

INDIANAPOLIS RESOURCE RECOVERY FACILITY

Location: Indianapolis, IN
 Plant Manager: Steve DiLiberto
 Phone: 317-532-6706

Plant Type: Mass Burn
 Status: Operational

TECHNICAL SPECIFICATIONS

Design Capacity (TPD): 2,355.00
 Actual Capacity (TPD): 1,967.00
 Ratio Actual by Design Capacity (TPD): .84
 Number of Boilers: 3
 Tons Per Unit: 785.00
 Boiler Manufacturer: Riley Stoker
 Grate Manufacturer: Martin
 BTUs Per Pound: 5,400
 Steam (lbs. per hr.): 558,000
 Temperature (F): 710
 PSIG: 510
 Co-combusting with: Sludge

ASH RESIDUE CONTROL
 Ash Residue (tpd-wet basis): 511
 Ash residue tpy: 186,515
 Year: 2003
 Percent Ash Disposed: 26.0%
 Ash fill: Southside Landfill, Indianapolis IN 46221
 Owner: City of Indianapolis
 Public or Private Owner: Privately Owned
 Combined Ash Fee Per Ton: \$10.40
 Ash Residue Notes: 20-yr. agreement with private firm to handle ash.

AIR POLLUTION CONTROL

TYPE	MANUFACTURER	YEAR
Dry Scrubbers	Environmental Elements	1988
SNCR - DeNox	Covanta	1999
Baghouse Or Fabric Filter	Environmental Elements	1988

CEM System Installed (year): 1988
 CEM Manufacturer: Ogden
 CEM Notes: SO2, CO, opacity

ENERGY RECOVERY

Types of Energy Produced at Plant: Steam
 Electricity
 Fuel Customer: Citizens Gas And Coke Utility --
 Investor-owned Utility
ENERGY REVENUES SPLIT

PERCENT	ENTITY
90%	Indianapolis
10%	Ogden

 Contract for the Sale of Energy by Fuel: Contracts In Place
 Contract Begin Date: 1988
 Contract End Date: 2008

Number of Turbines: 1
 Turbine Manufacturer(s): Terry Turbine
ELECTRIC OUTPUT RATING (MW)
 Gross: 6.50
 Net: 4.20
 Megawatt Hours Produced: 36,792
 Explanation: Electricity is for internal use only. Have small turbine generator.
 Steam Output lbs. per hr
 Gross: 508,613
 Net: 381,385
 Steam lbs per ton processed
 Net: 4,653
 Steam in \$ per 1000lbs: \$2.40
 Is there a steam capacity payment? No

WASTE STREAM

METHODS WASTE GUARANTEED TO FACILITY

METHOD	% OF STREAM
Residential Contract/Franchise	19%
Public Residential Collection	24%
Short Term Contract(less than 1 yr.)	14%
Long Term Contract	39%
Other Guarantees	4%

PARTIES INVOLVED

City of Indianapolis contracts out 7 of 12 districts.
 City of Indianapolis picks up refuse in 5 districts.
 Out of county commercial haulers.
 Covanta has contracts with haulers in two counties.
 Special wastes

Geographic area from which waste are collected: Multi-County

Marion County and two additional counties

Population Served: 792,000

Does facility accept any special types of waste: Yes
 Types of waste: Pharmaceutical (Distressed) Waste,
 Document Destruction, Other Waste, Counterfeit textiles

OPERATIONS AND PERSONNEL

Days of Operation Per Year: 365
 Days of Operation Per Week: 7
 Shifts Per Day: 2
 Hours Per Shift: 12
 Full Time Employees (FTE): 64

MATERIALS RECYCLING

TYPE OF MATERIALS PROCESSED AT FACILITY

Materials Recovered before Incineration: None
 Materials Recovered after Incineration: Ferrous Metals

SALE OF RECOVERED MATERIALS

MATERIAL	TPY	CUSTOMER
Ferrous Metals	10,705	

MATERIALS REVENUE SPLIT

PERCENT	ENTITY
35%	Indianapolis
65%	Operator

INSTITUTIONAL ARRANGEMENTS

Owner: Covanta Energy of Indianapolis
 Operator: Covanta Energy of Indianapolis
 Owner Operator Relationship: All Private Sector
 Procurement Arrangement: Full Service

OPERATING CONTRACT

Contract Term (years): 20
 Year Contract Began: 1988
 Year Contract Ends: 2008
 Designer: CRS Serrine
 Builder: J.A. Jones Construction Company

FINANCIAL ARRANGEMENTS

CAPITAL COSTS

Original Capital Cost and Year: \$83,800,000 (1985)
 Is Boiler included in Capital Cost: Yes
 Adjusted Capital Cost (in 2004 dollars): \$137,503,789
 Original Capital Cost By Design Capacity Tons Per Day:
 \$35,584
 Adjusted Original Capital Cost By Design Capacity Tons
 Per Day: \$58,388

TOTAL O & M COST PER TON & YEAR

With Debt Service & Year: \$27.15 (2003)
 Without Debt Service & Year: \$13.23 (2003)

TOTAL ANNUAL O & M COSTS & YEAR

With Debt Service & Year: \$19,500,000 (2003)
 Without Debt Service & Year: \$9,500,000 (2003)

ADDITIONAL CAPITAL COSTS

CAPITAL COST	YEAR	EXPLANATION
\$3,500,000	1999	Upgrading air emissions systems. Add De-Nox and mercury control.

CAPITAL FINANCING MECHANISM(S)

SOURCES AND AMOUNTS OF CAPTAL FUNDS

BONDS

Industrial Revenue Bonds \$109,000,000 1985 \$84,200,000 1996

PRIVATE CAPITAL

Private Investment \$25,000,000 1986

COMMENTS

Issue in 1996 was a refinancing.

FEES

TIP FEES IN DOLLERS PER TON

FEE	AMOUNT	TPY	EXPLANATION
Tip Fee1	\$27.00	588,000	City of Indianapolis-residential tonnage/In-county commercial tonnage.
Tip Fee2	\$22.00	100,000	Private haulers.-outside county
Spot Market Fee1	\$22.00		As available

COMMENTS

This is the second largest plant operated by Covanta in the United States. Major product is steam, which goes into the downtown steam loop. It is the second largest steam loop in the United States. Steam is used for both heat and cooling. There is a constant demand for the steam. Steam is supplied to the downtown area at a discounted price, keeping energy prices very competitive. Covanta owns 1.5 miles of the steam pipe; the utility owns the remaining 3.5 miles of the pipe. Electricity produced at the Waste to Energy facility is used internally at the plant. Facility is used as a center for secure waste destruction, including documents, and distressed manufactured products, as well as contreband. The City receives 30% of the revenues from the supplemental waste stream. With respect to both commercial waste and special waste, rates vary depending on the length of contract, tonnages, and type of waste. In 1998, Covanta (Ogden) has looked into joint venture with integrated paper company to build linerboard mill near WTE facility. The plan never was implemented. The main issue for this plant is to keep the tip fee competitive. Given that prevailing landfill rates are quite low, the tip fee has to be kept in the \$20 to \$30/ton range.

CONTACT(S)

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