

**COUNCIL ACTION FORM**

**SUBJECT: 2013 RESOURCE RECOVERY ANNUAL REPORT**

**BACKGROUND:**

A calendar year report is prepared annually for the Resource Recovery System. Based on this annual report, and in accordance with existing contracts, billings are prepared for the participating communities and Iowa State University.

The 2013 Resource Recovery Annual Report shows that 54,159 tons of Municipal Solid Waste (MSW) were received at the plant during 2013, with 6.2 percent (3,347 tons) of that amount from Iowa State University. Approximately 81 percent (44,093 tons) of the total tons received at the plant were processed, and 64 percent (28,262 tons) of this became Refuse Derived Fuel (RDF). Approximately 9,903 tons (18.3 percent) were sent to the Boone County Landfill.

Revenues from all sources totaled \$4,062,011, and total expenses were \$4,196,226. This resulted in net reduction of \$134,216 to the Resource Recovery fund for 2013. This reflects the major capital improvements made during 2013, including the new primary shredder and the fire suppression room addition. The per capita fee charged to the other participating jurisdictions remained at \$9.10 for 2013, and the tipping fee for haulers remained at \$52.75 per ton.

**ALTERNATIVES:**

1. Accept the attached 2013 Resource Recovery Annual Report as presented, and authorize staff to distribute the report and to bill the participating communities and Iowa State University.
2. Request further information from staff.

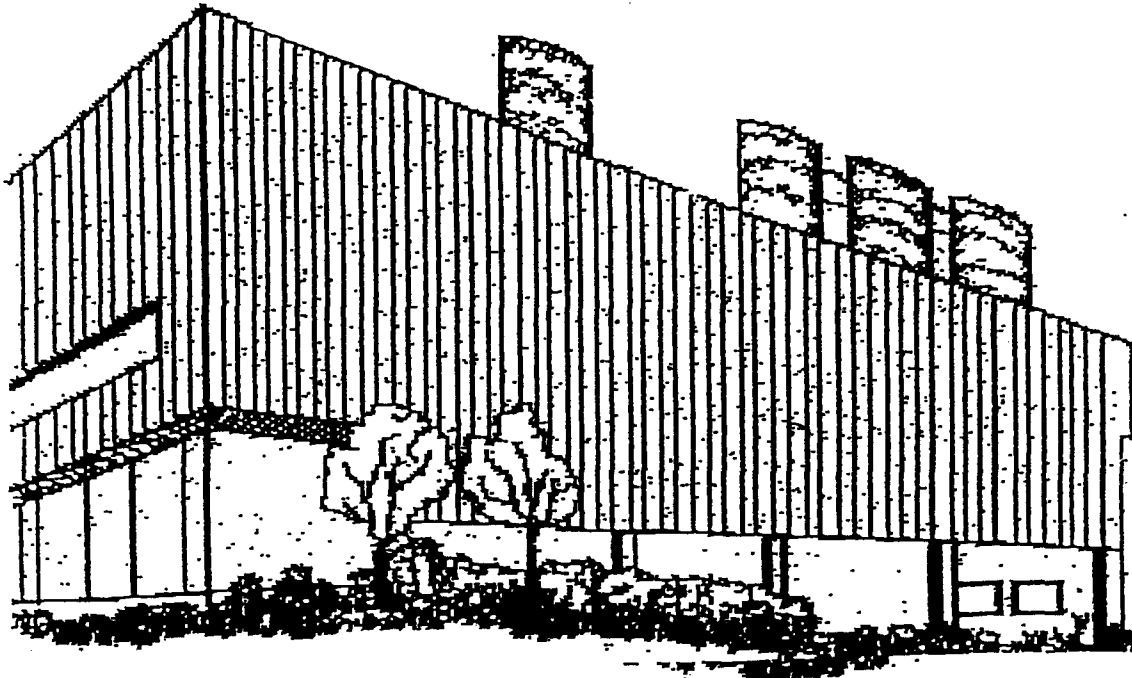
**MANAGER'S RECOMMENDED ACTION:**

Council acceptance of this report will allow staff to bill our participating partners for their respective portions of the Resource Recovery System's 2013 costs.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No.1, thereby accepting the 2013 Resource Recovery Annual Report as presented and authorizing staff to distribute the report and to bill the participating communities and Iowa State University.

**ARNOLD O. CHANTLAND  
RESOURCE RECOVERY SYSTEM**

**2013**



*CITY OF AMES, IOWA*





February 11, 2014

Dear Resource Recovery System Members:

The Resource Recovery System continues to be one of the most successful methods of landfill diversion in the state of Iowa. Approximately **64% of the waste processed at the plant becomes Refuse Derived Fuel (RDF)**, which replaces a portion of the coal used for electric generation at the City of Ames Power Plant. Also, more than **2,000 tons of metal** and **170 tons of glass** are recovered for recycling. Drop-off disposal of Household Hazardous Materials (HHM) continues to be offered by appointment, keeping **nearly 11 tons** of HHM from the landfill.

The **2013 per capita charge**, which is payable on July 1, 2014 and December 1, 2014, **will be maintained at \$9.10**. The per capita charges will be based on the certified 2010 census. **The tipping fee rate will remain at \$52.75 per ton and the car line rates will continue to be \$8 for cars/passenger vans and \$22 for pickups/trailers.**

The system **agreements with the county and member communities/agencies are being renewed early in 2014**. We sincerely appreciate your hospitality and consideration as we made visits to all the member agencies during the fall of 2013 to gain input on renewing our agreements. We look forward to beginning the next exciting 20-year period in July 2014.

Several innovative ideas and improvements were made to the system during 2013. The most significant among these was **replacing the original primary shredder with a new, state-of-the-art shredder**. This is planned to reduce the amount of electrical demand, as well as reduce operations/maintenance and landfill transportation/disposal costs. A sprinkler room addition was also made to the facility. This will enable **replacement of the internal fire suppression system** during the coming year, which will increase safety at the plant. Another improvement was **replacement of the truck scale**. We will also continue to further evaluate **potential gasification technologies** as an option to the traditional RDF process.

We experienced some irregularity in our availability to commercial haulers during 2013 due to needed maintenance at the power plant, as well as the noted improvements to our facility. We appreciate the accommodations that were made by our customers and expect the improvements to provide a much more reliable system in 2014 and beyond.

If you or any of your constituents have questions about this annual report or any of the activities of the Resource Recovery System, please do not hesitate to contact me or our Superintendent, Gary Freel.

Sincerely,

John C. Joiner, P.E.  
Public Works Director

**CITY OF AMES, IOWA**  
**RESOURCE RECOVERY SYSTEM**  
**ANNUAL BILLING**

**Participating Communities**  
**For Calendar Year 2013**

**REVENUES:**

Per Capita	725,188.10	
Refuse sold for fuel	694,366.00	
Sale of metals	261,149.91	
Public fees	62,021.42	
Regular customers	2,085,789.14	
Reimbursements and refunds	13,516.23	
Other governmental units	18,493.39	
Iowa DNR SWAP Funding	-	
Out of County Revenue	7,117.88	
Scrap tires	2,467.50	
I.S.U. participation	200,222.79	
Interest Revenue	(8,322.29)	
		<b>4,062,010.07</b>

**EXPENSES:**

Operations	4,196,225.72	
Debt Service	-	
		<b><u>4,196,225.72</u></b>
	<b>Net Loss</b>	<b>(134,215.65)</b>

## MATERIALS, REVENUES & EXPENSES RESOURCE RECOVERY SYSTEM

YEAR	AVAILABLE	TO PROCESS	(%)	FERROUS	(%) <sup>1</sup>	RDF	(%) <sup>1</sup>	(%) <sup>2</sup>	REVENUES	EXPENSES	REV/EXP	NET EXPENSE (\$/TON)
1994	47,869	45,540	95%	1,906	4%	34,280	75%	72%	1,937,432	2,197,280	88%	5.43
1995	28,117	28,059	100%	1,097	4%	20,386	73%	73%	1,372,600 *	2,109,276	65%	26.20
1996	28,484	28,452	100%	835	3%	18,875	66%	66%	2,237,072 **	2,628,208	85%	13.73
1997	45,435	42,644	94%	1,464	3%	27,746	65%	61%	3,081,928	3,163,332	97%	1.79
1998	48,643	47,690	98%	1,903	4%	31,138	65%	64%	3,373,503	3,183,602	106%	(3.90)
1999	49,164	46,370	94%	1,654	4%	30,434	66%	62%	3,161,495	3,220,240	98%	1.19
2000	48,896	44,397	91%	1,401	3%	28,095	63%	57%	3,097,282	3,313,053	93%	4.41
2001	50,093	44,955	90%	1,104	2%	30,435	68%	61%	3,353,739	3,281,503	102%	(1.44)
2002	50,267	48,717	97%	1,258	3%	35,147	72%	70%	3,731,348	3,110,513	120%	(12.35)
2003	51,906	47,436	91%	1,678	4%	33,146	70%	64%	3,803,639	3,527,346	108%	(5.32)
2004	53,788	51,026	95%	2,332	5%	34,334	67%	64%	4,017,107	3,462,794	116%	(10.31)
2005	54,493	53,468	98%	2,250	4%	32,621	61%	60%	4,285,110	3,716,566	115%	(10.43)
2006	55,500	50,989	92%	2,229	4%	30,180	59%	54%	4,250,337 ***	4,449,985	96%	3.60
2007	57,333	52,820	92%	2,102	4%	34,182	65%	60%	4,392,686	4,531,663	97%	2.42
2008	57,470	52,716	92%	2,068	4%	36,060	68%	63%	4,632,493	3,725,904	124%	(15.77)
2009	53,395	46,647	87%	1,987	4%	31,040	67%	58%	3,956,279	5,507,045	72%	29.04
2010	58,756	57,494	98%	2,347	4%	37,865	66%	64%	4,937,018	4,605,121	107%	(5.65)
2011	55,270	50,611	92%	2,166	4%	34,422	68%	62%	4,697,573	3,729,248	126%	(17.52)
2012	53,106	49,381	93%	2,177	4%	32,329	65%	61%	4,641,704	4,089,447	114%	(10.40)
2013	54,159	44,093	81%	1,873	4%	28,262	64%	52%	4,062,010	4,196,226	97%	2.48
<b>20 YEAR TOTAL</b>	<b>1,002,144</b>	<b>933,505</b>	<b>93%</b>	<b>35,831</b>	<b>4%</b>	<b>620,977</b>	<b>67%</b>	<b>62%</b>	<b>\$73,022,355</b>	<b>\$71,748,352</b>	<b>102%</b>	<b>(\$1.27)</b>

<sup>1</sup>Denotes percent of processed material

<sup>2</sup>Denotes percent of tons available

\* Closed for renovation for part of the year (1995, 1996)

\*\* Beginning in 1996, per capita is included as revenue

\*\*\*Closed for one month for Air Knife Installation

### TWENTY YEAR AVERAGES

<i>\$/Incoming Ton Revenue</i> .....	<b>\$72.87</b>
<i>\$/Incoming Ton Expense, Net</i> .....	<b>(\$1.27)</b>
<i>Percent Recovery - R.D.F.</i> .....	<b>62%</b>
<i>Percent Recovery - Ferrous</i> .....	<b>4%</b>

## CITY OF AMES, IOWA

### POPULATION - PERCENTAGES - CHARGES

Annual Billing - Calendar 2013  
Per Capita - \$9.10

	<u>POPULATION</u> <sup>1</sup>	<u>PERCENT OF POPULATION</u>	<u>TOTAL</u>
Ames	49,765 <sup>2</sup>	62.45%	\$452,861.50
Story County	8,706	10.92%	\$79,224.60
Nevada	6,798	8.53%	\$61,861.80
Story City	3,431	4.31%	\$31,222.10
Huxley	3,317	4.16%	\$30,184.70
Slater	1,489	1.87%	\$13,549.90
Roland	1,284	1.60%	\$11,684.40
Gilbert	1,082	1.36%	\$9,846.20
Maxwell	920	1.15%	\$8,372.00
Colo	876	1.10%	\$7,971.60
Cambridge	827	1.04%	\$7,525.70
Zearing	554	0.70%	\$5,041.40
McCallsburg	333	0.42%	\$3,030.30
Kelley	309	0.39%	\$2,811.90
<b>TOTALS</b>	<b>79,691</b>	<b>100.00%</b>	<b>\$725,188.10</b>

<sup>1</sup> Based on 2010 U.S. Census

<sup>2</sup> 58,965 minus I.S.U. 9,200

# APPENDIX

**CITY OF AMES, IOWA  
MONTHLY REFUSE VOLUMES - 2013**

	<b>TOTAL REFUSE RECEIVED (Tons)</b>	<b>TONS RECEIVED FROM I.S.U.</b>	<b>TONS RECEIVED FROM N.A.D.C.</b>	<b>TONS RECEIVED FROM I.D.O.T.</b>	<b>TONS RECEIVED FROM OTHER</b>
January	4,225	312	19	6	3,888
February	3,722	341	14	5	3,362
March	3,966	311	20	8	3,627
April	4,902	318	27	9	4,548
May	4,976	370	8	4	4,594
June	4,324	190	9	9	4,116
July	5,058	208	15	9	4,826
August	4,931	279	19	8	4,625
September	4,540	317	9	8	4,206
October	5,003	357	164	13	4,469
November	4,242	41	1	7	4,193
December	4,270	303	16	17	3,934
<b>TOTAL</b>	<b>54,159</b>	<b>3,347</b>	<b>321</b>	<b>103</b>	<b>50,388</b>
<b>% OF TOTAL</b>	<b>100.0%</b>	<b>6.2%</b>	<b>0.6%</b>	<b>0.2%</b>	<b>92.9%</b>



**CITY OF AMES, IOWA  
RESOURCE RECOVERY PLANT VOLUMES  
12/31/2013**

<b>CLASS</b>	<b>2013 TRIPS</b>	<b>2013 WEIGHT</b>	<b>PERCENT OF TOTAL WEIGHT</b>
Non-Scale Refuse (Car line)	4,058	1,128	2.1%
Commercial Haulers	8,210	38,554	71.1%
Private Industry/Contractors	549	759	1.4%
City of Ames	55	44	0.1%
Iowa State University	1,073	3,347	6.2%
Iowa Dept of Transportation	304	103	0.2%
U S D A Lab	113	321	0.6%
Directly to Boone	1,905	9,903	18.3%
<b>TOTALS</b>	<b>16,267</b>	<b>54,159</b>	<b>100.0%</b>

**CITY OF AMES, IOWA**  
**RESOURCE RECOVERY SYSTEM**  
**FEE SCHEDULE**

YEAR	PER CAPITA	TIPPING FEE	CARLINE	
			CARS	PICKUPS
2005/06	\$10.50	\$52.75/TON	\$8.00	\$22.00
2006/07	\$10.50	\$52.75/TON	\$8.00	\$22.00
2007/08	\$10.50	\$52.75/TON	\$8.00	\$22.00
2008/09	\$10.50	\$52.75/TON	\$8.00	\$22.00
2009/10	\$10.50	\$52.75/TON	\$8.00	\$22.00
2010/11	\$10.50	\$52.75/TON	\$8.00	\$22.00
2011/12	\$9.10	\$52.75/TON	\$8.00	\$22.00
2012/13	\$9.10	\$52.75/TON	\$8.00	\$22.00
2013/14	\$9.10	\$52.75/TON	\$8.00	\$22.00
2014/15	\$9.10	\$52.75/TON	\$8.00	\$22.00