







# **Public Utilities**

Annual Report 2011













# PUBLIC UTILITIES DIVISION CITY OF BRENHAM FY 2010-11

The Public Utilities department has the responsibility of overseeing the day-to-day operations of 11 departments that make up the city's utility funds. The department plans for the maintenance and expansion of the utilities infrastructure and is responsible for providing the utilities for the city of Brenham. These departments include Electric, Gas, Water Treatment, Water Distribution, Wastewater Collection, Wastewater Treatment, Collection Station, Transfer Station, Residential Collection, Recycling and Utility Billing. These departments serve more than 7,600 customers to provide them with safe, dependable natural gas as well as drinking water, environmentally sound wastewater treatment, street lighting for making neighborhoods safer and municipal power. Each department has a superintendent reporting directly to the Director and Assistant Director of Public Utilities.

City of Brenham utility funds are self-sustaining. No revenue is received from sales tax or property taxes. The utilities operate on funds generated through service charges from our customers.

#### Administrative Personnel

Lowell Ogle Director of Public Utilities

Dane Rau Assistant Director of Public Utilities

Nancy Stafford
Cindy Turnbow
Michele Glenz
Daniel McCracken
Jordan Prigge

Administrative Assistant
Administrative Secretary
Pre-Treatment Coordinator
SCADA System Manager
Line Locate Technician



The department receives and dispatches calls for all of the utility departments including power outages, sewer stoppages, water and gas leaks, sanitation issues, emergency disconnects for repairs to be made and reconnects when repairs are complete. During this fiscal year the department received and dispatched over 2700 calls and called in 703 utility line locates for field departments.

The department issued 330 new utility taps which included 111 water, 27 irrigation, 2 fire lines, 68 sewer taps and 62 gas taps. The department also issued 60 orders for new electric connections.

The infrastructure for utilities demands a set of sound practices to maintain the quality of service the city of Brenham's Public Utility Department provides. Departmental staff regularly attends conferences and seminars to stay current on utility industry issues. Those issues consist of safety as well as new regulations concerning municipalities. Key personnel are continually involved with industry groups and associations so that Brenham utilities continue to advance in all aspects of the organization. Some of this involvement includes serving on committees and as board members.

The department interacts with multiple federal and state regulatory entities through reports and inspections. These agencies include, but are not limited to, the Environmental Protection Agency (EPA), Energy Information Administration, North American Electric Reliability Council (NERC), Texas Commission on Environmental Quality (TCEQ), Texas Water Development Board, Texas Railroad Commission and the Electric Reliability Council of Texas (ERCOT).

The department is also directly responsible for the city's wastewater pretreatment program, backflow prevention program, FOG Program, locating services, and SCADA system operation.

The pretreatment program samples, monitors and inspects some of the city's largest wastewater customers. This sampling is used to control pollutants from the industrial user which may pass through or interfere with POTW (Publicly Owned Treatment Works) treatment processes or which may contaminate sewage sludge. The pretreatment program has 3 major industries. They are the Blue Bell Snack Plant, Blue Bell New Plant and Longwood Elastomers.

During the fiscal year 10-11, the Pretreatment Department conducted 3 plant inspections, conducted 16 sampling visits checking for levels of metals, cyanide, oil and grease and conducted 40 sampling visits to the major industries for BOD (biochemical oxygen demand) and TSS (total suspended solids) for surcharge purposes. The total revenue collected from the industry surcharges were \$402,794.40.

The backflow prevention program maintains a database of installed backflow prevention devices and ensures those devices are tested on an annual basis.

#### **FOG PROGRAM**

On January 6, 2011 Brenham City Council passed an amendment to Chapter 26 of the Code of Ordinances. This Ordinance provides for the protection of the sewer system by regulating the installation, maintenance, pumping frequency and sizing requirements for food processors/food establishments and grit trap users who discharge into the sewer system. The FOG (Fats, Oil, Grease, and Grit) Program relates to grease/grit trap management. Unnecessary discharges of fats, oils, grease and grit have caused line stoppages, sanitary sewer overflows and deterioration of sewer mains. The program has a total of 107 facilities. Sixty-five of those facilities are on a pumping schedule, 36 are in the proration state and six are on a deadline for installing a grease trap/interceptor by March 6, 2012.

# **SCADA**

The SCADA department is responsible for the maintenance of the SCADA system. The system monitors the city's gas, water, wastewater and electrical systems as well as the automation of operations at the Water Treatment Plant.

During the 2010 - 2011 fiscal year, the SCADA department:

- Installed 2 new RTUs in the field:
  - o Rhames Street Recloser

- o Backup generator at the communications tower.
- Performed a full upgrade to the Jeffries tower RTU and partial upgrade of the RTU at the Water Treatment Plant.
- Created a virtual SCADA system to be used for training and testing purposes.
- Expanded the SCADA database by 210 points.
- Worked with IT to implement the Wi-Max wireless system on the SCADA network to monitor SCADA devices.
- ❖ Implemented and installed the send phase of a SCADA network expanding redundant communications to the Water and Waste Water Treatment plants.
- Purchased and installed a SCADA web server to allow operators to view the SCADA system in a "read only" format over the internet.

Utility sales for the 2010-2011 fiscal year were as follows; 289,472,286 KWHs (an increase of more than 18,000,000 KWHs from 2010) 394,563 MCFs (a decrease of 48,000 MCFs from 2010) 996,362,800 gallons of water (an increase of more than 243,000,000 gallons from 2010) 657,568,000 gallons of wastewater treated (a decrease of more than 69,000 gallons from 2010)

During this fiscal year Public Utilities presented several items to Council for discussion and action to be taken. Those items were:

- Second reading amending Chapter 26 of the Code of Ordinances adding Article V, Electric Utility Distributed Generation. The agenda was approved.
- On October 7, 2010, an agenda item was presented to council to discuss and possibly act upon amending the Rate Tariff Schedules for the Transfer/Collection Rates to increase the rate \$3.00/ton. The amendment was approved.
- Presented to council an ordinance related to the implementation of a Fats, Oils, and Grease (FOG) program as part of the Grease Trap/Interceptor requirements of the city of Brenham.
- ❖ Bid No. 11-003 was presented to Council and a contract was awarded to Central Poly, Inc. in the amount of \$69,000 for the purchase of 10,000 rolls of refuse bags.
- ❖ In December 2010, a rate increase of 5% to cover increased operating costs was proposed by Texas Commercial Waste for commercial sanitation services. The increase was approved.
- RFP No. 11-004 was presented to council in January 2011 for the purchase of automated meter reading equipment. The resolution was approved.
- ❖ Bid No. 11-006 was presented to council for the purchase of a 48' aluminum refuse trailer to allow the city to haul all of our non-compacted waste rather than pay a third party. The bid was accepted and awarded to Travis Body and Trailer Co.
- Authorized the final payment in the amount of \$185,479.38 to Matula & Matula Construction, Inc. for the work on the West Side Water System Improvements, Phase II.

- In February 2011, Bid No. 1006.057-UA-UB was presented to council for utility line extensions along Hwy 36 North to serve multiple dwellings in an area that was annexed in 2005. The motion was passed.
- ❖ Authorized the final payment in the amount of \$22,661.65 to M-W-D Construction Co., Inc. for the work they performed on the West Side Water System Improvements, Phase II, Atlow Pump Station.
- A request for the extension of sewer services outside the city limits to 2325 Hwy 105 was presented to council. The request was the result of an individual who wished to open a dewatering facility. The request was accepted by council.
- ❖ Bid No. 11-007 was presented to council for the purchase of a bucket truck for the Electric Department. Motion was passed and order issued to Altec Industries, Inc.
- ❖ Bid No. 11-008 for the construction of a warehouse addition for the Electric Department was presented to council in March 2011. The addition was approved in the 2010-11 budget process and contract awarded to Rhodes Building System, Inc.
- ❖ Bid No. 11-009 was presented to council for discussion and multiple contracts were awarded for Bulk Water Treatment Chemicals for the Water Treatment Plant.
- On March 24, 2011, expenditures in accordance with RFP No. 11-004 were approved for the purchased the AMR/AMI equipment to begin the balance of the conversion of the system to AMR/AMI.
- In May 2011, an Ordinance was presented to council adopting a revised Drought Contingency Plan and Water Conservation Plan for 2010-2015. TCEQ mandates the plan to be revised and adopted every five years. The revised plan was adopted.
- An agreement was presented to council for a multi-year support and maintenance contract for the SCADA software. The city saved approximately \$12,000 savings by purchasing the agreement for a 5-year period.
- The final payment was authorized to Brazos Valley Services for the rehabilitation of the Henderson Park Lift Station
- ❖ Bid No. 11-014 was presented to council for the purchase of garbage bags. Council passed the motion.

#### UTILITY CUSTOMER SERVICE DEPARTMENT

The Utility Customer Service Department bills and collects for electric, gas, water, wastewater and solid waste services. The department is also responsible for providing excellent and efficient customer service which includes assisting with service requests, providing information related to billing and assisting customers with establishing new accounts. Customers are offered payment options which include bank or credit card drafting and online payments. Payment arrangements are also provided to avoid disconnect for non-payment.

Other important functions are meter reading, mail room, and late notices. This department also acts as collection point for monies received by every department in the City i.e. Collection Station, Recycling Center, Aquatic Center, Library, Main Street, Public Works, Public Utilities and Animal Shelter. The Incode Computer System, Aqua Metric Database and Laserfiche are maintained in this department.

The Utility Clerks work closely with Faith Mission and BVCAA who request information on a regular basis for customers seeking assistance in paying their utility bill.

The department also provides monthly reporting and governmental reporting for various agencies.

#### Utility Billing Personnel

Wanda Kramer	Utility Customer Service Supervisor
Shelley Schluens	Assistant Utility Customer Service Supervisor
Nadine Layton	Cashier
Linda Mooney	Utility Clerk
Denise Pappas	Utility Clerk
Gladys Hodde	Utility Clerk
Elizabeth Menjares	Utility Clerk
Melissa Wilkerson	Utility Clerk
Derrick Rogers	Meter Technician



Service Awards

Nadine Layton 5 years Wanda Kramer 35 years Gladys Hodde 32 years (retired)

Processed 91,472 utility bills resulting in revenues of \$39,291,588.

Assessed 14,747 penalties resulting in revenues of \$337,585.

Processed 16,504 ach payments in the amount of \$13,609,081 and sent 4,639 e-bills.

Read over 223,952 meters; imported 26,104 AMR readings.

Issued 9,595 customer service orders of which 4,327 were meter changes for AMR.

Customers Assisted:

1,293 new customer applications

30,293 payments at the drive thru

21,137 payments in the lobby and 33,167 mail payments.

#### **ELECTRIC DEPARTMENT**

The Electric Department provides the construction of new services and is responsible for the operation and maintenance of 117.86 miles of overhead and underground lines. The Lower Colorado River Authority sells wholesale power to the City of Brenham and delivers the electricity to a substation owned by the LCRA but shared with the city of Brenham. The electricity is delivered to the substation at 138,000 volts where it is "stepped down" to 7,200 volts through transformation. The electric system distributes that power throughout the city and it is eventually reduced to required voltage levels with transformers placed at each home or business.

The Electric Department is dedicated to delivering dependable, uninterrupted electrical service to the residents and businesses in Brenham. Over the years, the City of Brenham Electric Department continues to improve upon systems and processes to bring reliable electricity to our area.

As of September 2011, the system served more than 6,895 customers and maintains over 1,350 street lights.

# Electric Department Personnel

Alton Sommerfield	Superintendent
Don Bolenbarr	Assistant Superintendent
Brett Church	Senior Lineworker
Paul Kasprowicz	Senior Lineworker
Jesse Vela	Lineworker II
James Antkowiak	Lineworker I
Ryian Marshall	Lineworker I
Curtis Martin	Lineworker I
Jason Lange	Lineworker I
Luke Ondugu	Apprentice Lineworker
Cody Hodges	Apprentice Lineworker
Morgan Culbertson	Meter Technician



This department has completed numerous small projects to upgrade or replace short sections of problem lines. In prior years the focus has been more on system automation, so the next few years will be directed more to system hardware type improvements. This will include improvements like replacing sections of old conductors, overloaded transformers, along with identifying and replacing

bad equipment. The department also has a meter replacement program to insure meter accuracy. Over the course of the meter change out program the Electric Department has changed 4,768 of the 6,910 meters.

The Electric Department continues to implement the rotten pole change out program replacing poles that have rotted or have been damaged. Each year approximately 850-900 utility poles are inspected and treated. In addition, approximately 20 poles per year are replaced improving reliability as well as improving the safety to the public, personnel and equipment. The department also continues to carry out the tree and vegetation trimming program. This increases system reliability by reducing tree related outages and reducing damage claims resulting from these tree related incidents.

The department has had a high demand this fiscal year for new service connects or upgrades to current customers. This has slowed progress to some projects currently ongoing in 10-11.

The department has continued the overhead to underground conversion in the Walnut Hill Subdivision. The conduit and wire has been installed internally (in the back yards) only a portion of the subdivision has been converted.

Projects completed during fiscal year 10.01.10 – 9.30.11

- Purchased new bucket truck
- New warehouse addition
- \* Transformer installation-Blue Bell
- Changed out poles & transformers for the Johnson St. rehab
- Installed new service to the All Sports Bldg
- Woodbridge Subdivision-Phase 2
- Reconductor First Street for an alternate feed to Blinn College campus
- Completed a backup feed for Blue Bell plant on FM 577
- Removed overhead circuit over highways 290 and 36 for construction of new highway
- Worked with Stanpac and Blue Bell to split service in the mill site.
- Completed Blinn's addition of new dorms, addition to the band hall and a new agriculture building.
- ❖ Installed underground service for the Hohlt Park Amphitheatre
- Set pole and extended underground service for new Hyundai dealership
- ❖ Installed 3-phase power to the Henderson Park Lift Station
- Moved pole on Niebuhr St. to widen curb
- Relocated line and installed new transformer for new generator at Water Plant



#### GAS DEPARTMENT

The Gas Department is responsible for the maintenance and operation of 116 miles of gas mains and as of September 2011 served 4,276 customers.

#### Gas Department Personnel

Ande Bostain Gas Superintendent

Joe Moore Customer Service/Gas Tech II

Gary Marburger Gas Tech II
Haney Wilkerson
Chris Bugaj Gas Trainee



Service Awards

Joe Moore

15 years

The city purchases natural gas from Eagle Rock Energy. From the purchase point, the natural gas is delivered to the city's main gate station at a pressure of over 600 psi. The pressure is reduced to approximately 400 psi and odorant is added for safety purposes. The gas is transported to the city's two other "gate" stations where the pressure is reduced to 60 psi or less. The gas is then distributed through a system of mains ranging in size from 1-1/4 inches to 6 inches in diameter and is delivered to homes and businesses at pressures from 4 oz. to several pounds. Regulators located adjacent to each customer's meter further reduce the pressure according to the needs of the customer.

#### Utility Awards

The Gas Department is dedicated to providing safe and reliable gas service to its customers. For the eighth year in a row, the City of Brenham Gas Department has achieved a rating of 98 or above by the TML Intergovernmental Risk Pool. The department continues to be rated "excellent" for its performance rating.

This department replaces a certain amount of steel mains and services with polyethylene pipe each year to reduce leakage and increase system reliability. Replacing these lines with polyethylene will help the department become more efficient as the polyethylene mains require less maintenance and are less prone to leakage and not susceptible to corrosion.

The department's meter replacement program is in place to insure gas measurement accuracy. The department has swapped 1,652 meters of the 4,276 gas meters in service. Also, a painting plan is in place to maintain gas facilities and meters and to prevent atmospheric corrosion. During the fiscal year 2010-2011 the department painted more than 356 meter loops.

The department completed over 1,332 work orders including 59 new services, replaced or removed 6 separately protected services lines, abandonment of 8 old service lines, reworked the meterloop and replaced the meter at 121 locations, repaired 48 meter loop leaks, repaired 6 main line leaks and repaired 8 service line leaks. The department also replaced 9 steel services with polyethylene, added 83 excess flow valves to system services, and removed 121 old or stopped meters from system.

In September 2011, the Gas Department mailed a survey to its customers regarding their knowledge of natural gas leaks, odors, gas lines, markers, etc. The survey was a success in that of the number of surveys mailed, response was as high as 94%.

Other work completed by the department included:

- ❖ Woodbridge Subdivision-Phase 2
- Southwest Industrial Park Extension
- Installed a 2" main off of Old Mill Creek for new Blinn Agriculture building
- Installed gas lines with valves at 6 different locations to link pressure planes together





**Border Station** 

**Main Gate Station** 

#### WATER TREATMENT

The Water Treatment Plant is responsible for providing a safe and consistent supply of drinking water to the citizens of Brenham while maintaining compliance with State and Federal regulations.

#### Water Treatment Plant Personnel

Dane Bybee	Plant Manager "A" Water License
John Gerland	Chief Operator "B" Water License
Gregory Franco	Plant Operator "C" Water License
Kevin Post	Plant Operator "C" Water License
Ashley Gibson	Plant Operator "C" Water License
Fred Schultz	Plant Operator "C" Water License
Johnny Randermann	Maintenance Tech III



#### Service Awards

John Gerland	5 years	
Greg Franco	10 years	
Kevin Post	5 years	

The City of Brenham's Water Treatment plant receives and treats water supplied from Somerville Lake for which the City of Brenham has a contract with the Brazos River Authority for 4,200 acre feet per year. The water is pulled from the lake through an intake structure and pump station. The water is treated with Chlorine Dioxide as a primary disinfectant which also controls taste and odor. It is then delivered to Brenham through a 24" pipeline over a 14 mile route.

Once the water reaches the treatment plant, it is temporarily stored in a 750,000 gallon "raw water tank" where Chloramines are added to complete the disinfection process. The raw water is then pumped into the plant where Alum and polymers are added to aid in the clarification/sedimentation process. The water then gravity flows from the clarifiers to the filters which is the final stage of treatment. Caustic is then added which is used to bring the water to a "neutral" pH and Fluoride is also added.

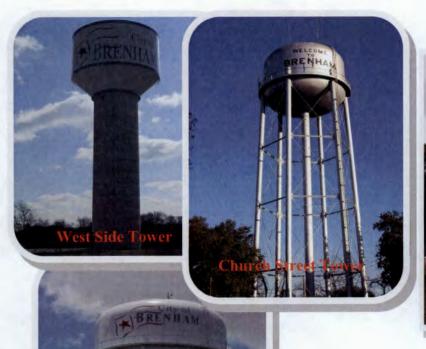
# **Lake Pump Station**



The Water Treatment Plant pumped 1,627,947,000 gallons of water from Somerville Lake, compared to 992,464,000 gallons in 2009-2010.

The highest monthly pumpage was 157,398,000 gallons in August of 2011 and the lowest was 70,378,000 in February of 2011.

The treated water is stored in tanks called "clear wells" where it is pumped into the distribution system and towers as needed. The three (3) towers (West Side, Church St., and Jeffries St.) have a storage capacity of 1,100,000 gallons. Total storage, including elevated and ground storage, is 4.6 million gallons. The Atlow Tower now serves as ground storage used to supply water to the newly constructed West Side Tower.



# **Clear Well**



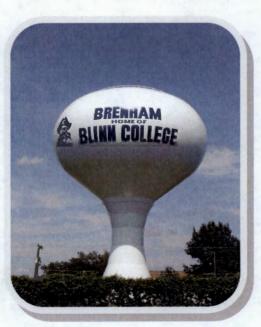
The Water Treatment Plant monitors and reports weather data to the National Weather Service. For this fiscal year 16.16 inches of rain was reported. The average for Brenham is 45.05 inches.

2010 - 2011 chemical usage / expenses			2009 - 2010 chemical usage / expenses	
Chemical	Usage	Cost	Usage	Cost
Liquid Caustic Soda	384 tons	\$ 92,339	240 tons	\$ 39,727
Liquid Aluminum Sulfate	720 tons	\$112,336	648 tons	\$ 86,448
Chlorine	68 tons	\$ 46,224	42 tons	\$ 30,382
Liquid Ammonia Sulfate	96 tons	\$ 16,320	72 tons	\$ 10,380
Polyortho-Phosphate	1500 gallons	\$ 29,400	2,500 gallons	\$ 34,000
Sodium Chlorite	9000 gallons	\$ 58,050	5,000 gallons	\$29,025
	<b>Total Costs</b>	\$354,669	Total Costs	\$229,962

The following items were presented and acted upon by Council:

- 1 Bid #11-009 for Aluminum Sulfate
- 2. Revised Drought Contingency Plan





#### WATER DISTRIBUTION

The Water Distribution Department is responsible for the construction, connection, operation and maintenance of the city's water transmission and distribution lines. The department oversees 145 miles of water mains, 2800 water valves and over 800 fire hydrants. Water is distributed through a series of mains ranging in size from 2 inches to 12 inches in diameter. The department is on call 24 hours a day and serves more than 7,100 connections. These services include water leaks and water main breaks. The department is dedicated to providing a safe and reliable supply of potable water to all residents and commercial/industrial accounts located in the Brenham area. The water system in Brenham is rated superior by the State of Texas through the Texas Commission on Environmental Quality.

#### Water Distribution Personnel

Dane Bybee	Superintendent	
Shawn Bolenbarr	Crew Leader	
Henry Beckermann	<b>Equipment Operator I</b>	
Steven Vela	Maintenance Worker I	
Brandon Fielding	Maintenance Worker I	
Eric Sommerfield	Maintenance Worker I	



#### Achievements

The Water Distribution Department is also involved in the meter change out program. Of the 7,267 meters in need of changing, 2,256 have been changed out for the AMI Sensus meters.

#### The department:

- Responded to 1,171 calls
- Installed 119 new water taps and 30 new sprinkler system taps.
- Painted 670 fire hydrants, replaced 6 fire hydrants, repaired 35 fire hydrants and flow tested 268 fire hydrants. (testing was suspended on May 11, 2011 to conserve water due to drought.)

- ♦ Installed 3,190 feet of new and 730 feet replacement water main.
- Installed 2 fire lines.
- The department also repaired over 187 main breaks (30 more water main leaks than last year).
- Work was completed on extending the following mains:
  - o Installed 6" water line south of Mansfield to Chauncey and South Baylor
  - o Lounge Rd extension (for the new All Sports Building)
  - o Installed fire line at Collection Station for mulch pile
  - o Extended water line on Old Mill Creek Rd.
  - o Longwood (into the Industrial Park expansion)
  - Extended water service on North Park (Business 36 North) for properties recently annexed
  - o Installed water line for Hohlt Park Amphitheatre

#### **Water Main Installation**





The following item was presented to Council by the Water Treatment Department:

Revised Drought Contingency Plan



# **WASTEWATER COLLECTION**

The Wastewater Collection Department insures that the wastewater collection system operates at optimum capacity. This department is responsible for the maintenance and operation of 139.5 miles of sewer mains, 2,112 manholes and served over 6,400 customers as of September 2011. The maintenance of these sewer lines requires routine manhole and main line inspections.

The department responded to 399 service calls and installed 68 new sewer taps.

#### Wastewater Collection Personnel

Bobby Keene, Jr.	Superintendent, Class "A" Wastewater License
Stephen Scheffer	Crew Leader, Class "C" Wastewater License
Chuck Boggan	Equipment Operator I
Terry Fielder	Customer Service Tech
Colton Fondren	Maintenance Worker I



Projects completed by the Wastewater Collection Department as of September 30, 2011.

- Installed 400 feet of 6 inch sewer main on Lounge Rd. plus 2 manholes on Lounge Rd.
- Installed 870 feet of 8 inch sewer main at Blinn College plus 3 manholes.
- Installed 300 feet of 6 inch sewer main at Stanpac.





#### WASTEWATER TREATMENT

Wastewater travels through a network of over 138.37 miles of wastewater collection lines to the Wastewater Treatment Plant owned and operated by the City of Brenham. The treatment plant, built in 2004 has a 3.55 mgd treatment capacity. The City of Brenham's Wastewater Treatment Plant and numerous lift stations serve a population of over 15,000 people. State certified operators continuously operate the facility 24 hours a day, 7 days a week.

#### Wastewater Treatment Plant Personnel

Bobby Keene, Jr. Superintendent Class "A" Wastewater

Karl Goessler Chief Plant Operator Class "B" Wastewater

Roger Kmiec Plant Operator Class "B" Wastewater Glenn Kristoff Plant Operator Class "B" Wastewater

Johnny Randermann Maintenance Tech III



Service Awards Glen Kristoff 10 years

The wastewater is received by gravity flow to the Wastewater Treatment Plant. Once at the plant, the wastewater enters the main lift station and is pumped into the head works where (2) mechanical bar screens remove large objects from the wastewater. The wastewater then flows through a grit chamber where sand and grit is removed. After this process, the wastewater flows into a diverter box where the flow is divided between the new aeration basin and the old aeration basin. The wastewater is then aerated for additional treatment with bacteria and other organisms which help breakdown the solids. Once this is done, the wastewater enters the clarifiers where the solids settle out. The clear supernatant then flows to the chlorine contact chamber where the supernatant is treated with Chlorine, followed by de-chlorination with Sulfur Dioxide in order to discharge into Hog Branch Creek. The wastewater must be treated to meet strict Federal and State limits before being discharged. The remaining solids from the bottom of the clarifiers are pumped into the four (4) large digesters which also help break down the solids by final aeration, organisms and bacteria.



Biosolids

The remaining solids are then pumped to the belt press and treated as Class "A" biosolids, which are then sold to local farmers and ranchers as a soil enhancer.

The department produced 5,369 yards of biosolids.

The department sold \$22,920.00 of biosolids to local farmers.

The Wastewater Treatment Plant has a designed flow of 3.55 mgd with a two hour peak flow of 10.65 mgd. The plant's daily average flow is 1,825,649 mgd. The plant's daily average influent BOD is 378.7 mg/L with a daily average TSS of 236.6 mg/L, the plant's daily average effluent CBOD is 3.0 mg/L with a daily average TSS of 2.57 mg/L.



**Grit Chamber** 

- ❖ The department treated 666,362,000 gallons of wastewater.
- The Wastewater plant had an average daily flow of 1,825,649 gallons.
- Collected BOD, TSS, and Ammonia Nitrogen samples 336 times throughout year.
- The plant achieved a 99% reduction in BOD as well as a 99% reduction in TSS.
- Income received from waste haulers \$55,254.49

During the 2010-2011 fiscal year, the following item was presented to Council:

A request for sewer services outside the city limits to 2325 Hwy 105. The individual wanted to open a dewatering facility. The request was accepted by Council.



**New Aeration Basin** 





# **SANITATION**

#### **COLLECTION STATION**

The City of Brenham Citizen's Collection Station offers the citizens of Brenham and Washington County along with numerous businesses and local contractors a means to dispose of unwanted items such as household waste, construction debris, yard waste, tires, used electronics, and other miscellaneous items for a nominal fee.

# Collection Station Personnel

Bobby Branham Superintendent

Colleen Latham Collection Station Attendant
Albino Ortiz Yard Foreman / Transfer Driver
Kevin Quinn Yard Foreman / Residential Driver





**Collection Station** 

The Citizen's Collection Station operating hours are Monday-Friday 8:00 a.m. - 5:00 p.m. and Sat 8:00 a.m. - 4:00 p.m. Items brought to the center are inspected and according to material are weighed and assessed a fee for disposal. At the Collection Station you can buy "Municipal Mulch" for your landscaping needs. Municipal Mulch is available in 2.0 cu yd bags as well as in bulk. You can also obtain a certified weight for registration purposes related to your equipment, livestock or wholesale items.

- Sold approximately \$113,355 (5,793 tons) of mulch during October 10 September 11. Sales increased by almost 9% over the prior fiscal year.
- Shipped out approx. 200 roll-off containers through the Citizen's Collection Station area.
- ❖ 48,360 tickets were entered through the Collection Station booth during October 10 September 11.
- A total of 5,166 tons on brush/yard debris was processed through the Collection Station from which the city produces "Municipal Mulch" for resale.
- Amended Rate Tariff Schedules to increase rates an additional \$3.00/ton.
- Accepted a rate increase by Texas Commercial Waste of 5% for commercial sanitation services.
- Purchased 48' aluminum refuse trailer
- Rehabilitated roll-off area.
- ♦ Hosted the 2010 Annual Spring Cleanup for City and County residents. The following was generated during the cleanup:
  - ➤ 103 tons of Scrap Metal
  - > 470 tons of Solid Waste (43 roll-offs)
  - ▶ 81 Automotive Batteries

# Diamond Z Grinder Making Municipal Mulch



# TRANSFER STATION

The City of Brenham Transfer Station accepts compacted waste from city residential trucks, local refuse companies, Texas Commercial Waste, and the City of Bellville on a daily basis.

#### Transfer Station Personnel

Bobby Branham Superintendent

Cody Neutzler Transfer Driver Lionel Moore Transfer Driver

Albino Ortiz Transfer Driver / Yard Foreman



Compacted waste is weighed at the station and then emptied into large semi-trailers. By utilizing the scale it allows each trailer to reach the desired weight of 20 tons in order to reach its final destination at the Brazos Valley Solid Waste Management Authority (BVWMA) landfill located in College Station, Texas. The Transfer Station is regulated to dispose of 125 tons per day. On average the station handles 70-80 tons of compacted waste per day. Currently the fleet consists of (3) long-haul trucks and (4) semi walking floor trailers, which are maintained by 3 full-time employees.



**Transfer Trucks** 

#### Achievements

- Trucked approximately 14,943 tons of waste to the landfill located in College Station; trucked approximately 2,752 tons of waste to the Austin landfill.
- Total number of loads trucked was 928 trips.
- The highest per month coming in May of 2011 - 109 trips.

#### RESIDENTIAL COLLECTION

The City of Brenham residential collection operation consists of (3) International/McNeilus refuse trucks in which two are operated daily and one is used as a backup to collect household garbage from city residents. Household garbage is collected twice per week with Monday / Thursday and Tuesday / Friday collection.

#### Residential Collection Personnel

Bobby Branham Sup

Superintendent

Ralph Blackshire

Residential Driver

Jeff Nowak Kevin Quinn Residential Driver / Yard Foreman

Residential Driver



Service Awards

Dinnie Hicks

36 years (Retired)

The City of Brenham issues rolls of polyurethane bags to residents both in January and July. On each Wednesday a yard waste route is also provided by collection staff for residents who call in for pickup. On average residential collection provides service to 5,200 customers.

#### **Achievements**

During October 2010 – September 2011 Residential trucks collected 4,467 tons of household garbage from City of Brenham residents.

- ❖ In December 2010 Bid No. 11-003 was presented to council for the purchase of refuse bags. The bid was granted and contract awarded to Central Poly, Inc. in the amount of \$69,000 for the purchase of 10,000 rolls of refuse bags for distribution to the residents of Brenham during the months of January and July. The bid was accepted.
- ❖ Due to increased sales of bags at the city and the Collection Station, Bid #11-014 was presented to council in July 2011 for the purchase of an additional 10,000 refuse bags. The bid was accepted.

# **Residential Collection Truck**



#### RECYCLING CENTER

Since 1999, the City of Brenham has remained committed to providing the citizens of Brenham and Washington County an alternate method of waste disposal by reusing, recycling and reducing recyclable materials from the waste stream. Since record keeping began in 2003, the center has diverted more than 15,000 tons of recyclable materials from entering our landfills.

#### Recycling Center Personnel

Bobby Branham Superintendent

Curtis Thomas Recycling Center Attendant

Kris Kokemoore Recycling Center Maintenance Tech I

Recipients of the REGIONAL SOLID WASTE MANAGEMENT AWARD BY THE BVCOG



We now have over 100 customers on the cardboard route.

At the center numerous items can be recycled. Cardboard, aluminum cans, paper products, plastics, glass, ink jet cartridges, motor oil, oil filters, and batteries are all items that are recycled through the center. After collection and separation of materials these items are processed for shipment and sent to regional recycling plants which reimburse the City of Brenham for the products. Each product has a certain value with cardboard and plastics topping the list.

# During Oct. 10 – Sept. 11 the Recycling Center collected and shipped out:

Aluminum Cans 32 tons
Cardboard 667 tons
Mixed Paper 403 tons
Plastics 101 tons
Scrap Metal 208 tons
Glass 156 tons



