

METHANE RECOVERY FACILITIES

Name: Huntsville Landfill

Location: Huntsville, AL

Developer: Ogden Projects, Inc./Huntsville S. W. Disposal Auth.

Manager: Wayne Thompson

Manager Phone & Fax: 205-881-8700

Gas Use: Medium BTU Gas Production for off-site Boiler

Status, Collection System: Operational - Customer

Start-Up Date, Collection: July 1990

Status, Processing System: Operational

Start-Up Date, Processing: July 1990

LANDFILL DATA

Name: Huntsville Landfill

Location: Huntsville, AL

Primary Landfill Owner:

Huntsville S.W. Disposal Authority

Operator (if still operating):

Date(s) Landfill Opened & Closed:

	Section I	Section II	Section III	Section IV
OPENED	1945			
CLOSED	1993			

If Open, Projected Closure Date:

Total Active Landfill Acreage: 215

Acres Devoted To Methane Recovery: 40

Percent of Landfill with Gas Wells: 18.6%

Tons of Refuse Buried On-Site:

Average Depth of Fill (feet): 40

Refuse Density (lbs/cu. yd.): 1,000

Average Annual Rainfall (inches): 55

Type(s) of Landfill Liners: None

LANDFILL GAS, COLLECTION SYSTEM

Cubic Feet of Gas/Minute (scfd) Design:

Cubic Feet of Gas/Minute (scfm) Actual: 30

Cubic Feet of Gas/Day (scfd) Design:

Cubic Feet of Gas/Day (scfd) Actual: 43,200

Percentages of Gas Flared: 0.0% & **Processed:** 100.0%

Type of Flow Measurement Equipment: Orifice Plate

Number & Type of Flares:

Major Equipment & Manufacturers:

- Blowers
- Compressor Sullair
- Flare
- Condensate Knockout System
- Other

Well or Trench Collection System: Well

Number of Wells: 10

Number of Trenches:

Linear Feet of Trenches:

Well Pipe Material: PVC

Lateral/Header Pipe Material: PE

Lateral/Header Pipe Above Or Below Ground: Below

Disposition of Condensate:

On-site pre-treatment: Yes

Disposal location:

- No
- Public Sewer System

LANDFILL GAS, PROCESSING/ENERGY GENERATION SYSTEM

Kilowatts of Electricity Produced:

BTU Value - Untreated Gas: 550

BTU Value - Treated Gas:

Gas Processing System Manufacturer:

Electrical Generation Equipment:

Number & Manufacturer(s) of Engine(s):

Number & Manufacturer(s) of Steam Turbine(s):

Number & Manufacturer(s) of Gas Turbine(s):

Number & Manufacturer(s) of Boiler(s):

METHANE RECOVERY FACILITIES

INSTITUTIONAL & OPERATING ISSUES

Collection System

Owner: Huntsville Solid Waste Disposal Authority
Operator: Ogden Projects, Inc.
Designer: The McGuire Group, Inc.
Constructor: Harbert Construction
Number of FTE Employees: 0.50

Fuel Customer(s):

Ogden WTE Project

Processing Facility

Owner: Huntsville Solid Waste Disposal Auth.
Operator: Ogden Projects, Inc.
Designer: The McGuire Group, Inc.
Constructor: Harbert Construction
Number of FTE Employees:

Cents/KWH:

Capacity Payment & Explanation: Yes

CAPITAL COSTS

Collection System Original Capital Costs & Year:

1998 Dollars:

Proc./Energy Gen. System Original Capital Costs & Year:

1998 Dollars:

Combined Original Capital Costs & Year:

\$2,000,000 (90) **1998 Dollars:** \$2,492,968

Additional Capital Costs (yr.) & Explanation:

% of Fuel Revenues Paid to Landfill Owner:

Is the Facility Using Federal Tax Credits: No

Is the Facility Using Other Special Programs:

Capital Financing Mechanism(s):

- General Obligation Bonds
- State Loan Or Loan Guarantee
- Municipal Revenue Bonds
- State Bonding
- Industrial Development Revenue Bonds
- Private Investment
- State Grant
- Federal Grant
- Leveraged Leasing
- Federal Revenues
- Authority/County Revenues
- City Revenues
- Other

Contact(s):

Sam Harrison
Huntsville S.W. Disposal Authority
P.O. Box 2619
Huntsville AL 35804
205-880-6054

Fax:

Wayne Thompson
Landfill Supervisor
Huntsville S. W. Disposal Authority
4100 Leeman Ferry Road
Huntsville AL 35804
205-881-8700 Fax:

Comments:

Landfill gas is purified, compressed and piped to Ogden's Energy Recovery plant as a supplemental boiler fuel. Gas used from November through April. Sanitary landfill is closed, but the site is still used as ash monofill. Boilers run on LFG, natural gas and #2 diesel oil in order to meet guarantees. Gas is used in two designated boilers to produce steam which is sold to the US Army at the Redstone Arsenal. There is 7 mile 10" pipeline from the WTE plant to the Arsenal. Steam is sold for \$15.28/Kilo/ton. During Summer months, gas is vented to the atmosphere. There is no demand for the gas at that time, since the amount of refuse going through the WTE plant does not warrant extra fuel. There is the ability to expand to three refuse boilers at the WTE plant, but currently there are no plans to do so.