



Executive Summary:

Lucas-Milhaupt Inc. has participated in the Wisconsin Green Tier program since September 2007. Lucas-Milhaupt manufactures brazing and soldering filler metals in the form of bulk, strip and wire, preformed strip and wire, pastes, powders, fluxes and other metal products for a wide range of industries including automotive, electronics, heating and air conditioning, aerospace and others. Lucas-Milhaupt, Inc. was founded in 1942 and employs approximately 190 people.

In 2015 Lucas-Milhaupt enjoyed continued growth due to expanded market share and economic upturn in manufacturing. Our continuous improvement projects ensure that we minimize our environmental impact and conserve natural and man-made resources through growth of the business.

Environmental Policy Statement:

Lucas-Milhaupt is committed to complying with all applicable environmental laws and regulations and to preserving the environment of the community in which we work and live by minimizing environmental risks associated with its operations. We are committed to continuous improvement of our Environmental Management System and performance including resource conservation and pollution prevention.

Environmental Management System:

Lucas-Milhaupt has had a formal Environmental Management System since 2003. Lucas Milhaupt Milwaukee is registered to ISO 14001. An annual surveillance audit performed by BSI in January 2016, No major non-conformances were reported. There were two minor non-conformance noted, which have action plans associated with these findings.

Minor non-conformances:

Finding # 1 –

During the External BSI audit there were no records showing that all shifts had received fire drill training and there was no record of any severe weather drills being held. Plus there was no evidence of corrective actions being taken for areas identified as a concern.

Corrective Action # 1 –

1. Review procedure to ensure that back up to EHS is available if personal changes occur.
2. Fire drill will be conducted in Q2-2016 for all shifts at LMM. Drill will be noted and drill critique will be reviewed with management for any CA or PA that may have arose from the drill.
3. Severe weather drill will be conducted for all shifts in Q3 – 2016. Drill will be noted and drill critique will be reviewed with management for any CA or PA that may have arose from the drill.

Finding # 2 –

No objective evidence operational controls for waste management are being properly followed. A drum was noted to have exceeded the accumulation start date allowance.

Corrective Action # 2 –

1. Signage has been created for the Waste storage areas. Detailing storage requirements
2. Weekly hazardous waste inspections – dates of drums will be loaded into spreadsheet to avoid further issues
3. All employees who handle or inspect waste will be retrained on requirements.

2015 Objectives & Targets Updates:

2015 ASPECTS & IMPACTS PROJECTS LIST (Updated: December, 2015)					
Activity/Team Lead	Action Items	Resource	Target Date	Status	Associated Legal
Paper, Cardboard, Plastic, Electronic & Wood Recycling	Identify current recyclers for each recyclable category and work with them to identify amounts we recycled per category in 2014.	New Hire	July 31st	complete	NR 500's Reduction of Solid Wastes
	Objective & Target: Use the 2014 amounts to establish goals for 2016 to see if we can recycle larger quantities of each category.	New Hire	July 31st	complete	
	Work with each Recycler to identify descriptions of each category that can be used to better identify what type of product/item can be recycled as well as what types of product's items cannot be recycled.	New Hire	4/30/2016	in process	
	Take these descriptions and turn them into one of the monthly awareness training topics for 2015 so all shop floor employees can participate in campaign to increase amount of recyclables at our facility.	John R. & VSM's	Sept 31st	complete	
	Work with VSM's & Shop Floor employees to identify additional collection sites and/or collection bins that may be needed to help make it easier to recycle more items. Next work with Recyclers to obtain any additional recycling containers based upon employee input.	John R. & VSM's & Shop Floor	Sept 30st	complete	
	Work with our Cleaning Crew to verify that they know where each Recycling Container is to be emptied, to avoid any recycling material from being discarded in regular trash.	John R. & Cleaning Crew	Sept 30st	complete	

Activity/Team Lead	Action Items	Resource	Target Date	Status	Associated Legal
Energy Audit	Work with Team to identify any item(s) that can be used as an A & I Project for 2015.	John R. & George B.	Feb 28th	Completed	Clean Air Act & Reduce Consumption of Electricity
	For any item identified as a 2015 A & I Project, add to our list and select Resources & Target Dates.	John R. & George B.	March 31st		
	LED Light for Offices & Motion Sensors. Trial use of one LED Light is currently underway.	George B. & John R.	Oct. 31st	Completed	
	Objective & Target: Work with "Focus on Energy" to help us identify the amount of electricity that will now be saved by using LED vs. Fluorescents.	George B. & John R.	Oct. 31st		



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Activity/Team Lead	Action Items	Resource	Target Date	Status	Associated Legal
Re-Organize the Wastewater Collection Process for Formulated's Bowl Washing	Make the switch from use of 55 gallon drums and evaporators over to 275 gallon totes to collect wastewater from bowl washing. Purchase and install totes in Formulated.	George, Eric & John		Complete	NR 500's (Reduce Solid Wastes), NR 600's (Reduce Hazardous Wastes) & Reduce Usage of both Natural Gas & Electricity
	Collect samples of waste from each Tote and send out for analysis to verify that this new waste stream will be either a Hazardous or a Non-Hazardous Waste - this will be a TCLP Test.	John, Tom P. & Waste Hauler	Feb. 2015	Complete	
	Once results come back and new waste stream is identified. Work with Waste Hauler to determine the frequency when our Tank or totes will be vacuumed for removal. Initial thoughts are once every 4 to 5 weeks.	John, Tom P. & Waste Hauler	Feb. 2015	Complete	

2016 Targets and Objectives:

2016 ASPECTS & IMPACTS PROJECTS LIST (Last Updated: March 2016)

Activity/Team Lead	Action Items	Resource	Target Date	Status	Associated Legal		
METHYL ETHYL KETONE Reduce / Eliminate MEK in Coating	Examine the potential for replacing the use of MEK in our Aluminum Strip & CAP Coating process with the use of DMC. Also review our use of NMP as well.	Joel S., John R., Jay B. & Tom P.	Q2, 2016	Rescheduled to meet 2016 project priorities and available resources	Clean Air Act & NR 400's (Reduce Air Pollution)		
	Identify the Product Performance Testing that must be done in order to qualify this product and the quantities needed. J. Baumle to ask S. Marek for his help in identifying what these tests should be and for his dept.'s help in conducting these tests.	J. Baumle & S. Marek	Q2, 2016				
	Reformulate existing NEK & NMP used formula with DMC.	J. Schroeder	Q2, 2016				
	Make a batch of DMC based Flux to use on sample batch of coated aluminum strip.	T. Peters	Q3, 2016				
	Make a sample batch of aluminum parts that can be coated by the newly formulated DMC based flux and coat them.	T. Peters	Q4, 2016				
	Run/conduct identified product performance tests and keep documentation. Tests to include actual brazing of both flat shims and	S. Marek	Q4, 2016				
	Obtain customer application information on these parts.	T. Peters	Q4, 2016				
	Work with Tony on identifying how we are to approach customer(s) regarding this change that we are making.	TBD & T. Maletta	Q4, 2016				
	Objective & Target: By replacing MEK with DMC we are eliminating approximately 1,970 Lbs. of VOC's from our facility each year. Current MEK usage represents roughly 2/3's of the total VOC's emitted by this facility each year. TARGET: Eliminate the use of MEK at LMM						
Activity/Team Lead	Action Items	Resource	Target Date	Status	Associated Legal		
AIR CONTAMINATION Reduce / Eliminate Flux Dust in HVAC operation	Examine the potential for replacing the use of current flux with a new formulation that will not disperse into the air as easily. Reviewing two systems	TBD	Q2, 2016		Clean Air Act & NR 400's (Reduce Air Pollution)		
	New flux formulated produced in test quantities	Joel S	Q1				
	New flux cored into aluminum wire	NPD	Q1				
	Produce Rings	VSM / HVAC	Q1				
	Product Testing LMM	NPD	Q2				
	Product Testing External / Customer	NPD	Q3				
	PPAP Documentation	QC / NPD	Q3				
	Production Ramp-Up	Joel S	Q3				
	Product Release	Joel S	Q3				
	Production Job 1	VSM / HVAC	Q4				
	System Two: Containment per Aluminum Layout Objectives	GEB	Q3				
	Objective & Target: By improving the flux formula the air quality at the LMM facility will improve, there will be a reduction in contaminants, the need to shut down for cleaning operations will be reduced, the need to replace filters on a weekly basis will be reduced, and the amount of flux that is used in the operation will be reduced - less waste. TARGET: To have a filter replacement program that allows one filter replacement every 2 weeks, currently 2 filter replacements per week.						
	Activity/Team Lead	Action Items	Resource			Target Date	Status
Wastewater Treatment System II (tote's/ Analysis) Eliminate the need to treat all waste as Hazardous Waste	Elimination of the waste water treatment system -	TBD	Q2, 2016		Clean Air Act & NR 400's (Reduce Air Pollution)		
	Objective & Target: By eliminating the onsite waste water treatment system - LMM will greatly reduce its environmental impact on the water discharge. All waste water will now be hauled and treated off-site.						
Activity/Team Lead	Action Items	Resource	Target Date	Status	Associated Legal		
BUILDING HEAT Improve Efficiency of heating / cooling the LMM facility				Compl			
	New Windows / Manufacturing (23 total) \$40		Q4, 2015	Compl			
	New Heating Unit Central Office, \$27		Q2, 2016	In Progress			
	New Boiler system LMM total facility, \$80		Q2, 2016	Purchased & Received			
	Objective & Target: As units are replaced the replacements will save energy, provide a better work environment & operate more efficiently. TARGET: A minimum 25% reduction on kilwatt hours based on a comparison of January 2016 - January 2017 WE Energies invoices			July 31st			