table III.N.I Plan of Action and Timetable for Achieving Specific Goals and Objectives

Goal/Objective	Plan of Action	Milestone Dates
Waste Reduction	Reduce waste landfilled by 5% by the end of the intermediate planning period. Further reduction of waste to 10% by the end of the long-range planning period. Increase landfill diversion amounts, decrease C&D waste, educate municipalities on reducing waste footprint.	5% by 2032 10% by 2042
Composting Programs for Yard Wastes and Related Organic Wastes	Increase yard waste processing amounts in region’s landfills. Promote educational items to residents to increase desire to home compost and avoid placing yard waste in dumpsters.	Short-term planning period (1-5 years) Intermediate planning period (6-10 years), and long-range planning period (11-20 years or longer)
Household Hazardous Waste Collection (HHW) and Disposal Programs	Increase county collection days for Household Hazardous Waste (HHW) pickup. Increase availability of Hazardous Waste landfills to accept and process HHW. Develop permanent HHW collection bins throughout counties.	Short-term planning period (1-5 years) Intermediate planning period (6-10 years) Long-range planning period (11-20 years or longer)
Public Education Programs	Provide educational flyers in utility bills and add information to city websites promoting waste reduction, reuse, and recycling. Print, web, radio, or TV advertisement to educate on proper disposal efforts for common HHW	Short-term planning period (1-5 years) Intermediate planning period (6-10 years)

Goal/Objective	Plan of Action	Milestone Dates
The Need for New or Expanded Facilities and Practices	and Electronic Equipment. Municipalities to become more active in DETCOG related events and inter-communications to understand the regions and municipality’s needs. Expand current facilities or seek development of new facilities as needed.	Short-term planning period (1-5 years) and Intermediate planning period (6-10 years) Long-range planning period (11-20 years or longer)
<input type="checkbox"/> Check box if additional details are provided in <i>Attachment III.N.</i>		

III.O. Identification of the Process that Will be Used to Evaluate Whether a Proposed Municipal Solid Waste Facility Application Will be in Conformance with the Regional Plan

The process that will be used to evaluate whether a proposed municipal solid waste facility application will be in conformance with the regional plan is identified in *Attachment III.O.*

Section IV. Require Approvals

Table IV.I Required Approvals

Solid Waste Advisory Committee	July 19, 2021
Public Meeting Dates	July 21, 2021
Executive Committee	September 23, 2021

- Check box if local government and jurisdiction resolutions, and letters of support are included in **Attachment IV.A.**
- Public notice, agenda, public comments, and the transcript of the required public meeting are included as **Attachment IV.B.**

ATTACHMENT III.A: DEMOGRAPHIC INFORMATION

Table III.A.I - Demographic Information

Current population and projections were sourced from the Texas Demographics Center (TDC) 2018 Total Population Projections Data. Council of Governments projections for “Code 14” - Deep East Texas Council of Governments, minus the Population Projections for Jasper County, were used. TDA made the Population Projections before Jasper County was moved from DETCOG to the Southeast Texas Regional Planning Commission. The data from 2015, 2020, 2025, 2030, 2035 and 2040 were used to develop the region's population growth rate. The growth rate was calculated using the Law of Growth equation, $P(t)=P(o)*exp(r*t)$. The population at time t is equal to the initial population multiplied by the product of the growth rate and time between initial and final population years.

Table III.A.I				
Population Projections for DETCOG Region				
Year	Area Code	Area Name	Age	Total Population
2050	14	Deep East Texas	All (0-95+)	333,285
2045	14	Deep East Texas	All (0-95+)	336,998
2040	14	Deep East Texas	All (0-95+)	341,697
2035	14	Deep East Texas	All (0-95+)	346,237
2030	14	Deep East Texas	All (0-95+)	349,534
2025	14	Deep East Texas	All (0-95+)	350,279
2020	14	Deep East Texas	All (0-95+)	348,273
2015	14	Deep East Texas	All (0-95+)	344,749
2010	14	Deep East Texas	All (0-95+)	342,767
* Source: Texas Demographics Center - 2018 Total Population Projection TDC Projections for DETCOG Region minus Jasper County Projections				

Table III.A.II - Residential Waste Generation

The base year landfill tonnage and recycling data were determined from surveyed municipality responses and totals listed on the TCEQ's Municipal Solid Waste (MSW) 2020 annual report. However, at least two of the current four landfills located in the region (Western Waste of Newton County - Registration No. 100222553 and Polk County Landfill - Registration No. 102668654) accept waste from nearby metropolitan areas. When those volumes are used in the formula an unusually high pounds-per person-per day number results. The operations

manager for the largest private waste collection company in the DETCOG Region, Pineywoods Sanitation, reports they collect 5.5 Lbs. of household waste per person per day.

Waste disposal and recycling amounts were assumed to follow similar population growth rates for the DETCOG area. Table III.A.I contains the cumulative DETCOG region population, waste, and recycling projections based on the projections for the planning years 2020, 2022, 2027, 2032, 2037, and 2042.

Table III.A.II									
Residential Waste Generation									
Year	Growth Rate per Year	Current Population/ Population Projection	Landfill Disposal (Tons)	Landfill Disposal (lbs.)	Disposal Rate (lbs./Person/Day)	Recycling (Tons)	Recycling (lbs.)	Recycling Rate (lbs./Person/Day)	Residential Waste Generation (Tons)
2020	0.20%	348,273	849,530	1,699,060,000	13.37	22,467	44,934,000	0.35	871,997
2021		348,556	850,220	1,700,439,637	13.37	22,485	44,970,486	0.35	872,705
2022		348,839	850,910	1,701,820,394	13.37	22,504	45,007,002	0.35	873,414
2023		349,122	851,601	1,703,202,272	13.37	22,522	45,043,548	0.35	874,123
2024		349,406	852,293	1,704,585,272	13.37	22,540	45,080,123	0.35	874,833
2025		350,279	852,985	1,705,969,395	13.34	22,558	45,116,729	0.35	875,543
2026	0.12%	350,037	852,396	1,704,792,276	13.34	22,543	45,085,598	0.35	874,939
2027		349,796	851,808	1,703,615,970	13.34	22,527	45,054,489	0.35	874,335
2028		349,554	851,220	1,702,440,475	13.34	22,512	45,023,401	0.35	873,732
2029		349,313	850,633	1,701,265,791	13.34	22,496	44,992,335	0.35	873,129
2030		349,534	850,046	1,700,091,917	13.33	22,481	44,961,290	0.35	872,527
2031		-0.04%	348,783	848,218	1,696,436,720	13.33	22,432	44,864,624	0.35
2032	348,033		846,395	1,692,789,381	13.33	22,384	44,768,165	0.35	868,779
2033	347,284		844,575	1,689,149,884	13.33	22,336	44,671,913	0.35	866,911
2034	346,538		842,759	1,685,518,211	13.33	22,288	44,575,869	0.35	865,047
2035	346,237		840,947	1,681,894,347	13.31	22,240	44,480,030	0.35	863,187
2036	-0.19%		345,240	838,525	1,677,050,492	13.31	22,176	44,351,928	0.35
2037		344,246	836,110	1,672,220,586	13.31	22,112	44,224,194	0.35	858,222
2038		343,254	833,702	1,667,404,591	13.31	22,048	44,096,829	0.35	855,751
2039		342,266	831,301	1,662,602,466	13.31	21,985	43,969,830	0.35	853,286
2040		341,697	828,907	1,657,814,171	13.29	21,922	43,843,197	0.35	850,829
2041		-0.262%	340,679	826,437	1,652,873,884	13.29	21,856	43,712,544	0.35
2042	339,664		823,974	1,647,948,320	13.29	21,791	43,582,281	0.35	845,765

Note: The growth rate per year was calculated using the law of growth equation, based on Texas Demographics Center population projections for the DETCOG region. Waste Tonnage and recycling data is calculated based on county surveys and population projections. Tonnage amounts rounded to the nearest whole number.

Table III.A.III - Residential Waste Generation with Projected Reductions

Region population and waste projections remain identical to calculated values in Table III.A.I. The region’s waste reduction goals are to achieve a 5% reduction in waste by year 2032 and an increase by 10% in year 2042. An increase of similar percent is intended for recycling in years 2032 and 2042. The waste reduction and the recycling increase percentage was compared to the projected tons based on population growth (i.e., Projected tonnage for 2032 is 851,808 tons and a 5% reduction is 804,075 tons). A separate waste reduction rate and a recycling increase rate were calculated between the two goal periods, 2020-2032 and 2032-2042. The per person disposal and recycling rate were adjusted to reflect the goal values for comparison.

Table III.A.III										
Residential Waste Generation with Projected Reductions										
Year	Growth Rate per Year	Current Population/Population Projection	Landfill Disposal (Tons)	Goal, Landfill Disposal (Tons)	Disposal Rate (lbs./Person/Day)	Goal, Disposal Rate (lbs./Person/Day)	Recycling (Tons)	Goal, Recycling (Tons)	Recycling Rate (lbs./Person/Day)	Goal, Recycling Rate (lbs./Person/Day)
2020	0.20%	348,273	849,530	849,530	13.37	13.37	22,467	22,467	0.35	0.3535
2021		348,556	850,220	845,646	13.37	13.29	22,485	22,552	0.35	0.3545
2022		348,839	850,910	841,779	13.37	13.22	22,504	22,636	0.35	0.3556
2023		349,122	851,601	837,931	13.37	13.15	22,522	22,722	0.35	0.3566
2024		349,406	852,293	834,100	13.37	13.08	22,540	22,807	0.35	0.3577
2025		350,279	852,985	830,286	13.34	12.99	22,558	22,893	0.35	0.3581
2026	0.12%	350,037	852,396	826,490	13.34	12.94	22,543	22,979	0.35	0.3597
2027		349,796	851,808	822,711	13.34	12.89	22,527	23,066	0.35	0.3613
2028		349,554	851,220	818,950	13.34	12.84	22,512	23,153	0.35	0.3629
2029		349,313	850,633	815,205	13.34	12.79	22,496	23,240	0.35	0.3645
2030		349,534	850,046	811,478	13.33	12.72	22,481	23,327	0.35	0.3657
2031	-0.04%	348,783	848,218	807,768	13.33	12.69	22,432	23,415	0.35	0.3679
2032		348,033	846,395	804,075	13.33	12.66	22,384	23,503	0.35	0.3700
2033		347,284	844,575	797,595	13.33	12.58	22,336	23,550	0.35	0.3716
2034		346,538	842,759	791,167	13.33	12.51	22,288	23,596	0.35	0.3731
2035	-0.19%	346,237	840,947	784,792	13.31	12.42	22,240	23,642	0.35	0.3742
2036		345,240	838,525	778,467	13.31	12.36	22,176	23,689	0.35	0.3760
2037		344,246	836,110	772,194	13.31	12.29	22,112	23,736	0.35	0.3778
2038		343,254	833,702	765,971	13.31	12.23	22,048	23,782	0.35	0.3796
2039		342,266	831,301	759,799	13.31	12.16	21,985	23,829	0.35	0.3815
2040		341,697	828,907	753,676	13.29	12.09	21,922	23,876	0.35	0.3829
2041	-0.262%	340,679	826,437	747,602	13.29	12.02	21,856	23,923	0.35	0.3848
2042		339,664	823,974	741,577	13.29	11.96	21,791	23,970	0.35	0.3867

Note: The growth rate per year was calculated using the law of growth equation, based on Texas Demographics Center population projections for the DETCOG region. Waste Tonnage and recycling data is calculated based on county surveys and population projections. Tonnage amounts rounded to the nearest whole number. Landfill tonnage and recycling amounts were projected out assuming similar growth trend as population. The region’s waste reduction goals are to achieve 5% reduction by 2032 and 10% reduction by 2042 with increasing in recycling by similar percents. Waste reduction and recycling increase rates were calculated for the periods 2020-2032 and 2027-2042. Blue cells indicate goal years.

ATTACHMENT III.B: CURRENT AND FUTURE SOLID WASTE AMOUNTS BY TYPE

Table III.B.I - Current and Future Solid Waste Amounts by Type

The number of landfills accepting individual waste types was determined from surveyed municipality responses and totals listed on the TCEQ's fiscal year 2020 annual report. Current tons disposed was calculated from the summation of each landfill tonnage within the region accepting the corresponding waste. The base year or current year is designated 2020 based on the availability of data and projected out in five-year increments (i.e., 5-Year Projection is 2025, 10-Year Projection is 2032, etc.). If no data was found for a corresponding waste the value of zero was selected for the table and calculations.

Table III.B.I							
Current and Future Solid Waste Amounts by Type							
Waste Type	Number of Landfills Accepting Waste Type	Percent of Total Tons Disposed	Current Year (2020)	2027 Projection (tons)	2032 Projection (tons)	2037 Projection (tons)	2042 Projection (tons)
Municipal	4	74.03%	628,880	630,566	626,559	618,946	609,962
Brush	1	0.08%	651	653	649	641	631
Construction or Demolition	3	10.89%	92,498	92,746	92,157	91,037	89,715
Litter	0	0.00%	-	0	0	0	0
Class 1 Non-Hazardous	1	2.62%	22,229	22,289	22,147	21,878	21,560
Classes 2 and 3 Non-Hazardous	2	8.56%	72,722	72,917	72,454	71,573	70,534
Incinerator Ash	0	0.00%	-	0	0	0	0
Treated Medical Waste	0	0.00%	-	0	0	0	0
Municipal Hazardous Waste from CESQGs	0	0.00%	-	0	0	0	0
Regulated Asbestos-Containing Material (RACM)	0	0.00%	-	0	0	0	0
Non-RACM	0	0.00%	-	0	0	0	0
Dead Animals	3	2.55%	21,638	21,696	21,558	21,296	20,987
Sludge	3	0.86%	7,325	7,345	7,298	7,209	7,105
Grease Trap Waste	1	0.01%	93	93	93	92	90
Septage	0	0.00%	-	0	0	0	0
Contaminated Soil	1	0.00%	32	32	32	31	31
Tires (split, quartered, shredded)	4	0.04%	381	382	380	375	370
Pesticides	0	0.00%	-	0	0	0	0
Used Oil Filter	0	0.00%	-	0	0	0	0
Other (identify other types reported as Attachment III.B.)	1	0.36%	3,081	3,089	3,070	3,032	2,988
Totals:	4	100.00%	849,530	851,808	846,395	836,110	823,974
Note: Survey responses and TCEQ 2020 annual report were used to determine tonnage information for each corresponding waste type. Waste disposal projected out in five-year increments using the law of growth equation with region cumulative growth rate as used in Table III.A.I.							

Table III.B.II - DETCOG Region 2020 Landfill Data

Table III.B.II					
DETCOG Region 2020 Landfill Data					
Waste Type	Angelina County Waste Management Center - RN101947323	City of Nacogdoches Landfill - RN102217395	Western Waste of Texas Newton Complex - RN100222553	Polk County Landfill - RN102668654	Totals (tons)
Municipal	94,795	68,171	201,800	264,114	628,880
Brush	651				651
Construction or Demolition	19,662		4,400	68,436	92,498
Litter					-
Class 1 Non-Hazardous			22,229		22,229
Classes 2 and 3 Non-Hazardous		522	72,200		72,722
Incinerator Ash					-
Treated Medical Waste					-
Municipal Hazardous Waste from CESQGs					-
Regulated Asbestos-Containing Material (RACM)					-
Non-RACM					-
Dead Animals	179	59		21,400	21,638
Sludge	2,831	3,553		941	7,325
Grease Trap Waste	93				93
Septage					-
Contaminated Soil	32				32
1 Tires (split, quartered, shredded)	381				381
Pesticides					-
Used Oil Filter					-
Other (identify other types reported as Attachment III.B.)				3,082	3,082
Totals:	118,624	72,305	300,629	357,972	849,530

Source: TCEQ Central Registry - MSW Annual Report 2020

Table III.B.III - DETCOG Region 2020 Recycling Data

Table III.B.III												
DETCOG Region 2020 Recycling												
Waste Type	Eastex Recycling & Scrap Yard (San Jacinto County)	K & L (Nacogdoches County)	K & L Houston Co./Houston Scrap & Salvage/ Crockett Recycling (Houston County)	Southside Metal Recycling (Tyler County)	A-1 Recycling (Nacogdoches County)	City of Nacogdoches (Nacogdoches County)	San Jacinto County (San Jacinto County)	City of Lufkin (Angelina County)	Angelina County	USA Recycling (San Jacinto County)	Unified Recycling Resources /Nacogdoches Metal Recycling (Nacogdoches County)	Total
Metals	2,100	3,100	2,700			19						7,919
Non-Ferrus Mixed		68	48									116
Copper	21			20	28					50		119
Brass	9			3	10					20		42
Alum	95			32	15		1	16		50		209
Cast Iron	410			50	774							1,234
Steel	240			1,570	1,548		160	50	3,850	1,800	19	9,238
Batteries	120			26				5				150
Cardboard						137	99	2,160			193	2,589
Mixed Paper								480				480
Plastic								220				220
Glass								150				150
Totals:	2,995	3,168	2,748	1,702	2,376	156	260	3,081	3,850	1,920	212	22,467

Source: Collected by emailed survey and follow-up phone calls by DETCOG Staff

ATTACHMENT III.C: DESCRIPTION OF CURRENT AND PLANNED SOLID WASTE MANAGEMENT ACTIVITIES

Plan Content: Description of Current and Planned Solid Waste Management Activities in the Region

Table III.C.I-Transportation

Based on the large open area and sparsely populated region, transportation of waste is required to dispose of MSW into permitted landfills. Many small municipalities within the region do not operate their own solid waste collection and disposal, or only operate citizen collection / drop-off site. Surveyed municipalities in the region did indicate instances of waste transport outside of the city to the nearest permitted landfill. The following table lists a few transport operations within the region, but due to the lack of survey responses may not cover all waste transport operations.

Table III.C.I-Transportation		
DETCOG Region - MSW Collection & Disposal		
Municipality	Collection	Disposal
Appleby	No Contract - Pineywoods	Angelina County Landfill
Broadus	My TRASH	Angelina County Landfill
Burke	n/a	n/a
Center	Republic Waste	Pinehill in Longview- Gregg County
Chester	None	Angelina County Landfill
Chireno	None	Angelina County Landfill
Coldspring	None	Polk County Landfill
Colmesneil	Pineywoods Sanitation	Angelina County Landfill
Corrigan	Pineywoods Sanitation	Polk County Landfill
Crockett	Pineywoods Sanitation	Angelina County Landfill
Cushing	Pineywoods Sanitation	Angelina County Landfill
Diboll	Pineywoods Sanitation	Angelina County Landfill
Garrison	Lilly Sanitation	Jacksonville County Landfill
Goodrich	Lilly Sanitation	Polk County Landfill
Grapeland	Waste Connections	Jacksonville County Landfill
Groveton	Pineywoods Sanitation	Angelina County Landfill
Hemphill	Ameritech Waste	n/a
Hudson	Pineywoods Sanitation	Angelina County Landfill
Huntington	Pineywoods Sanitation	Angelina County Landfill
Huxley	None	None
Ivanhoe	Local Sanitation	Transfer in Angelina County
Joaquin	None	Longview
Kennard	Pineywoods Sanitation	Angelina County Landfill
Latexo	No Response to Survey	No Response to Survey
Livingston	Republic Waste	Polk County Landfill
Lovelady	Pro Star Waste	Polk County Landfill
Lufkin	City of Lufkin Collects	Angelina County Landfill
Nacogdoches	City of Nacogdoches Collects	Nacogdoches City Landfill
Newton	City of Newton Collects	Angelina County Landfill
Onalaska	Pineywoods Sanitation	Polk County Landfill
Pineland	Ameritech Waste	n/a
Point Blank	Privately Owned	Polk County Landfill
San Augustine	Pineywoods Sanitation	Angelina County Landfill
Seven Oaks	No contract - Pineywoods & Pro Star	Polk County Landfill
Shepherd	No contract - Pineywoods & Pro Star	Polk County Landfill
Tenaha	City of Tenaha	Longview
Timpson	Waste Connections	Angelina County Landfill
Trinity	City of Trinity Collects	Twin Oaks-Bryan- Brazos County
Woodville	City of Woodville Collects	Angelina County Landfill
Zavalla	None	Angelina County Landfill

Source: Collected by emailed survey and follow-up phone calls by DETCOG Staff

Table III.C.II-Disposal of Solid Waste

Surveyed municipalities and private haulers within the region provided landfill waste and tonnage information. The provided data coupled with the most recent fiscal year 2020 TCEQ Annual Report data, was used to construct the following tables. Table III.C.I (b) demonstrates the annual tonnage at each MSW landfill within the region. Tonnage information was obtained from municipality surveys and verified by TCEQ Annual Reports. Table III.C.I (c) demonstrates the remaining life at each MSW landfill within the region. Not shown is the Peach Creek Environmental Park landfill in San Jacinto County whose application is under consideration by TCEQ.

Table III.C.II (b)		Table III.C.II (c)	
Landfills Annual Tonnage		Landfills Remaining Life	
Municipality / Facility Name	Annual Tonnage (tons)	Municipality / Facility Name	Remaining Life (Years)
Angelina County Waste Management Center	118,624	Angelina County Waste Management Center	14.3
City of Nacogdoches Landfill	72,305	City of Nacogdoches Landfill	21.8
Western Waste of Texas Newton Complex	300,629	Western Waste of Texas Newton Complex	95
Polk County Landfill	357,972	Polk County Landfill	15.6
Source: TCEQ MSW Annual Report			

**ATTACHMENT III.D: DESCRIPTION AND
ASSESSMENT OF THE ADEQUACY OF EXISTING
SOLID WASTE MANAGEMENT FACILITIES AND
PRACTICES**

Narrative III.D.I - Plan Content: Description and Assessment of the Adequacy of Existing Solid Waste Management Facilities & Practices, and Household Hazardous Waste Programs

Resource Recovery

Surveyed municipalities and private haulers within the region did not indicate any resource recovery operations. Current recycling operations collect material and transfer recyclable material outside of the region for resource recovery. Recycling operations in the region lag behind anticipated goals without a resource recovery facility in the region or nearby. Many municipalities operate some form of recycling operations, but predominately act to collect, sort, and transfer the material outside of the region. With transportation costs, most recycling operations in the region operate in a deficit situation. Municipalities would push for additional recycling if a resource recovery facility existed within the region to lower transportation costs and aid in creating a profitable recycling operation. The lack of a resource recovery facility is an inadequacy for both facility and practice.

Storage

Surveyed municipalities and private institutions within the region did not indicate any solid waste (MSW) storage procedures. Current waste generation, collection, and disposal methods employed in the region does not lead to the need for Municipal Solid Waste (MSW) storage. MSW storage is not employed in the region but is not considered an inadequacy.

Transportation

Waste transportation outside of collection and disposal exists in the regions active transfer stations, Pineland Transfer Station Facility (Registration No. 40054), City of San Augustine Transfer Station Facility (Registration No. 40024), City of Woodville Transfer Station Facility (Registration No. 40013) and the Tyler County Transfer Station (Registration No. 40038) all transfer waste to the Angelina County Landfill. Pineywoods Sanitation (Registration No. 40318) has a Transfer Station under construction in Crockett, Texas that will send its waste to the Angelina County Landfill. The Pro Star (Republic) Transfer Station (Registration No. 40277) in Goodrich sends its waste to the Pro Star (Republic) Landfill in Polk County. The R&J Recycling and Disposal Transfer Station (Registration No. 40277) transfers its waste to the Sabine Parish Landfill in Zwolle, Louisiana. The following table lists the TCEQ Registered Municipal Solid Waste Facilities in the DETCOG Region.

Table III.D.II – DETCOG Region TCEQ Registered Municipal Solid Waste Facilities

Table III.D.II – DETCOG Region TCEQ Registered MSW Facilities												
DETCOG Region - TCEQ Registered Municipal Solid Waste Facilities												
Site Name	Physical Type	Legal Status	Physical Site Status	Reg. No.	County	Phys Addr Line 1	Phys Addr City	Phys	Phys Ac	Near Phys Loc City	State	Zip
ANGELINA COUNTY LANDFILL	1	ISSUED	ACTIVE	RN101947323	ANGELINA	7521 FM 58	LUFKIN	TX	75901	LUFKIN	TX	75901
CITY OF NACOGDOCHES LANDFILL	1	ISSUED	ACTIVE	RN102217395	NACOGDOCHES	4602 NW STALLINGS DR	NACOGDOCHES	TX	75964	NACOGDOCHES	TX	75964
NEWTON COUNTY REGIONAL SOLID WASTE COMPLEX	1	ISSUED	ACTIVE	RN100222553	NEWTON	2372 COUNTY RD 3870	DEWEYVILLE	TX	77614	DEWEYVILLE	TX	77626
POLK COUNTY LANDFILL	1	ISSUED	ACTIVE	RN102688654	POLK	3477 FM 942 W	LEGGETT	TX	77350	LEGGETT	TX	77350
PEACH CREEK ENVIRONMENTAL PARK	1	PENDING	NOT CONSTRUCTED	RN110843042	SAN JACINTO						TX	
CITY OF KENNARD TRANSFER STATION	5CC	ACKNOWLEDGED	ACTIVE	RN102987419	HOUSTON	JULIA ST	KENNARD	TX	75847	KENNARD	TX	75847
CITY OF CROCKETT CITIZENS COLLECTION STATION	5CC	ACKNOWLEDGED	ACTIVE	RN110669215	HOUSTON	2601 CADDO LN	CROCKETT	TX	75835		TX	
NEWTON COUNTY SITE 4	5CC	ACKNOWLEDGED	ACTIVE	RN101478527	NEWTON	2175 COUNTY RD 4123	DEWEYVILLE	TX	77614	DEWEYVILLE	TX	
BURKEVILLE SITE 32	5CC	ACKNOWLEDGED	ACTIVE	RN102334133	NEWTON	4150 FM 692	BURKEVILLE	TX	75932	BURKEVILLE	TX	
OLD FIELD COMMUNITY/ MID CO SITE 12	5CC	ACKNOWLEDGED	ACTIVE	RN105708895	NEWTON	211 CR 4100	BLEAKWOOD	TX	77614		TX	
WIERGATE SITE 21	5CC	ACKNOWLEDGED	ACTIVE	RN102598711	NEWTON					OLD SALEM	TX	75928
TOLEDO BEND SITE 31	5CC	ACKNOWLEDGED	ACTIVE	RN101492965	NEWTON	9550 RECREATION ROAD 255 EAST	BURKERVILLE	TX	75932	BURKERVILLE	TX	
BON WIER SITE 11	5CC	ACKNOWLEDGED	ACTIVE	RN106068638	NEWTON	231 CR 4575	BON WIER	TX	75928	BON WIER	TX	75928
CITY OF NEWTON CITIZENS COLLECTION STATION	5CC	ACKNOWLEDGED	ACTIVE	RN106446776	NEWTON	301 N KAUFMAN ST	NEWTON	TX	75966	NEWTON	TX	75966
POLK COUNTY CCS RICHARDSON RD	5CC	ACKNOWLEDGED	ACTIVE	RN102694916	POLK	RICHARDSON ROAD OFF HWY 190 EA	LIVINGSTON	TX	77351	LIVINGSTON	TX	77351
POLK COUNTY CCS UNION SPRINGS RD	5CC	ACKNOWLEDGED	ACTIVE	RN102694783	POLK	1859 UNION SPRINGS RD	CORRIGAN	TX	75939	CORRIGAN	TX	75939
POLK COUNTY CCS WALDING RD	5CC	ACKNOWLEDGED	ACTIVE	RN102088721	POLK	HWY 190W @ WALDEN RD	LIVINGSTON	TX	77351	LIVINGSTON	TX	77351
POLK COUNTY CCS ONALASKA	5CC	ACKNOWLEDGED	ACTIVE	RN100529759	POLK	416 ONALASKA DR E	ONALASKA	TX	77360	ONALASKA	TX	77360
POLK COUNTY CCS - HWY 146	5CC	ACKNOWLEDGED	ACTIVE	RN102694817	POLK	HWY 146	LIVINGSTON	TX	77351	LIVINGSTON	TX	77351
CITY OF HEMPHILL	5CC	ACKNOWLEDGED	ACTIVE	RN102072469	SABINE	895 SABINE ST	HEMPHILL	TX	75948	HEMPHILL	TX	
COLD SPRING COMPACTOR NO 1	5CC	ACKNOWLEDGED	ACTIVE	RN102616679	SAN JACINTO	141 FM 222 LOOP N	COLDSRING	TX	77331	COLDSRING	TX	77331
SHEPHERD COMPACTOR NO 2	5CC	ACKNOWLEDGED	ACTIVE	RN102707809	SAN JACINTO	550 N BYRD	SHEPHERD	TX	77371	SHEPHERD	TX	77371
CLEVELAND COMPACTOR #3	5CC	ACKNOWLEDGED	ACTIVE	RN100534528	SAN JACINTO	31 LILLEY YEAGER LOOP N	CLEVELAND	TX	77328	CLEVELAND	TX	77327
SAN JACINTO COUNTY PREINCT #4	5CC	ACKNOWLEDGED	ACTIVE	RN102030392	SAN JACINTO	COUNTS RD	POINT BLANK	TX	77364	POINT BLANK	TX	77364
SHELBYVILLE COUNTY	5CC	ACKNOWLEDGED	ACTIVE	RN1020507514	SHELBY	1004 SHELBYVILLE ST	CENTER	TX	75935	CENTER	TX	75935
LAKE AREA TRASH DISPOSAL	5CC	ACKNOWLEDGED	ACTIVE	RN104216718	TRINITY	S STATE HIGHWAY 19	TRINITY	TX	75862	TRINITY	TX	75862
CITY OF NACOGDOCHES GREASE TREATMENT FACILITY	5GG	ISSUED	ACTIVE	RN102070653	NACOGDOCHES					NACOGDOCHES	TX	
MARTY CAMPBELL	5LV	ACKNOWLEDGED	ACTIVE	RN105792915	NACOGDOCHES	473 COUNTY ROAD 4672	ETOILE	TX	75944		TX	
CITY OF NEWTON LOW VOLUME TRANSFER STATION	5LV	ACKNOWLEDGED	ACTIVE	RN102328770	NEWTON	720 JAMESTOWN RD	NEWTON	TX	75966	NEWTON	TX	
TOLEDO DISPOSAL SERVICES	5LV	ACKNOWLEDGED	ACTIVE	RN105700264	SABINE	2315 FAIRDALE RD	HEMPHILL	TX	75948	HEMPHILL	TX	75948
PINE VALLEY LN	5LV	ACKNOWLEDGED	ACTIVE	RN106266919	SAN JACINTO					POINT BLANK	TX	77364
PILKINTON AND VESTAL PROPERTY	5LV	ACKNOWLEDGED	ACTIVE	RN106273584	SAN JACINTO	3850 FM 222	COLDSRING	TX	77331		TX	
J & D TRASH SERVICES	5LV	ACKNOWLEDGED	ACTIVE	RN104705124	SHELBY						TX	
WESTWOOD SHORES PROPERTY OWNERS ASSOCIATION	5LV	ACKNOWLEDGED	ACTIVE	RN106145428	TRINITY	205 WESTWOOD DR E	TRINITY	TX	75862	TRINITY	TX	75862
EAGLE SANITATION	5LV	ACKNOWLEDGED	ACTIVE	RN106663024	TRINITY	815 JACK SCHEFFER RD	TRINITY	TX	75862	TRINITY	TX	75862
LINDA WARREN PROPERTY	5LV	ACKNOWLEDGED	NOT CONSTRUCTED	RN106500796	TRINITY	9614 US HWY 94	TRINITY	TX	75262		TX	
MATTS TRUCK AND AUTO REPAIR	5LV	ACKNOWLEDGED	ACTIVE	RN106280704	TRINITY	2620 N STATE HIGHWAY 19	TRINITY	TX	75862		TX	
EAGLE SANITATION II ALPHA	5LV	ACKNOWLEDGED	ACTIVE	RN109813626	TRINITY	6965 N STATE HIGHWAY 94	GROVETON	TX	75845	GROVETON	TX	75845
A-Y WOOD PRODUCTS INC	5RCX	ACKNOWLEDGED	ACTIVE	RN105215453	SHELBY	2398 FM 2787	JOAQUIN	TX	75954		TX	
LOGGINS STORAGE YARD	5RR	ACKNOWLEDGED	ACTIVE	RN105705263	ANGELINA	ELLEN TROUT DR LOOP 287	LUFKIN	TX	75901		TX	
NACOGDOCHES RECYCLING	5RR	ACKNOWLEDGED	ACTIVE	RN110842945	NACOGDOCHES	2299 COUNTY ROAD 711	NACOGDOCHES	TX	75964	NACOGDOCHES	TX	75964
PINEY WOODS SANITATION	5TS	ISSUED	NOT CONSTRUCTED	RN111117677	HOUSTON	405 E PEASE AVE	CROCKETT	TX	75835	CROCKETT	TX	75835
PRO STAR WASTE	5TS	ISSUED	ACTIVE	RN104786249	POLK	7118 US HIGHWAY 59 S	GOODRICH	TX	77335	GOODRICH	TX	77335
PINELAND TRANSFER STATION FACILITY	5TS	ISSUED	ACTIVE	RN102120938	SABINE	7858 YELLOWPINE RD	PINELAND	TX	75968	PINELAND	TX	75968
CITY OF SAN AUGUSTINE TRANSFER STATION FACILITY	5TS	ISSUED	ACTIVE	RN102327780	SAN AUGUSTINE					UNKNOWN	TX	
R&J RECYCLING AND DISPOSAL TRANSFER STATION	5TS	ISSUED	ACTIVE	RN110587854	SHELBY					CENTER	TX	75935
CITY OF WOODVILLE TRANSFER STATION FACILITY	5TS	ISSUED	ACTIVE	RN102143807	TYLER					WOODVILLE	TX	
TYLER COUNTY TRANSFER STATION FACILITY	5TS	ISSUED	ACTIVE	RN101999969	TYLER	1921 CR 1010	WOODVILLE	TX	75979	WOODVILLE	TX	75979
AMERITECH RESOURCE RECOVERY WASTE INCINERATION FACILITY	5WI	ISSUED	INACTIVE	RN102507514	SHELBY	1004 SHELBYVILLE ST	CENTER	TX	75935	CENTER	TX	75935
* Data from "TCEQ - MSW-Solid-Waste-Facilities-Texas" - Physical Type: 1 - Landfill 5CC - Citizens Transfer Station 5GG - Registered Liquid Waste Processing Facility 5LV - Low Volume Transfer Station 5RCX - Recycling Facility, Composting 5RR - Recycling Facility, Recycling 5TD - Solid Waste Transfer Station 5WI - Medical Waste Processing Facility, Incinerator												

Treatment

Surveyed municipalities and private institutions within the region did not indicate any Municipal Solid Waste (MSW) treatment procedures. Current waste generation, collection, and disposal methods employed in the region does not lead to the need for MSW treatment. MSW treatment is not employed in the region but is not considered an inadequacy.

Disposal

Surveyed municipalities and private institutions within the region did not indicate any inadequacy for disposal operations. Current remaining tonnage and life for the region’s landfills, and potential expansion of the Angelina County Waste Management Center and potential permitting of the Peach Tree Environmental Park could provide adequate landfill capacity well past the long-range planning period. Based on surveys and TCEQ annual reports, only two landfills indicated remaining life less than 50 years. The following table from Attachment III.C.I (c) indicates the remaining life for landfills within the region.

Table III.D.III – DETCOG Region Landfills Remaining Life

Table III.C.I (c)	
Municipality / Facility Name	Remaining Life (years)
Angelina County Waste Management Center	14.3
City of Nacogdoches Landfill	21.8
Western Waste of Texas Newton Complex	95.0
Polk County Landfill	15.6
Source: TCEQ MSW Annual Report	

Based on the adequate landfill storage available the region has no inadequate facilities and current practices are adequate.

Household Hazard Waste Collection

Surveyed municipalities and private institutions within the region did not indicate any ongoing collection program for household hazardous waste (HHW) or electronic waste (Electronic Equipment). Periodically cities may conduct special collection days to allow residents to drop off HHW. The lack of accessible long-term drop-off locations throughout the region and the inability to collect HHW at the source poses a risk to increased improper disposal of HHW. The region does not have an adequate number of facilities and/or practices for handling HHW collection. The region requires long-term drop-off facilities, designated permanent HHW collection containers, or an increase of private haulers to collect HHW to address the inadequacy.

Household Hazard Waste Disposal

The City of Nacogdoches indicated accepting vehicle oil at city drop off locations, but the lack of permanent disposal or processing available in the region poses an increased risk for improper disposal. HHW is frequently improperly disposed of at the residential level and due to its size is commonly missed in landfilling operations. To address the inadequacy the region requires additional disposal and/or processing facilities within the region to aid in transportation cost required to divert HHW away from landfill operations. Additional facilities capable of processing HHW materials for reuse would be beneficial for the region.

ATTACHMENT III.H. Identification of Public and Private Management Agencies and Responsibilities

Narrative III.H. Identification of Public and Private Management Agencies and Responsibilities

As part of the 20-year planning process, Texas Commission on Environmental Quality (TCEQ) requires identification of public and private entities involved in solid waste management. TCEQ does not provide specific parameters or guidelines for the entities, so we identified entities with a wide range of responsibilities.

We categorized entities into several different groups and considered the role each could play. The purpose of this attachment is to provide lists of public and private entities involved in waste management in the Deep East Texas Council of Governments (DETCOG) region, as well as a broad categorization of the type of responsibility of each.

DETCOG gathered information about the entities involved in waste management within the COG region using a variety of methods, including use of multiple TCEQ data sources, knowledge of members of the DETCOG Regional Solid Waste Advisory Committee and online searches. Entities found in TCEQ data sources are listed in ALL UPPER CASE whereas those derived from other sources are shown in Upper and Lower Case.

We grouped the entities and facilities we identified into 10 broad categories, which are listed alphabetically.

Citizens Collection Stations. We included citizens collection stations because of their role in solid waste management providing collection options for local residents.

Citizens Collection Stations
BON WIER SITE 11
BURKEVILLE SITE 32
CITY OF CROCKETT CITIZENS COLLECTION STATION
CITY OF HEMPHILL
CITY OF KENNARD TRANSFER STATION
CITY OF NEWTON CITIZENS COLLECTION STATION
CLEVELAND COMPACTOR #3
COLD SPRING COMPACTOR NO 1
LAKE AREA TRASH DISPOSAL
NEWTON COUNTY SITE 4
OLD FIELD COMMUNITY/ MID CO SITE 12
POLK COUNTY CCS - HWY 146
POLK COUNTY CCS ONALASKA
POLK COUNTY CCS RICHARDSON RD
POLK COUNTY CCS UNION SPRINGS RD
POLK COUNTY CCS WALDING RD
SAN JACINTO COUNTY PRECINCT #4
SHELBYVILLE COUNTY
SHEPHERD COMPACTOR NO 2
TOLEDO BEND SITE 31
WIERGATE SITE 21

(More)

Composting Facilities. We included the only composting facility we found because of their role in transforming organic waste into a beneficial material.

Composting Facilities
Living Earth Technology Company

Environmental Stakeholders. In this group, we included agencies that may be involved with goals and projects that relate closely to solid waste management, making them potential partners in clean up events or educational campaigns.

Environmental Stakeholders
Keep Diboll Beautiful
Keep Nacogdoches Beautiful
Keep Angelina County Beautiful
Keep Huntington Beautiful
Angelina-Neches River Authority
Lower Neches River Authority
Sabine River Authority
Trinity River Authority
Lower Trinity Groundwater Conservation District
Pineywoods Groundwater Conservation District
Southeast Texas Groundwater Conservation District

Haulers. We included agencies involved with waste hauling because they could have a direct impact on their customers through cart tagging or waste audits. They also have a large role in the transport of waste.

Waste Haulers
Ameritech Waste
City of Lufkin
City of Nacogdoches
City of Newton
City of Teneha
City of Trinity
City of Woodville
Lilly Sanitation
Pineywoods Sanitation
Pro Star Waste
Republic Waste
Waste Connections
Grease Haulers
Global Grease Recyclers, LLC
DAR PRO Solutions
Medical Waste Haulers
Stericycle
BIO Medical Waste Solutions

(More)

Landfills. Agencies operating landfills in the region were included because of their significant role in solid waste management.

Landfills
ANGELINA COUNTY LANDFILL
CITY OF NACOGDOCHES LANDFILL
NEWTON COUNTY REGIONAL SOLID WASTE COMPLEX
POLK COUNTY LANDFILL

Municipal Utility Districts (MUDs). We included MUDs in the region because of their potential to administer some utility services and provide some environmentally related services.

Municipal Utility Districts
Houston County WCID 1
Mauriceville Municipal Utility District
Brookeland MUD
Rayburn Country MUD
Nacogdoches County MUD 1
Cape Royale Utility District
Memorial Point Utility District
Polk County FWSD 2
Somerset MUD 2
Waterwood MUD 1
Somerset MUD 1
Westwood Shores MUD

Processors. Processors were included because of the large roles they play in waste diversion and waste treatment, as well as an educational role they could play, such as offering tours of their facilities to aid public understanding.

Processors
HUTTO GARBAGE SERVICE
CITY OF NACOGDOCHES
PRO STAR WASTE
DON GENERAL SERVICES
CITY OF SAN AUGUSTINE TRANSFER STATION FACILITY
CITY OF WOODVILLE TRANSFER STATION FACILITY
TYLER COUNTY TRANSFER STATION

(More)

Recyclers. Recyclers were included because of the large roles they play in waste diversion, as well as an educational role they could play, such as offering tours of their facilities to aid public understanding.

Recyclers
City of Lufkin Recycling Center
City of Nacogdoches Landfill
Recycling Center - Polk County
San Jacinto County Precinct #1
San Jacinto County Precinct #2
San Jacinto County Precinct #3
San Jacinto County Precinct #4
Metal Recycling
USA Recycling
L A Scrap Metal
Universal Demolishing Co
DRK GROUP, LLC
CMC Recycling
City Scrap & Container Services
Barrios LLC DBA East Texas Recycling
Nacogdoches Recycling Center
BKL Metal Recycling
Triple D Salvage
A-1 Recycling & Disposal LLC
Metalbrick Division-CTI
San Augustine Scrap & Recycling LLC
Eastex Recycling and Scrap yard
Southside Metal Recycling

Recycling Facilities. We included recycling facilities because of their role in solid waste management through maximizing resource use.

Recycling Facilities
City of Lufkin Recycling Center
City of Nacogdoches Landfill
Recycling Center - Polk County
San Jacinto County Precinct #1
San Jacinto County Precinct #2
San Jacinto County Precinct #3
San Jacinto County Precinct #4

(More)

Tire Handlers. We included registered scrap tire handlers because of the problems associated with tire disposal. These handlers could play a role in tire reduction efforts or efforts to beneficially reuse tires.

Tire Handlers
Tire Processors
ANGELINA COUNTY WASTE MANAGEMENT CENTER
LOCAL SOLUTION ENTERPRISES
Tire Transporters
HERMAN TIRE POWER
PINEY WOODS SANITATION
JUST US SERVICES
MTZ TRUCKING
ENVIROCARE RECYCLING SOLUTIONS
DAY & NIGHT TIRE
TEXAS TIRE TRANSPORTERS
LOCAL SOLUTION ENTERPRISES

**ATTACHMENT III.O. PROCESS TO EVALUATE
WHETHER A PROPOSED MUNICIPAL SOLID WASTE
FACILITY APPLICATION IS IN CONFORMANCE
WITH THE REGIONAL SOLID WASTE PLAN**

Narrative III.O. IDENTIFICATION OF THE PROCESS THAT WILL BE USED TO EVALUATE WHETHER A PROPOSED MUNICIPAL SOLID WASTE FACILITY APPLICATION WILL BE IN CONFORMANCE WITH THE REGIONAL PLAN

This process is not a regulatory technical review of the application. The Deep East Texas Council of Governments (DETCOG) Regional Solid Waste Advisory Committee, nor DETCOG's Board, does not approve, or deny, permit applications. Approval of municipal solid waste management permit applications are the responsibility of the TCEQ.

Parts I and II of all Municipal Solid Waste (MSW) facilities proposed for siting in the Deep East Texas Council of Governments (DETCOG) region must be submitted for review to see if it complies with the regional solid waste plan. As such, one of the primary functions of the Solid Waste Advisory Committee (RSWAC) of DETCOG is to review permit and registration applications being filed from this region to assess their conformance to the DETCOG Regional Solid Waste Management Plan. The findings of the RSWAC are then presented to the TCEQ Commission.

In the DETCOG region the conformance review will consist of the following procedures that will be followed by the RSWAC when asked to review a permit or registration application for regional plan conformance:

Timing of a Review Request: Applicants may only request a conformance review of their registration or permit application after Part 1 and Part 2 of the filing forms have been submitted to TCEQ. These documents will be submitted to the DETCOG as part of the review process.

Additional Required Filing Information: In addition to submitting Part 1 and Part 2 of the registration or permit application, applicants will also be required to submit a completed DETCOG Solid Waste Plan Conformance Checklist. The Deep East Texas Council of Governments may be contacted for more information about the Solid Waste Plan Conformance Checklist. The applicant will complete the form to the best of his or her ability to indicate how the proposed facility will help in promoting the goals and objectives of the regional plan. The applicant or chief administrative officer empowered to make commitments for the applicant must sign the form to attest to the accuracy and truthfulness of the information presented.

Requesting a Registration or Permit Application Review: When requesting a review, applicants will need to comply with the instructions on the [DETCOG Solid Waste Plan Conformance Checklist](#).

RSWAC review requests will not be considered until all the required information has been submitted in its completed form. Once it has been determined that the information has been properly filed, the DETCOG Regional Solid Waste Coordinator will confirm its receipt in writing to the applicant and schedule a meeting of the RSWAC to review the application at the earliest possible date. Applicants will be notified in writing of the application review date and are strongly encouraged to attend that RSWAC meeting in order to present their application to the committee.

RSWAC's Conformance Review Considerations/Goals and Objectives: The Regional Solid Waste Advisory Committee (RSWAC) will consider the following factors when determining how a proposed facility will or will not conform to the regional solid waste plan:

RSWAC's Conformance Review Findings: There are Three (3) responses the RSWAC may consider when determining the conformance of a proposed facility to the regional solidwaste management plan. Those are:

1. A finding that insufficient information and additional information will be required before a final recommendation can be rendered.
2. A finding of conformance.
3. A finding the application does not conform with an explanation of how

All conflicts of interest rules established by the Deep East Texas Council of Governments Regional Solid Waste Grants Program contract program conditions apply to the conformance review process; A RSWAC member may not comment on a DETCOG Solid Waste Plan Conformance Checklist for any MSW facility application in which he/she owns or controls any interest in the business entity or other non-governmental organization that will benefit, directly or indirectly from activities of the RSWAC.

It should be noted that this review is not an application approval or disapproval process. It is merely a means by which the RSWAC can voice its qualified opinion of how the proposed facility conforms to the regional solid waste management plan to the body that will eventually approve or disapprove the application.

Per 30 TAC Sec. 330.643(a)(4), as amended, the regional plan may not prohibit, in **fact or** by effect, the importation or exportation of waste from one political subdivision into another. The DETCOG Executive Committee may or may not offer supplementary comments separate from the conformance review on the MSW facility applications. Such supplementary comments are separate from the conformance review and will be submitted separately

Communicating the RSWAC's Conformance Review Findings: The DETCOG's Regional Solid Waste Coordinator will be responsible for communicating the RSWAC's findings in writing to all affected parties. Those findings will be communicated as stated on the instructions for the checklist.

Appeals Process: The RSWAC is an Advisory Committee to Deep East Texas Council of Governments Board of Directors. As the DETCOG Board has vested the responsibility for MSW facility application conformance review with the RSWAC, its recommendations will generally be final. An applicant may appeal the RSWAC recommendations **only** if the application review is not processed and treated in accordance with the procedures set forth in this section. All appeals, including the specific alleged procedural violation(s), must besubmitted to the DETCOG Executive Director in writing. The Executive Director may take one of the following actions:

1. Investigate the allegation and determine that the appeal is valid. If the appeal is not valid, the applicant will receive in writing the basis for the decision to rejectthe applicant's appeal.

2. If there is some validity to the appeal, the Executive Director will place the appeal on the agenda of the DETCOG Board of Directors. The protesting applicant will be notified of the time and date of the meeting during which the Board of Directors will consider the appeal. The applicant will be given the opportunity to present his/her case directly to the DETCOG Board of Directors. The Board of Directors will then render a decision on the appeal of the protesting applicant. All decisions made by the DETCOG Board of Directors will be final.

RSWAC members will receive copies of the appeal and select a representative to attend the Executive Committee meeting.

An appeal can be filed at any time during the seven (7) calendar-day period following the date on which the RSWAC developed its recommendation. The appeal must be received by the DETCOG during that timeframe. Any appeals received after that date will not be considered and the RSWAC recommendation letter will be immediately forwarded to the TCEQ following final determination by the DETCOG executive board.

Voluntary Pre-Application Review: A Municipal Solid Waste (MSW) facility applicant may request a meeting with the DETCOG Staff to discuss an impending application, its conformance with the regional plan, and steps that may be taken to meet the region's solid waste planning goals.

Per 30 TAC §330.643(a)(4), states that the regional plan may not prohibit, in fact or by effect, the importation or exportation of waste from one political subdivision into another.

Additionally, the plan should not address the technical aspects of whether a facility will be constructed to be protective of human health or the environment, since those factors are considered by the TCEQ under technical review of the application.

**Deep East Texas Council of Governments
Regional Solid Waste Management Plan Conformance Checklist**

This process is not a regulatory technical review of the application. The Deep East Texas Council of Governments (DETCOG) Regional Solid Waste Advisory Committee, nor DETCOG's Board, does not approve, or deny, permit applications. Approval of municipal solid waste management permit applications are the responsibility of the TCEQ.

The TCEQ requires that the Regional Solid Waste Management Advisory Committee (RSWAC) of the Deep East Texas Council of Governments (DETCOG) review your application to determine if the proposed facility will conform to the DETCOG Regional Solid Waste Management Plan. The questions below pertain to the goals and objectives of that plan. Your response to these questions will provide the RSWAC with a perspective on how your proposed facility will support the plan's goals.

All questions relating to the type of facility being permitted or registered must be answered. A response of "Not Applicable" or "N/A" will not be acceptable. This checklist must be fully completed and submitted to DETCOG, along with Parts 1 and 2 of your facility application, before the local conformance review process can be initiated. The certification box must be signed by the chief administrative officer of the applicant/entity indicating that the information provided herein is accurate and true.

Section 1: General Applicant Information

1.1. Applicant's Name: _____

1.2. Location of proposed facility Nearest City: _____ County: _____

1.3. New facility

or

Amendment to current permit/registration

1.4. Is this a permit or a registration application? (Please check the appropriate box and provide the application number.)

- Permit No. _____
- Registration No. _____

1.5. What type of MSW facility is being registered or permitted?(Please check the appropriate box)

- Type I Landfill
- Type I AE Landfill
- Type IV Landfill
- Type IV AE Landfill
- Type V Facility
- Other (please describe)

Describe "Other" below:

Section 2: Regional Planning Goal Conformance

The 2022-2042 DETCOG Regional Solid Waste Management Plan is provided below. Please provide information as to how your proposed facility will help to support or conform with the goals, objectives, and action steps of the DETCOG Regional Solid Waste Management Plan.

<p>Goal #1: Achieve a 5% reduction of solid waste entering landfills by 2032 and 10% by 2042.</p>	<p>Objective 1.A. Increase diversion rate at landfills and look for local partners and ways to reuse or process waste locally.</p> <p>Objective 1.B. Incentivize and coordinate with contractors and new development within the region to push for Construction and Demolition waste reduction, increased material reuse, or use of salvaged material.</p> <p>Objective 1.C. Encourage composting, chipping, and/or grinding of yard waste for reuse as mulch and fertilizer.</p>
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<p>Goal #2: Encourage proper Electronic Disposal and Recycling in the region</p>	<p>Objective 2.A. Partner municipalities with local commercial electronic vendors to develop joint regional Electronic Equipment disposal and recycling plan.</p> <p>Objective 2.B. Educate citizens on the hazards of disposing of electronics in their local dumpsters or collection stations.</p> <p>Objective 2.C. Provide permanent containers designated for Electronic Equipment collection within cities or increase number of community collection days in the region that accept Electronic Equipment.</p>
<p>Goal #3: Decrease improperly disposed tires within region</p>	<p>Objective 3.A. Develop model scrap tire ordinances for Counties or Cities to aid in incentivizing proper scrap tire disposal.</p> <p>Objective 3.B. Gather and distribute information on scrap tire processing facilities in or near the DETCOG Region.</p> <p>Objective 3.C. Educate citizens on the tire collection facilities within or near the DETCOG Region.</p>
<p>Goal #4: Increase Public Education and Local Enforcement in the Region on Illegal Dumping</p>	<p>Objective 4.A. Provide model ordinances on Illegal Dumping and Enforcement to educate and provide training for the Counties and Cities in the Region.</p> <p>Objective 4.B. Provide environmental enforcement training to educate and provide training to the entire region (enforcement, prosecution, judicial and public).</p> <p>Objectives 4.C. Gather and make available educational materials, and provide training, on the impact illegal dumping has in our region.</p>

<p>Goal #5: Increase the appropriate disposal of Household Hazardous Waste (HHW) in the Region</p>	<p>Objective 5. A. Encourage public/private partnerships to share cost burden and provide Household Hazardous Waste (HHW) services.</p> <p>Objective 5.B. Educate the municipalities on ways to gather and dispose of HHW and the unwanted results of improperly disposed HHW.</p> <p>Objective 5.C. Gather and distribute information for the public on the importance of the proper disposal of HHW.</p>
<p>Goal #6: Citizen Collection Stations and Small Transfer Stations</p>	<p>Objective 6.A. Determine if new or expanded facilities are needed within the region.</p> <p>Objective 6.B. Promote the development of transfer and citizen collection stations in areas of need.</p> <p>Objective 6.C. Encourage open and free markets within the region for solid waste collection, disposal and recycling.</p>
<p>Goal #7: Encourage and support the development of Local Solid Waste Management Plans in the Region</p>	<p>Objective 7.A. Coordinate with Counties and Cities developing Local Solid Waste Management Plans to integrate them into the Regional Plan.</p> <p>Objective 7.B. Promote development of local programs to enforce Municipal Solid Waste (MSW) regulations and permit requirements.</p> <p>Objective 7.C. Provide information to develop Local Solid Waste Plans in accordance with Texas Health & Safety Codes.</p>
	<p>Objective 8.A. Encourage Multi-Discipline approaches to Solid Waste Technical Studies in the Region.</p>

<p>Goal #8: Encourage Tech Studies in the Region</p>	<p>Objective 8.B. Provide information for projects to collect data, analyze issues and needs, elevate alternative solutions, collect public input, and recommended actions to assist in making solid waste management decisions on a local level.</p> <p>Objective 8.C. Encourage Solid Waste Tech studies to not only consider Technological aspects, but also the Environmental Impact and Sociological Sustainability.</p>
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Waste Stream Management

2.1.1. Will your facility divert for recycling or beneficial reuse any of the following items? (If additional space is needed, attach an additional sheet titled “Response to Question #2.1.1.” in the upper right-hand corner of the page)

- White Goods
- Scrap Metal
- Tree limbs or brush
- Electronics
- Yard Waste
- Construction/Demolition Debris
- Other (please describe)

2.1.2. What types of waste(s) will be accepted at your facility? Please specify any special wastes.

2.1.3. If applicable, how will your facility manage scrap/used tires? Please explain in detail. (If additional space is needed, attach an additional sheet and provide the information under a heading titled "Response to Question #2.1.3.")

2.1.4. What are your plans for managing yard waste and brush? Please explain in detail. (If additional space is needed, attach an additional sheet and provide the information under a heading titled "Response to Question #2.1.4.")

2.1.5. If the proposed facility is other than a landfill, what, if any, measures will be taken to minimize, reduce, or recycle the waste before it is hauled off for disposal? (If additional space is needed, attach an additional sheet and provide the information under a heading titled "Response to Question #2.1.5.")

Additional Plan Review

2.2.1 Do you believe your facility will support these regional planning goals?

If so, please explain.

(If additional space is needed, attach an additional sheet and provide the information under a heading titled "Response to Question #2.6.1.").

Section 3: Certifications

I hereby certify that the information contained herein is, to the best of my knowledge complete and accurate and that the information in fact represents the MSW facility for which this entity is requesting a TCEQ registration or permit.

Name of Applicant's Chief Administrative Officer: _____

Title of Chief Administrative Officer: _____

Signature of Chief Administrative Officer

Date

NOTE:

PLEASE COMPLETE THIS FORM AS AND AS ACCURATELY AS POSSIBLE. YOUR COMPLETED CHECKLIST WILL BE SUBMITTED TO THE PERMITS SECTION OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY ALONG WITH THE REGIONAL SOLID WASTE MANAGEMENT ADVISORY COMMITTEE'S CONFORMANCE REVIEW ASSESSMENT.

**ATTACHMENT IV. B: PUBLIC NOTICE, AGENDA,
PUBLIC COMMENTS & PUBLIC MEETING
TRANSCRIPT**

Item IV.B.II – Public Meeting Agenda:



AGENDA

DETCOG 20-Year Regional Solid Waste Plan Public Meeting

Wednesday July 21, 2021 –

11:00 AM

DETCOG

**Multi-Purpose Room
1405 Kurth Drive**

- 1) Call to Order/Welcome Bob Bashaw, DETCOG
Regional Planner**
- 2) Review and Discussion of the draft 20-Year Regional Solid Waste Plan.**
- 3) Summation of Public Comments**
- 4) Adjourn**

**Serving Angelina, Houston, Nacogdoches, Newton, Polk, Sabine, San Augustine, San Jacinto, Shelby, Trinity, Tyler
Counties**

Equal Opportunity Employer

Item IV.B.III – Public Meeting Sign-In Form:

REGISTRATION

MEETING: DETCOG 20 Year Regional Solid Waste Plan Public Meeting. LOCATION: DETCOG Multi-Purpose Room 1405 Kurth Drive Lufkin, Tx 75904
 DATE & TIME : July 21, 2021 at 11:00 A.M.

IN PERSON

Name	Entity	Address	City	Zip	Phone	Email
Donna McCollom	KTRV TV				9365593306	dmcolloma@ktrv.com
Carolyn Stephens	DETCOG	1405 Kurth Dr.	Lufkin	75904	936 634 2247	csteph@meditay.gov
Bob Bashaw	DETCOG	1405 Kurth Dr.	Lufkin	75904	936 634 2247	Bob.Bashaw@editay.gov
KAYLEY FLORE	LUFKIN DAILY NEWS	1405 Kurth Dr.	LUFKIN	75905	936 207 2978	llovely.flo@lufkindailynews.com
VIRTUAL						

MA

Item IV.B.IV – Public Meeting Transcript:**DETCOG****1405 KURTH DRIVE****LUFKIN TEXAS 75904****20 YEAR PLAN PUBLIC MEETING TRANSCRIPT**

07 21 2021

11:10 AM TO 11:50 AM

Unknown Speaker 0:12

I'm Bob Bashaw.

Unknown Speaker 0:15

Got the title of regional planner. And Carolyn Stevenson, who did much of the legwork for this thing. So, she's as much as doing this. We get a grant from Texas Commission on Environmental Quality. And typically, what we end up doing with it is we do the regional solid waste grants and you know, Angel a beautiful clean, got some money this year for their hazardous household hazardous waste collection day. Polk County is setting up the beginning of a recycling facility. They wanted a cardboard baler committee, and the board approved grant funds for them to buy a baler and a forklift for that facility. same set of counties that and it goes on saying so a county had an enforcement officer who did a bunch of training for litter reduction, that sort of thing.

They got a grant; we help pay for that. The grants are not large enough to pay for all of it, but they help city of Crockett did some community cleanup some old dilapidated buildings that needed to be demolished. They went through the process gain control of them, demolished them hauled it away. We helped them pay for that. That's the typical thing. Well, Danny, for anycounty enforcement officers litter dumping illegal dumping. They've been they've had two grants, the last 2020 2021. And these, these have all been successful and good problem. But that's the that's what's typically been happening. Well, this last contract for the grant from TC EQ, they also had a requirement for they and or new 20-year solid waste plan for the region.

The plan looks at what's going on in terms of municipal trash collection, rural trash collection, population growth, recycling, and takes a look and, and one of the focuses of the study is okay. You've got something going on there. Now. Do you have enough landfill capacity? Do you have a collection system that feeds the landfills? And is that sustainable for the next 40 years? So that's a component? Well, part of that is they view recycling as diversion of materials that would have normally showed up in a landfill. So of course, they want you to take a look at your recycle of materials, what's been collected in the region, and, and also track it along with what's going into the landfills. And they are very encouraging of us as an organization through our solid waste committee and board to work on what we can do to reduce the amount of materials that are going to the landfill. In this study, those were the components and then they number have you project them out for the 20-year period. So that's why it's a reflection. You got a copy of the report. Have you looked at it? Have you had a chance to know sir, okay, well, let me do the

presentation. Okay. That's part of what we're supposed to do here today. So hopefully, you can hear me from over here. If not, you might even need to move closer.

Unknown Speaker 4:12sure that we

Unknown Speaker 4:18throw me the record.

Unknown Speaker 4:47

I'm going to go straight to a lot of the initial is just qualifications and you know who we are what we are and then also what are we calling which planning period, that sort of thing. Section Three the plan content demographic information. The going to three solid numbers that are in this is that are collected and you know are resulting from reports that we have backup documentation mark is the current population. That's a number that we've gotten from the Texas demographics Center, the state demographers office over at UT San Antonio. The landfill disposal in tons is from the 2020 landfill reports the four landfills in the region submit to TCEQ. Recycling tons is a report collected by Carolyn primarily from surveys that we sent and followed up on to the recycling facilities in our 11-county region. And then everything else on this page is a calculation from those three key numbers.

Unknown Speaker 6:05

We are at this time, we don't see any reason that will have any significant change your commercial waste activities, either through our survey responses, we also survey with cities and counties in our region as part of this process, and that comment holds up throughout the entire 20-year time period. And same thing for industrial waste generation at this time. We see no new significant industrial activity that we're expecting during the 20-year period to either increase or leave what we think is this point, any information we have entered would indicate that what we lose we're also gaining caliber.

Unknown Speaker 6:55

So, what made the demographic information be in five-year increments? Was that just kind of the best that

Unknown Speaker 7:01

well, that's TC Q's, okay. Okay, any further on down and especially in the dependencies, there are yearly increment reports that that reflect these numbers also that are supposed to reflect these 100,000. So, moving on down to page four estimates current and future solid waste amounts by types. This report is a compilation of the 2020 landfill reports from the four landfills that percent of tons dispose, I'm sorry, the current year, the 20 to 20 column is a reflection of you know, computation of all of their reports and then the number of they break it down in their reports by different types of waste. And that's what the you know, number of landfills accepting waste. And the percentage is a computation as are the projections in terms of you know, given the population numbers that were in that first grid it this is what the how that computes out over the five-year increments. So, is there kind of a formula that the projections are based off of? Yes, okay. Yes, the car it's, it's pretty, it's pretty basic stuff. It's you know, if you if you go back and look at that first little grid, that growth right for year over to the side, okay. Those numbers, you know, if you extend them out the past the digits, they get crazy, but that's the number those are the numbers that are used to on the projections, okay.

It's five-year all population based at this point. So, the population numbers drive all the other projection numbers okay. As you can see, if you go down page four, you know go through all the different types of classification the amounts of materials and which landfills tank wide you know, some take grease trap way some though some dead animals some doubt, you know, that sort of slow noticing here

Unknown Speaker 9:37

that the landfills on page four, okay, that, you know, it's the same thing that some of the landfills don't take litter, they don't take incinerator ash treated medical waste. What kind of happens with that when the landfills don't take those items?

Unknown Speaker 9:54

Well, and in the catchment, area doesn't necessarily produce all of those items, in some cases, in other cases, you know, the haulers are the people that are, are trying to collect, have to find different places for them to go.

Unknown Speaker 10:21

Okay, let's move on to page six describe current plan solid waste management activities. And that's, you know, most of the report is that of this part of the report is the description of the current activities. And that we're saying we're not, we're not saying that there's going to be much change. So, if you, you know, reading through the generations section, source separation, the highlighted area and source separation, the kind of the turquoise area is the turquoise are highlighted areas are the changes that were made. In the solid waste advisory committee meeting, which was held Monday morning. We as soon as we got out of that we made the chair that meeting would make the changes and reposted this material with these changes. In this case, it's an addition that that I am preparing the report and forgotten that all of the precincts down in same Southern County have at their collection stations further, they don't have a lot of pickups, so they have a lot of drop off, you know, in the big dumpster or in the big haul off dumpsters? Well, they also at those facilities have compactors, and all of them so they take the cardboard compact, and they're so close to the Houston area where the cardboard recycling our reprocessing facility is that transportation cost is not a big deal for them. When you get up here, transportation cost is a search factor that the little bit of money that they get paid for delivering it and Houston eats up and probably cost more especially from Lufkin. What it costs them to have it hauled down there. So, there's a, you know, an issue with that. Unknown Speaker 12:21

You know, what, what is classified as source separation, it goes on and talks about, you know, that we're not seeing a lot that drop off, you know, there's no curbside collection anymore in the region. You know, there are very few drop off locations. So, we'll talk about those. collection is all pretty much driven through city ordinances, and you know, just the marketplace. Down in the addendums. At the end, there's a listing of all of our incorporated communities and F's, the collection, who collects what, where, and that sort of thing.

Unknown Speaker 13:09 And going down to

Unknown Speaker 13:13

what we what we see is the very small trash collectors, there are a bunch of these low volume transport or transfer stations that they take their materials to dump it in. And then the larger trash collecting companies operate and control those. And so, they, you know, what they do is

they aggregate the waste to where it's economically feasible to pay the transportation cost, then haul it to the landfill, versus having a bunch of guys with pickup trucks, you know, with So, big cages on the back of them having to run back and forth, back and forth, back and forth.

And then some of the counties like Shelby County and Newton County operate citizens collection stations, and you know, have them hauled off I don't see any point is classified as handling, taking place in the region. No storage for municipal solid waste in the facility meant transportation, that's a breakdown of who has the registered solid waste transfer stations. And these are bigger facilities. These are not the ones that I was just talking about the aggregation stations and or the citizens drop off stations. That's a discussion of those. And there's a listing of all of the registered facilities and the addendums at the end of the report that are in our region processing. We don't have any processing facilities. Sydney United Nations has a grease treatment facility that's pinned up, it's registered, they're not offering, stop operating, there's a place in walking, that also was a compost, it was classified as a composting business. And they're not taking any more material, either. nobody's doing any treatment, you know, no resource recovery operations in the region. And then, you know, simple narrative explanation of how municipal solid waste and construction debris is handled in the region.

Unknown Speaker 15:44 At the end of page eight,

Unknown Speaker 15:47

and the terms of plan solid waste management activities, on the next page. You know, what we're being told over and over is kind of a hitting broke. So don't see make any changes. You know, that everything that the system that's in place at this time, you know, that, you know, you always end up with some folks that decide they just are highly motivated to dump their trash on the side of the road. Well, their efforts to try to determine who does that sort of thing and bring them to, you know, account for it. So, there is incentive to have, you know, to have a place to either a citizens drop off place to go take trash, and or have somebody pay somebody to come by and collect it out in front of your house. So that's, you know, pretty much the same report, no hauling no storage, you have transportation kind of, there's a system in place. You know, one big exception of transportations is that piney woods, sanitation and city of Crockett is in the process of building a municipal solid waste transfer station over there. They've got all their permits and everything. It's just not been finalized. We're not doing any processing, treatment, resource recovery. And then the next page goes on level three, the description assessment, the adequacy of existing Solid Waste Management, some of these practices we're telling him, you know, resource recovery, that there are issues there. So that's why we've

checked no box and it's addressed and attachment 3d, the end of the report, storage, no problems transportation, no problems treatment, no problems. Household Hazardous Waste. We have some issues there. You know, we have some efforts to deal with household hazardous waste. So, there's the description and free day. And same thing with collection and disposal.

Unknown Speaker 18:22

3d printers a statement? I don't there's not a statement BM. Three out of identification, additional opportunities for waste reduction. You know, the point we've tried to make, you know, in this case, can we talk about waste minimization, material reuse that, you know, try to work with the folks that are designing construction projects have been designed to use more recycled materials to minimize the sort of materials that they're using new materials and or on the other hand to also try to work with contractors and have them reduce their construction demolition waste that's coming in the landfills. Encourage them for materials reuse, and use of salvage materials when possible. Waste minimization reuse, recycle encourage citizens at municipalities compost, Chip grind and yard waste into reusable mulch or fertilizer. Reuse,

recycle. Partner with commercial vendors and develop regional e waste collection transportation disposal plans. You know there are entities that you can pay to come and take your old computer monitors printers, we do Here, as some of our cities and counties and whatnot have had, you know, e waste collection as part of, you know, some tire collection or something type day, but it's pretty sporadic, there's no set system. And so, I think we're talking about trying to see if we can develop some sort of system that would benefit the entire region on that. 3g or 4g, one was already a recommendation for greater resource reduction, waste, minimization, reuse, recycle. You know, what we're seeing is that there's not enough demand for reprocessed materials to drive the creation of more reprocessing facilities, the limited refund processing facilities that are available for in our case cardboard and paper. transportation cost becomes an issue for the you know, the materials that are being collected in municipalities, same set of county their cardboard, they're so close, they're closer to Houston to the cardboard recycling facility that transportation costs is not an issue. Polk County probably where they're building their new facility is going to be kind of you know, right on the borderline of that situation, get up to Angelina county bales of cardboard trying to get you know what

they end up trying to do is load up a flatbed 18 Wheeler trailer as far as they can to get as much material to get paid for when it gets there to offset the cost of having that truck the driver get it down there. And right now they're just not getting enough for the cardboard to pay for the truck. And that sort of environment you know, you either store it hoping that the price they get paid on the cardboard will increase or you end up even if you collect it you end up just hauling it to the landfill so what we're saying is you know there's got to be more development of process and facilities for all of the readily recyclable material the paper in the newspaper and cardboard number one and two plastics Yeah, we could recycle, work with municipalities and local independent school districts to increase awareness provide further education for reuse and recycling you know, provided you've got more market for them and collected materials you can provide more drop off facilities collection containers throughout the region develop reason why materials Recovery Facility you know if recycles hauling it to Eastern is a problem then maybe we can get a real materials recovery and reprocessing facility in the regions geographically move it up here

Unknown Speaker 23:23

the part in turquoise came out of our committee meeting the day that there's no traceability for tires the tires. However, wherever they apparently have serial numbers on it, if that was being recorded, you know, who sold them who bought them. When they show up on the roadside, maybe you can trace them back like you can you know the recycles trash that's dumped on the roadside, but they do as they go through it looking for a mailing address on something so then you'd be able to hold people accountable to private windows. Oh, yeah. Well, the same sort of situation if you could trace tires, you won't be able to watch the candy bar. Yeah, holding people accountable. It diminished the amount of Claire's that are showing up. And also, you know, we need more reprocessing facilities and or uses for the reprocessed material and then there's some discussion you know, some potential for our there are facilities worldwide that burn trash to generate energy, use it as the fuel to generate energy. So that's where number six came from.

Unknown Speaker 24:42

Number three, high dedication Solid Waste Management concerns establish of crime or priorities. Well, we've got like a regional city level plans to properly dispose or recycle e waste improper disposal of tires, improper disposal hazard household hazardous waste. And of course, the concern for over increased, you know, need for increased diversion of recyclable materials. And, you know, some ideas on what to how to go about addressing those issues.

Unknown Speaker 25:27

Three j planning areas, agencies with common Solid Waste Management concerns can be addressed through joint action, lack of recycling the meeting and the region. You know, there's some statement, there's a statement here in terms of, you know, we need more funds to create to assist the cities and counties for resource recovery facilities potentially help underwrite transportation costs. And then there's also encourage you to go on the other side of it, to encourage recycling, to develop materials, marketing materials for encouraging, recycling, reuse, reduction of, you know, materials that can be used by the cities and counties and schools in the region, then we've got to continue the proper disposal of tires. You know, disposal is the, you know, we need more processing facilities, and also probably a little bit more education of tires, illegal dumping, what it does, the problems that it creates. And then continued improper disposal of household hazardous waste. Need more information on telling people how to go about dealing with stuff.

Unknown Speaker 27:02

Then freak aid and professional incentives and barriers resource reduction in waste minimization, resource recovery. And so, there's, you know, spare tire ordinances, financial incentives for waste minimization, reduce contractors, provide funding for materials Recovery Facility, potential markets, tire processing, materials recovery. And then they ask us for regional goals. So our first two goals number one is achieved 5% reduction of reasonable solid waste by 2032 and 10% by 2042. And three thoughts in terms of how to go about doing that goal number two, be developed regional plan for properly disposal of E waste. Number three, the decrease improperly disposed tires and regions. You know, our biggest problem in terms of improperly disposed tires is they catch rainwater and they'd become mosquito breeding grounds. Oh, I'm sorry, no, how are these goals kind of determined?

Unknown Speaker 28:31

there? Well, first of all, I came, I developed them looking at the previous 20 year plan and looking at other model plants from across the state. And looking at what in our experience has been in terms of issues and concerns being expressed through cities and counties and our interaction will fail. Okay.

Unknown Speaker 29:10

We'll move on to three and recommendation of plan action associated timetable. And that was state waste reduction 5% 30 to 10%, but only 42. We, one of the committee members pointed out the other day that

Unknown Speaker 29:43

a yard waste processing facility is different from a composting facility. Composting involving the biological break down into you know organic elements versus composting or regarding waste processing. is basically creating mulch and grind up limbs and leaves and whatnot. And, you know, for spreading on landscaping to help it, retain moisture and, you know, minimize weeds and whatnot. So that's why there's a change in color there.

Unknown Speaker 30:21

household hazardous waste collection, the real issue there is that, in that it's classified as hazardous waste when we're talking bleaches, and detergents and whatnot. The landfills are not supposed to take that material, the municipal solid waste landfills, they are supposed to be packaged up much like annually, the beautiful clean does on their collection day, you know, and sealed containers and taken to landfills are facilities that are designed to either process and neutralize and pour, dispose of properly, something like that. So it doesn't end up in groundwater and people's drinking water. So that's, you know, part of the motivation, then in the wording here, there were some changes in terms of increasing instead of decreasing, I think I originally put in here something about, you know, having our landfills start taking has all this waste. Well, one of the landfill operators is on our committee, and he's like, whoa, wait a minute. There's a big difference between what we do and our facility, the way it's designed, and the facility down by Boma that, you know, charges you 10 times what we charge you, because it is, you know, like a nuclear waste disposal vault. So, we've made some changes there that, you know, indicate the difference in, you know, the way that material has to be handled and disposed. And, of course, public education programs for, you know, reduce recycle and reuse.

And then the note, again, for needing more facilities for handling, you know, if you're going to reduce what's going on in the landfill, by recycling materials, where you're going to have to have more facilities that are reprocessed. And that's pretty much the actual report itself. A lot of the titles and the addendums, and everything in the attachments are more detailed material showing where the numbers and the reports and things came from in the body of the report. You know, one of them is a breakdown of the actual individual landfill reports that went into the big landfill report, then the recycling, different recycling facilities are what they reported insurveys that we offer them. And then a chart of all the municipalities the collection, you know, how they collect their municipal life in most towns, and then you know, where does it go.

Unknown Speaker 33:36

Then disposal of solid waste has a breakdown of the individual tonnage and the individual landfills and then how many remaining life years based on those numbers, those particular landfill still have. And that's, that's a reported number, we don't have to calculate that that comes out there, plenty, plenty reports, etc.

Unknown Speaker 34:10

And then from the main report, and description of solid waste practices and materials, and there's a chart there of all the registered TC three registered municipal solid waste facilities with the solid waste transfer stations that are mentioned in the report highlighted. But GMC, all the low volume transfer stations and the city collect or the citizen collection stations and where they're located. And that's the end of the report.

Unknown Speaker 35:11

Are you still awake? I'm sorry.

Unknown Speaker 35:19 I'm here to learn.

Unknown Speaker 35:30

We're fortunate in that, at this time regionwide, we're talking to 11 counties, we've seen to have a system that's working, that we're not getting our hearing of reports of really

Unknown Speaker 35:47big

Unknown Speaker 35:49

illegal supposing issues, you know, you get one that pops up here in there. And, you know, you encourage those people to report on PC Q and or their local authorities. But in a very broad sense, we've got collection systems that are working, the trash is getting moved through the system and showing up at the appropriate landfills. When so, we went from the Old City dumps to engineered landfills, that transition was not so, what we have today. It was kind of clunky and rough. So that's one of the things that I see, unfortunately, and TCEQ is so - you know, this report is designed the format to cover the entirety of the state of Texas. So, they're dealing with large urban areas, and all the way down to us, which is all rural, rural. So the report format, there are some things in there that we just kind of Well, okay, yeah, that goes there.

And then there's the material that is very, it's meant to be detailed explanation of what's going on to so that somebody in Austin, when they look through this thing, that it all makes sense, you know that that's an important component of any report like this, or any plan.

Unknown Speaker 37:20The

Unknown Speaker 37:22

the deficiency and therefore, their whole focus for the people we deal with is let's reduce the stuff that's being buried. Well, Bobby's reduction agent would be recycled. Three years ago, four years ago, the United States was packing what we were calling recyclable materials into shipping containers and sending them to China. Well, China finally got to the point where they're like, okay, we don't need that raw material anymore. You know, so they quit taking it. We didn't have the reprocessing facilities and or the demand for the material that would come out of reprocessing facilities in United States. So

Unknown Speaker 38:11the

Unknown Speaker 38:13

mark, so called market for recyclables just stopped. And there were all sorts of projections for how long is it going to take for us to get back to World War well, different places, different things, you know, different processing facilities, different end users for re processed materials. So that's really, throughout the United States, different situations, different locations. Here for what we're hearing from our recycling people. There are really only three true demands for materials and the cardboard, office paper and just plain paper. And I'm not necessarily talking about newsprint because newsprint, pretty low grade paper, but it might be Caroline, do you know about newsprint, they include that with news with paper anyway. And then transportation becomes the issue. So, we're going to have to do a lot to make that work. That just were not apparent today, you know, at the date that we're finishing this report. So that's really the big challenge is, are we going to be able to minimize or maximize the viability of recycling coming out of just a cut off. And that really is I think, at least what I get out of all the amount of time that Carolyn Are you see anything different Carolyn? Carolyn works with this on a on an almost constant basis with this program. Whereas I bounced from solid waste transportation planning, economic development and you know, other things. No. Newspaper wasn't anything that wasn't even mentioned the newsprint So, wasn't it was mentioned in the recycle any, from anyone? Yeah, I just like to bet a basic question I'm not aware of whether or not they just include that in what's called paper. They, when you're talking to the recycling people, they do separate office paper, white copy paper, because apparently, there's a market for recycling that. So when you see these people that run the shredding operations that come around, shred your, your

documents, you're paying them to shred them, and then they turn around, take that raw material, much of it and resell it and get a pretty a much better return on that than anybody's getting on cardboard or, or playing paper. I'm not saying they're making big bucks. It helps with their business model.

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(End of Attachments)