

2013 Environmental Impact Report

Prepared for:

Greg Koeninger

Pomeroy

1020 Petersburg Road
Hebron, KY 41048

Prepared by:

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Mechanical Solutions Inc.

...your partner for a new century

Pomeroy
1020 Petersburg Rd
Hebron, KY 41048

ATTENTION: Greg Koeninger

SUBJECT: Environmental Impact Plan

Greg:

After having reviewed your current energy and recycling measures, we would like to work with you to create a more thorough environmental policy. The following is a list items we think would fit your companies goals for environmental responsibility.

- Conserve and improve energy efficiency
- Conserve and improve water efficiency
- Identify and reduce additional sources of greenhouse gas emissions
- Produce less waste and conserving resources
- Raise environmental awareness and encourage employee participation
- Investigate and expect similar environmental standards from suppliers
- Encourage use of biodegradable or environmental alternatives to chemicals
- Continued monitoring and review of campus wide operations and performance

We recommend a period of data collection and policy development to achieve these goals.

Thank you again for this opportunity and please call with any questions.

Sincerely,

CENTURY MECHANICAL SOLUTIONS INC.

Elizabeth Lienhart, PE.

About Pomeroy US Headquarters Campus

Pomeroy has been providing information technology services and solutions for over 30 years. It is a leader in designing, implementing, and supporting technology-based solutions. Extensive industry knowledge, flexibility and a dedication to innovation, give its professional certified staff the ability to create solutions and information technology challenges.

Pomeroy has developed a state-of-the art three building facility for its U.S. headquarters campus located in the greater Cincinnati. The Headquarters building is home to all corporate operations, including its sales, service operations and delivery, human resources, and financial functions. The Global Service Center is available 24/7/365 and has more than 400 analysts. The Distribution Center is ISO 9001:2008 certified, holds client inventory and handles configuration and deployment services.

Environmental Impact Summary

The US Pomeroy Headquarters campus is committed to minimizing its impact on the environment and continually seeks to improve environmental performance. Pomeroy recognizes environmental responsibility requires producing less waste, conserving resources, conserving energy, improving efficiency and raising awareness.

Periodic evaluations have been performed to identify measure and monitor environmental aspects. Assessment of operations include for utilities, lighting and HVAC. Additional steps have been taken to develop inventory and policy for waste, green gases and recycling. As a result of monitoring, improvements have been achieved in reductions in energy consumption, greenhouse gas emissions and waste generation and increases in efficiency and recycling.

Future goals include raise environmental awareness and encourage employee participation. Investigate and expect similar environmental standards from suppliers. Encourage use of biodegradable or environmental alternatives to chemicals. Increase levels of recycling. Identify and reduce additional sources of greenhouse gas emissions. Continue monitoring and review of campus wide operations and performance. As well as pursuing sustainable purchasing practices.

EcoVardis Survey

Pomeroy was tasked to complete an environmental impact survey. Questions were asked about consumption of energy, waste production, sustainability and stewardship. Fortunately, Pomeroy has been addressing many of these concepts such as measuring, monitoring and tracking consumption, encouraging employee health and safety and promoting a sustainable work environment through building improvements and recycling.

The following are some of the big ticket responses.

REPORTED RESULTS

ENV6100 : Electricity consumption (in the unit(s) that fit(s) you best) (year n-1)

Total in MWh 4849 MWh

Year n -1 -202 MWh

Electricity usage has gone down. See Appendix A for electricity data.

ENV6101 : Energy consumption of fossil fuels such as oil, gas or coal (in the unit(s) that fit(s) you best) (year n-1)

Total in MWh 2011 MWh

Year n -1 451 MWh

Gas costs have increased, which could it be attributed to cold weather. See Appendix B for gas data.

ENV660 : Direct GHG emissions (emissions from sources owned or controlled by the company, electricity not included, in the unit (s) that fit (s) you best) (year n-1)

Total in Tons 3,390 Tons

Year n -1 -142 Tons

Overall GHG emissions are on the decline. See Appendix C for GHG data. Note more to follow.

Recycling Program

The Pomeroy US Headquarters campus recognizes the importance of waste reduction. The facility encourages employees to participate. The current goal is for a year to year increase in recycling materials. Trends show an increase in recycling followed by a decrease. This data indicates first Pomeroy focused on recycling materials already in use. After recycling became part of the standard practices, Pomeroy pursued avenues to reduce consumption of waste generation, such as reusing paper materials.

Cardboard Recycling

Year	Tons
2009	190
2010	146
2011	239 (bought a new card board compactor)
2012	137
2013	129

Paper Recycling

Year	Tons
2009	126
2010	118
2011	148
2012	121
2013	68

Currently recyclable paper stock is taken to Cincinnati Recycling.

Plastic, Aluminum and Glass Recycling

- These items are collected throughout the campus.
- These items have a dedicated dumpster and recycled.
- However, the quantity removed is not currently tracked.

Light Bulb Recycling

- These items are collected throughout the campus.
- These items are recycled through the trash company Rumpke.
- However, the quantity removed is not currently tracked.

Indirect Greenhouse Gas Emissions

The Pomeroy US Headquarters campus aims for a goal of year to year decrease in energy consumption. The following report identifies the indirect greenhouse gas emissions (GHG) from the electricity purchased by Pomeroy. GHGs are emitted when fossil fuels are combusted to generate electricity. Therefore any GHGs produced are indirect emissions.

Over the past four years, electricity and natural gas usage data have been collected for each energy consumer at the facility. The facility location is used to determine the correct emission factors to use, as different parts of the country use different fuels to generate electricity. The attached Appendix A & B display purchased energy and quantify the equivalent emissions.

Overall, the data trend shows a decline in electricity consumption, even with increased expansion. Note consumption of natural gas increased during the measured years. This increase can be attributed to older than average temperatures.

Consistent efforts have been made to be more energy conscious and efficient. Some conservation actions include installing more efficient equipment. Building optimization measures have been implemented by the facilities management from monitoring this data.

Plans for future improvements include further optimizing building operation plan and an education plan for employees on health, safety and conservation measures.

Appendix C contains a summary of GHG emissions from a variety of sources including company-owned vehicle transportation, purchased energy and waste disposal. It is not intended to address outsourced activities such as supplier manufacturing operations or service-oriented businesses such as cleaning services.

Carbon-cutting actions such as recycling, waste prevention, and energy efficient product purchasing demonstrate Pomeroy's commitment towards sustainable business practices, therefore reducing the GHG emissions associated with their activities.

Electric Savings from Hand Dryer Upgrades

Electric hand dryers are used in restrooms to reduce paper generation and waste from towel consumption. Traditional hand dryers can be ineffective requiring multiple attempts and increased electric costs. Upgrading to high efficiency air blade hand dryers is an improvement because they decrease dry time by wiping hands with higher velocities of air, utilize zero heating elements and supply filtered air.

The following is a brief comparison of the energy consumption and savings earned by switching from hand towels to electric dryers and installing high efficiency units instead of standard dryers. There are many factors that go into the energy cost savings, but this analysis should provide a rough estimate.

The following assumptions were made. The operation is 18 hours a day, 6 days a week and 52 weeks a year. Average hand drying is assumed to be 120 dries per hour, or 673,920 dries per year. Owen Electric is Pomeroy's current energy supplier and the approximate energy cost per kilowatt hour is \$0.08.

Reduced Waste

Average hand towel usage is approximately 2.5 hand towels/ dry or 300 towels/ hr. If there are 4800 linear ft/ case of towels, annual consumption would be 6,318 cases of hand towels. At \$15/ case, the cost of hand towels could be estimated at \$94,770 annually. In terms of waste, this is equivalent to 7429 lbs of paper trash produced per year.

Energy Consumption

	Standard Dryer	High Efficiency Dryer
Time to Dry	40 Seconds	12 Seconds
Power Consumption	2.1 kW	1.5 kW
Power Consumption per Dry	0.023 kWh/ dry	0.005 kWh/ dry
Cost Per Consumption	\$1.87/ 1000 dries	\$0.40/ 1000 dries
Number of Hand Dries Annually	673,920	673,920
Annual Consumption per Dryer	15,725 kWh	3370 kWh
Yearly Energy Cost per Dryer	\$1260	\$270
Approximate Initial Cost of Dry	\$300	\$1200
Total First Year Cost	\$1560	\$1470

Annual electricity savings per dryer would be approximately \$988.42. The payback for installing one high efficiency dryer is less than one year.

Reduced Water Consumption from Urinal Upgrades

Traditional urinals use 1 gallon of water per flush. The proposed low flow urinals use 0.5 gallons of water per flush. Upgrading 12 fixtures to low flow will save 50% of the water cost for operation. Additionally, using bio-friendly urinal cakes will effectively address odor issues commonly associated with no flow/ low flow fixtures, without the use of toxic chemicals.

The following is a brief comparison of the energy consumption and savings between standard flow and smart flush urinals. There are many factors that go into the energy cost savings, but this analysis should provide a rough estimate.

The following assumptions were made. Restroom operation is 18 hours a day, 6 days a week and 52 weeks a year. Average urinal use varies from 30-80 flushes per day, assume 50 flushes average.

Water Consumption

	Existing Standard Urinals	Proposed Smart Flush Urinals
Water used per Flush	1 Gallon/ Flush	0.5 Gallon/ Flush
Number of Urinals	12	12
Approximate Flushes/ Day	50	50
Yearly Consumption Per Urinal	15,600 Gallons	7,800 Gallons
Yearly Consumption for 12 Urinals	187,200 Gallons	93,600 Gallons

Annual savings per urinal upgrade would be approximately 7,800 Gallons. Upgrading (12) urinals with the same usage over one year, provides approximate savings of 93,600 Gallons annually.

Employee Awareness

Pomeroy values employee health and safety. Programs are under development to improve workplace environment and promote safety.

Currently, Pomeroy provides employees at each of the buildings with fruit. Each day fresh fruit is made available in the common areas. This produce is free and encourages employees to make smart snack choices.

A new safety program is on track to be implemented in the next year. This will include information passed on through regular emails about best safety practices and measures to be taken in the workplace environment.

Pomeroy also has been promoting environmental awareness and sustainable measures by encouraging employees to use energy saving practices in their day to day activities. From upgrading equipment employees use daily, such as energy efficient monitors, to promoting recycling of office supplies. Pomeroy has demonstrated a clear interest in environmentally friendly and sustainable business from employees to business practices.

Appendix E lists some sustainability tips that could be added to the end of company wide emails. A sample of these tips could also be included in the upcoming safety program newsletters. These tips could even be displayed in frequently visited locations throughout the office, such as break rooms, hallways or near printer/copier machines.

Sustainable Consumption

Consumerism effects the environment from the creation, use and disposal of products. The following items are good ways to approach sustainable consumption.

Sustainable and Environmentally Friendly Purchasing

The EPA recommends looking at a product's content, manufacturing process, packaging and shipping methods when making a decision to purchase a product.

Consider selecting products that minimize the presence and exposure to harmful chemicals such as those that are corrosive, carcinogens or ozone depleting. Chose items that are made from renewable resources, recycled content and are biodegradable. Select refillable or reusable bottle, bulk shipping and efficient packaging with clearly identifiable instructions for use and disposal.

Waste Reduction

Preventing waste saves money. Waste is paid for it twice product is bought and then again when it is disposed of. By consuming and throwing away less, you will reduce the need to handle, treat, and dispose of waste. Potential waste prevention measures:

- Purchasing durable, long-lasting materials
- Striving to eliminate raw materials that are not incorporated into your final product or service
- Using products that are free of toxic materials
- Reducing the amount of packaging
- Conserving water and/or energy
- Implementing in-process recycling

Supplier Inquiry

Consider extending the environmental stewardship to suppliers. Does this supplier:

- Have a formal environmental management system?
- Take steps to reduce waste and emissions?
- Monitor and/ or measure of environmental impacts?

APPENDIX A: ELECTRICITY CONSUMPTION

51275-002		51275-004	51275-005	1275-006	51275-008
BILL DATE	KWH USAGE	KWH USAGE	KWH USAGE	KWH USAGE	KWH USAGE
8/5/2013	0	125,856	55,296	118,656	136,512
7/3/2013	48	110,304	38,400	121,728	124,992
6/5/2013	48	105,120	31,488	120,192	116,736
5/3/2013	0	105,696	25,536	113,664	115,776
4/3/2013	0	112,896	22,080	130,560	126,912
3/5/2013	48	107,712	19,776	125,952	119,808
2/5/2013	0	119,520	22,464	139,776	126,528
1/4/2013	0	115,488	25,152	127,488	133,440
12/5/2012	48	108,864	44,544	115,200	129,600
11/5/2012	0	116,064	33,984	114,816	134,592
10/3/2012	48	116,064	60,096	115,584	152,064
9/5/2012	0	121,824	73,920	116,736	153,792
	240	1,365,408	452,736	1,460,352	1,570,752

8/3/2012	48	130,176	75,840	128,640	161,472
7/5/2012	0	121,248	40,512	128,256	149,760
6/5/2012	0	112,608	28,224	117,504	136,512
5/3/2012	48	92,160	19,968	104,832	121,728
4/4/2012	0	108,576	28,800	120,192	138,240
3/8/2012	48	103,680	30,912	127,872	141,696
2/3/2012	0	105,120	30,912	132,480	146,688
1/5/2012	48	118,080	35,712	143,616	163,776
12/5/2011	0	99,072	35,904	122,880	147,072
11/2/2011	0	101,952	40,128	121,728	154,752
10/4/2011	0	106,272	44,736	122,496	155,904
9/2/2011	0	104,544	44,736	134,784	168,960
ANNUAL TOTAL	192	1,303,488	456,384	1,505,280	1,786,560

8/3/2011	0	135,360	71,424	143,616	162,048
7/5/2011	48	111,168	55,872	121,728	124,032
6/3/2011	48	107,136	33,984	120,192	124,224
5/4/2011	0	107,712	26,304	125,952	137,472
4/4/2011	0	109,152	23,040	121,728	141,888
3/3/2011	0	110,592	22,656	130,944	145,344
2/2/2011	48	123,840	26,688	140,928	165,696
1/5/2011	0	110,880	24,192	146,304	151,680
12/6/2010	48	109,152	22,272	119,808	143,232
11/3/2010	0	112,896	28,800	118,272	141,312
10/5/2010	0	131,616	52,608	130,560	147,840
9/2/2010	48	147,456	68,928	142,848	168,192
ANNUAL TOTAL	240	1,416,960	456,768	1,562,880	1,752,960

8/3/2010	0	144,288	66,816	135,552	160,896
7/2/2010	0	130,176	59,328	133,248	153,216
6/3/2010	48	106,272	46,656	130,176	138,624
5/5/2010	0	111,456	41,664	141,312	164,160
4/5/2010	0	118,368	38,976	142,464	136,896
3/4/2010	0	133,056	53,376	174,720	136,128
2/2/2010	48	136,800	53,376	185,472	181,056
1/5/2010	0	128,160	36,288	184,320	145,152
12/4/2009	48	134,784	47,616	179,328	140,928
11/3/2009	0	126,432	46,464	145,536	123,648
10/5/2009	0	156,672	56,256	172,416	148,800
9/2/2009	0	162,144	67,584	173,952	137,088
ANNUAL TOTAL	144	1,588,608	614,400	1,898,496	1,766,592

APPENDIX B: GAS CONSUMPTION

Acct #:	16402073 02	45003602 01	01302068 02	
Gas Meter:	1154981	681857	188349	TOTAL
Read Date	CCF	CCF	CCF	CCF
8/9/2013	0	0	2	2
7/10/2013	0	0	1	1
6/11/2013	6	0	28	34
5/9/2013	53	115	1829	1997
4/10/2013	424	3818	5721	9963
3/11/2013	594	5192	8192	13978
2/8/2013	681	5775	8163	14619
1/9/2013	644	6054	7824	14522
12/10/2012	340	4318	3918	8576
11/7/2012	160	1612	2697	4469
10/9/2012	14	234	234	482
9/7/2012	0	3	0	3
Annual Total	2916	27121	38609	68646

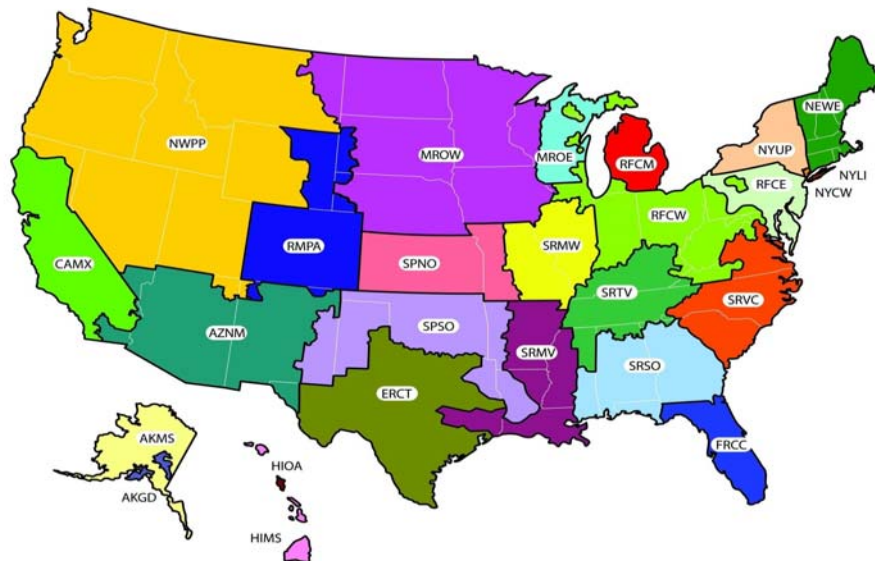
Acct #:	16402073 02	45003602 01	01302068 02	
Gas Meter:	1154981	681857	188349	TOTAL
Read Date	CCF	CCF	CCF	CCF
8/8/2012	0	0	0	0
7/11/2012	0	0	0	0
6/9/2012	1	112	0	113
5/9/2012	24	877	21	922
4/11/2012	13	2465	120	2598
3/12/2012	455	5765	6848	13068
2/9/2012	474	6070	6181	12725
1/12/2012	393	5596	6582	12571
12/12/2011	342	4247	3540	8129
11/8/2011	79	1196	1545	2820
10/11/2011	7	246	0	253
9/12/2011	0	30	26	56
Annual Total	1788	26604	24863	53255

APPENDIX C: GHG SUPPORTING DATA

eGRID2010 Version 1.1 Year 2007 GHG Annual Output Emission Rates

Annual total output emission rates for greenhouse gases (GHGs) can be used as default factors for estimating GHG emissions from electricity use when developing a carbon footprint or emission inventory. Annual non-baseload output emission rates should not be used for those purposes, but can be used to estimate GHG emissions reductions from reductions in electricity use.

eGRID subregion acronym	eGRID subregion name	Annual total output emission rates			Annual non-baseload output emission rates		
		Carbon dioxide (CO ₂) (lb/MWh)	Methane (CH ₄) (lb/GWh)	Nitrous oxide (N ₂ O) (lb/GWh)	Carbon dioxide (CO ₂) (lb/MWh)	Methane (CH ₄) (lb/GWh)	Nitrous oxide (N ₂ O) (lb/GWh)
AKGD	ASCC Alaska Grid	1,284.72	27.11	7.44	1,363.19	34.99	6.95
AKMS	ASCC Miscellaneous	535.73	22.65	4.48	1,462.30	61.68	12.18
AZNM	WECC Southwest	1,252.61	18.80	16.57	1,211.84	20.56	9.31
CAMX	WECC California	681.01	28.29	6.23	1,045.30	39.42	4.74
ERCT	ERCOT All	1,252.57	17.76	13.99	1,096.19	19.69	5.63
FRCC	FRCC All	1,220.11	41.19	15.25	1,286.41	43.40	11.50
HIMS	HICC Miscellaneous	1,343.82	135.15	21.71	1,645.57	122.94	21.33
HIOA	HICC Oahu	1,620.76	91.05	20.89	1,630.89	106.18	18.52
MROE	MRO East	1,692.32	28.79	29.05	1,905.18	35.25	29.98
MROW	MRO West	1,722.67	28.97	29.19	1,988.69	53.59	32.98
NEWE	NPCC New England	827.95	76.98	15.20	1,204.91	60.69	13.41
NWPP	WECC Northwest	858.79	16.34	13.64	1,279.58	43.31	15.75
NYCW	NPCC NYC/Westchester	704.80	26.22	3.35	1,234.06	37.65	4.88
NYLI	NPCC Long Island	1,418.74	90.50	13.10	1,397.80	44.08	6.99
NYUP	NPCC Upstate NY	683.27	17.41	9.90	1,384.20	31.55	16.19
RFCE	RFC East	1,059.32	27.40	17.03	1,671.96	33.29	22.19
RFCM	RFC Michigan	1,651.11	32.55	27.79	1,803.64	32.09	27.33
RFCW	RFC West	1,551.52	18.37	25.93	1,982.05	24.30	31.48
RMPA	WECC Rockies	1,906.06	23.63	28.89	1,554.38	23.17	16.45
SPNO	SPP North	1,798.71	21.22	29.20	1,958.22	25.40	27.75
SPSO	SPP South	1,624.03	24.52	22.42	1,435.24	25.03	13.14
SRMV	SERC Mississippi Valley	1,004.10	21.80	11.15	1,171.05	28.25	6.91
SRMW	SERC Midwest	1,779.27	20.57	29.60	1,945.66	24.02	29.69
SRSO	SERC South	1,495.47	23.64	24.57	1,551.05	28.50	21.69
SRTV	SERC Tennessee Valley	1,540.85	19.87	25.48	1,917.25	25.98	30.05
SRVC	SERC Virginia/Carolina	1,118.41	22.26	19.08	1,661.11	38.01	24.51
U.S.		1,293.05	25.07	19.64	1,520.21	32.23	18.41



This is a representational map; many of the boundaries shown on this map are approximate because they are based on companies, not on strictly geographical boundaries.
USEPA eGRID2010 Version 1.0 December 2010

APPENDIX D: WATER CONSUMPTION

		Average Montly Consumption 1000 Gals	Annual Consumption 1000 Gals
9/2/2013	10/4/2012	616	6,777
9/4/2012	10/3/2011	782	9,387
9/1/2011	10/4/2010	601	7,214
9/2/2010	10/7/2009	583	6,999
9/9/2009	10/3/2008	328	3,604

APPENDIX E: SUSTAINABILITY TIPS

Energy Savings

1. Bring your own mug to the café. Bring reusable bags to the grocery store.
2. Turn off lights, microwaves, or any other electric devices when you leave the room or house.
3. Replacing one incandescent light bulb with an energy-saving compact fluorescent bulb means 1,000 pounds less carbon dioxide is emitted to the atmosphere and \$67 dollars is saved on energy costs over the bulb's lifetime.
4. In North America, fruits and vegetables travel an average of 1,500 miles before reaching your dinner table. Buy local whenever possible.
5. Packaging makes up a third of all garbage tossed in the U.S. To cut down on waste, avoid single-serving foods and beverages. Instead, buy items in bulk and portion them out into reusable containers.
6. Planting trees help reduce greenhouse gases in the atmosphere by absorbing and storing carbon dioxide.
7. Swap disposable plastic bottles for a reusable BPA Free water bottle.
8. Consider saving energy by washing your clothes in cold water and line drying.
9. Recycle! Stop and check to see if your trash can be recycled!
10. Old electronics can be recycled: laptops, TVs, cell phones, etc.

Fuel Economy

1. Slow down. Reducing your speed to 55 mph from 65 mph may increase your fuel efficiency by as much as 15 percent; cut it to 55 from 70, and you could get a 23 percent improvement. National Geographic Society, Green Guide
2. Check your tire pressure. Under inflated tires cause poor fuel economy.
3. Check your air filter. Restricted airflow lowers engine performance.
4. No need to gun it. Accelerate reasonably to avoid wasting fuel.
5. Consider car pooling to work, riding a bicycle to the store or taking public transportation.

Water Savings

1. Turn off faucets while scrubbing hands, faces and teeth. You could save 4 Gals/ min!
2. Report or fix leaks and drips!
3. Consider replacing fixtures with low flow fixtures.