



Hamm Material Recovery Facility 2023 Annual Report to the City of Lawrence, Kansas



January 26, 2024

Mike Lawless Municipal Services & Operations PO Box 708 Lawrence KS 66044

Hamm is pleased to provide the 2023 annual report for Hamm Material Recovery Facility. As laid out in our agreement, Hamm is to provide information on the following areas:

- <u>Materials Processed and Marketed</u>: Cardboard, Mixed Paper, Newspaper, Carrier Stock, PET, HDPE Natural, HDPE Colored, #3-7 Plastics, Mixed Rigid Plastics, Steel Cans, Aluminum Cans, 3-Mix Glass, Glass Fines.
- <u>End Markets/Major Purchasers</u>: Pratt, Custom Polymers, International Paper, Alcoa, Tube City, KW Plastics, Batliner, Sonoco, Ripple Glass, GP Harmon Recycling, QRS Recycling, Kronick Industries, Advantage Metals, Hamm Quarry. (See Appendix III, IV for commodity pricing history)
- <u>Materials Composition Analysis:</u> See Appendices for 2023 material composition analyses and audits.
- <u>Rejected Loads</u>: Hamm inspects and processes all loads delivered and rejected zero loads in 2023. The City's focus on delivering high quality single stream is important to the sustained success of the system and is appreciated.
- <u>Equipment Additions/Deletions</u>: While Hamm continuously adjusts our processing system to optimize recycled material/diversion, Hamm has not modified the processing line significantly.
- <u>Incidents</u>: Hamm encountered no serious complaints, accidents, incidents, or downtime in 2023. It is our contention that this is a direct result of partnering with the City on recycling and cooperating/communicating on a daily basis.

As always, Hamm appreciates the opportunity to serve Lawrence's recycling and processing needs. Should you have any questions on any of this material, feel free to contact me.

Sincerely,

UM Sedlock

Charlie M. Sedlock

School/Organization Tours – Hamm provides tours to students and different organizations in order to increase awareness of our recycling system and process.



Free State High School – 2023

10 tours were conducted at the MRF Facility by Hamm, totaling 400+ participants!

Appendix I – Spring April 2023 Through Put Study Rebate Composition

| Rebate Con | nposition | | | | | | | | | | | | | | | | |
|------------|-----------|-----------|-----------|-----------------|---------------|------|------------|----------|-------------------------|-------------|-------------|------------------------------|---------------------------------|------------------|--------------------|-------------|---------------|
| | Cardboard | Mix Paper | Newspaper | HDPE Natural | HDPE Color | PET | Steel Cans | Aluminum | <u>#3-7</u> Plastics | 3-Mix Glass | Glass Fines | <u>Scrap</u> <u>Steel</u> | <u>Rigid</u> <u>Plastics</u> | Aluminum Foil | <u>Glass Trash</u> | Loose Trash | <u>Totals</u> |
| Weight | 3,773 | 2,584 | 2,324 | 239 | 253 | 799 | 353 | 388 | 609 | 2,620 | 420 | 580 | 100 | 1 | 180 | 1,000 | 16,223 |
| % | 23.3% | 15.9% | 14.3% | 1.5% | 1.6% | 4.9% | 2.2% | 2.4% | 3.8% | 16.1% | 2.6% | 3.6% | 0.6% | 0.0% | 1.1% | 6.2% | 100% |
| | х | X | х | X | х | X | х | х | Х | Х | X | Х | Х | X | х | Х | |
| | | | | | | | | | | | | | Rebate Composition | | Rebate Items | 88.5% | |
| | | | | | | | | | | | | | | | | Residuals | 11.5% |

Appendix I – Spring April 2023 Through Put Study Rebate Recycling and Diversion Composition

| Rebate Re | | | | | | | | | | | | | | | | | |
|------------|------------------------------------|------------------|-----------|-----------------|---------------|------|------------|----------|-------------------------|--------------------|--|------------------------------|--------------------------|--------------------------------|--------------------|-----------------------|--------|
| | <u>Cardboard</u> | <u>Mix Paper</u> | NewsPaper | HDPE Natural | HDPE Color | PET | Steel Cans | Aluminum | <u>#3-7</u> Plastics | <u>3-Mix Glass</u> | Glass Fines | <u>Scrap</u> <u>Steel</u> | <u>Rigid</u> Plastics | <u>Aluminum</u> <u>Foil</u> | <u>Glass Trash</u> | Loose Trash | Totals |
| Weight | 3773 | 2584 | 2324 | 239 | 253 | 799 | 353 | 388 | 609 | 2620 | 420 | 580 | 100 | 1 | 180 | 1000 | 16,223 |
| % | 23.3% | 15.9% | 14.3% | 1.5% | 1.6% | 4.9% | 2.2% | 2.4% | 3.8% | 16.1% | 2.6% | 3.6% | 0.6% | 0.006% | 1.1% | 6.2% | 100.0% |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | Rebate Recycling and Diversion Composition | | | | | Recycling & Diversion | 92.7% |
| | | | | | | | | | | | | | | | | Residuals | 7.3% |
| | | | | | | | | | | | | | | | | | |
| Lawrence 1 | Lawrence Truck Numbers and Weights | | | | | | | | | | | | | | | Residuals | 7.3% |

FALL 2023 – Through Put Study Results

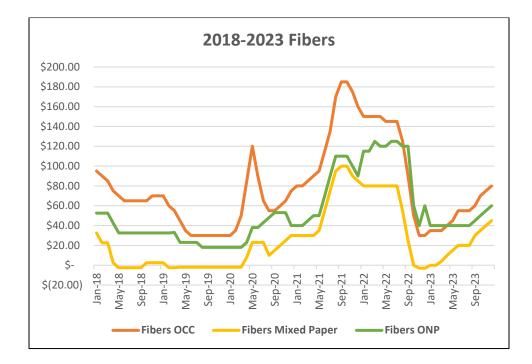
Appendix II – Fall November 2023 Through Put Study Rebate Composition

| Rebate | Compositio | n | | | | | | | | | | | | | | | |
|--------|------------|---------------------|-----------|-------------------------|-----------------------------|------|--------------------------------|-------------------------|-----------------------------|----------|--------------------|------------------------------|---|--|----------------------|-------------|--------|
| | Cardboard | <u>Mix</u> Paper | Newspaper | <u>HDPE.</u> Natural | <u>HDPE</u> <u>Color</u> | PEI | <u>#3-7</u> <u>Plastics</u> | Mixed Rigid Plastics | <u>Steel</u> <u>Cans</u> | Aluminum | <u>3-Mix Glass</u> | <u>Glass</u> <u>Fines</u> | <u>Scrap</u> <u>Steel</u> (Trash) | Aluminum <u>Foil/Scrap</u> (Trash) | <u>Glass (Trash)</u> | Loose Trash | Totals |
| Weight | 4,153 | 2,715 | 1,970 | 241 | 318 | 680 | 401 | 10 | 398 | 399 | 2,640 | 220 | 60 | 2 | 0 | 1,700 | 15,907 |
| 7. | 26.1% | 17.1% | 12.4% | 1.5% | 2.0% | 4.3% | 2.5% | 0.1% | 2.5% | 2.5% | 16.6% | 1.4% | 0.4% | 0.013% | 0.0% | 10.7% | 100% |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | Rebate | Compositio | Rebate Items | 88.9% | |
| | | | | | | | | | | | | | | | | Residuals | 11.3% |

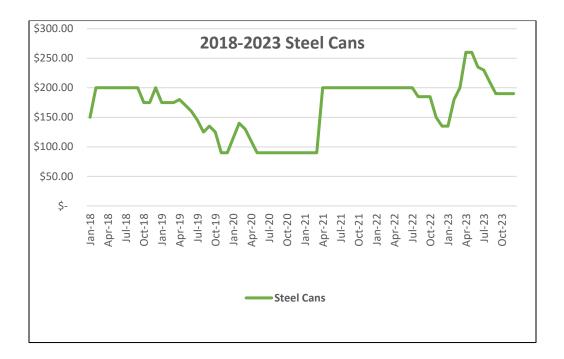
Appendix II – Fall November 2023 Through Put Study Rebate Recycling and Diversion Composition

| Rebate | Recycling a | nd Dive | rsion Compo | sition | | | | | | | | | | | | | |
|--------|------------------|---------------------|------------------|-------------------------------|---------------|------|--------------------------------|---------------------------------------|-----------------------------|----------|--|------------------------------|---|--|----------------------|-----------------------|---------------|
| | <u>Cardboard</u> | <u>Mix</u> Paper | <u>NewsPaper</u> | <u>HDPE</u> <u>Natural</u> | HDPE Color | PEI | <u>#3-7</u> <u>Plastics</u> | <u>Mixed Rigid</u> <u>Plastics</u> | <u>Steel</u> <u>Cans</u> | Aluminum | <u>3-Mix Glass</u> | <u>Glass</u> <u>fines</u> | <u>Scrap</u> <u>Steel</u> (Trash) | Aluminum <u>Foil/Scrap</u> (Trash) | <u>Glass (Trash)</u> | Loose Trash | <u>Totals</u> |
| Weight | 4153 | 2715 | 1970 | 241 | 318 | 680 | 401 | 10 | 398 | 399 | 2640 | 220 | 60 | 2 | 0 | 1700 | 15,907 |
| 1 | 26.1% | 17.1% | 12.4% | 1.5% | 2.0% | 4.3% | 2.5% | 0.1% | 2.5% | 2.5% | 16.6% | 1.4% | 0.4% | 0.013% | 0.0% | 10.7% | 100.0% |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | Rebate Recycling and Diversion Composition | | | | | Recycling & Diversion | 89.3% |
| | | | | | | | | | | | | | | | | Residuals | 10.7% |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | Residuals | 10.7% |

Appendix III







Appendix V

