



The C.A. Lawton Co.
Green Tier Annual Report
January 1, 2014 through December 31, 2014

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INTRODUCTION:

Foundries are among society's first recyclers. Metal casters take scrapped metal, melt it, and make new, saleable castings for today's manufacturers. Recycling, along with other sustainable business practices—reuse, reduction, repair, and rejection, easily fit with the management philosophy of The C.A. Lawton Co.

About the Company

The C.A. Lawton Co. (Calco) is a fifth-generation, family-owned gray and ductile iron foundry located in De Pere, Wisconsin. Calco differentiates itself from its competition by offering customers integrated, value-added services that target simplifying the purchase of complex, large castings. See our website at: <http://www.calawton.com>.

The company believes in the virtues of sustainability and sensitivity to the environment, while balancing fiscal responsibility and corporate continuity. These continuous efforts are critical to lasting success as a business, employer, and community member, which is why The C.A. Lawton Co. became a Green Tier business in 2013. In addition, Calco strives to be a conscientious corporate citizen and a positive member of the community. The company takes its regulatory responsibilities beyond compliance by applying best management practices designed to protect the environment.

In the early years of the twenty-first century, Calco began an aggressive approach to energy conservation in its operations. Specific energy-saving projects included installation of an energy draw limiter on the iron melting electric induction furnaces, replacement of outdated light fixtures, upgrade of the facilities' compressed air system, and implementation of "plug method" technology for sand supply transportation. Since then, Calco continues to assess energy conservation effectiveness by regularly auditing existing processes, monitoring new technology options, and making appropriate updates where necessary.

In 2014, the company incorporated an environmental management system (EMS). The purpose of the EMS is to define operational inputs and outputs, which objectively lead Calco to identify areas of opportunity to improve energy conservation and minimize the use of limited resources. The EMS complements

The C.A. Lawton Co.'s goal to meet or exceed sound environmental practices in all facets of its operations.

EXECUTIVE SUMMARY:

The C.A. Lawton Co. completed its first full year as a formal member of Green Tier in September, 2014. The concept of Green Tier is a natural fit with Calco's corporate values of Honesty, Caring, Improving, and Success. Caring and Improving directly address the company's commitment to its role as a conscientious corporate citizen and community member. Our corporate value statement of Caring specifically states that, "We care about our fellow stakeholder via safe and compliant operations".

Environmental stewardship is fundamental to the way Calco runs its business. The company is focused on being an industry leader in sustainability and implementing cutting-edge business practices that respect limited resources. Calco strives to be a positive member of the community, and demonstrates that intent with programs that protect storm water runoff, air emissions, and waste management. Being a Green Tier business conveys that message to stakeholders publicly and recognizably.

The Company continuously and aggressively pursues opportunities for improvement, including efforts to minimize the effects of its operations on the environment. The philosophy of management is to actively identify sources of waste--be it energy, materials, labor, space, by-products, efficiency, etc.; and determine how to reduce, reuse, or eliminate that waste. Calco methodically accomplishes this with various preventative maintenance programs, audits by independent entities, and educating its workforce to recognize and initiate improvement opportunities.

This report includes the results of our initial EMS internal audit, summary of efforts made to date toward our initial objectives, as submitted with our Green Tier application, the definition and rationale of new objectives and targets, and sustainability metrics compiled for calendar year 2014.

INTERNAL AUDIT RESULTS:

The internal audit of the Environmental Management System took place January 19-29, 2015 by Pete Schingen, Quality Engineer-The C.A. Lawton Co. Mr. Schingen was not part of the team that developed the EMS.

The purpose of Mr. Schingen's internal audit was to provide the Beyond Environmental Compliance (BEC) Team and Executive Team a comprehensive overview regarding the implementation and effectiveness of the company's EMS Program, as defined and implemented (Internal Audit Checklist – Plan, Document: QF:010 IA, Dated January 30, 2015, Pete Schingen, QE). The overview or gap analysis was conducted per ISO 14001 element requirements, and where denoted, per Wisconsin Statutes S299.83 (1)(dg).

Review of objective evidence resulted in all elements being acceptable. In the Internal Audit Summary & Sampling section of the report, the auditor provided observation commentary, where he gave recommendations to improve the EMS. He made the following observations, and corresponding responses were:

- External Communication Log – Closure of open items is not indicated. Listed items were reviewed and their status recorded in the log.
- External Communication Log – Document should be defined as a controlled document. Changed document to be controlled.
- EMS/Regulatory “hardcopy” files – File cabinets not labeled as EMS/Regulatory files. Printed labels for filing cabinets containing EMS/Regulatory “hardcopy” files.
- EMS/Regulatory “hardcopy” files – Storage and preservation files should be in fire resistant cabinets. All EMS/Regulatory “hardcopy” files five-years or older were sent to document storage facility.
- Regulatory Equipment – Test instrument (photohelic gauge) in spare inventory labeled as inoperable at time of calibration. Inoperable photohelic gauge removed from spare inventory and disposed.
- Emergency Preparedness and Response Program – Separate program from EMS. Recommended including program in EMS to ensure annual program review. Current Emergency Preparedness and Response Program, dated May 2013, has been incorporated into the EMS.

With the EMS in place, the Executive Team and other participants, (as identified by the Executive and/or BEC Team), will review audit reports, initiate system improvements, and document progress toward defined objectives and goals. The two teams will also make decisions regarding changes to the Environmental Policy, Objectives and Targets, and any other elements of the EMS. The Environmental Management Representative (EMR) will take and maintain meeting minutes.

DESCRIPTION OF PROGRESS MADE ON GREEN TIER OBJECTIVES AND TARGETS:

GREEN TIER OBJECTIVES & TARGETS:

On October 21, 2014, The BEC Team met to review the status of initial Objectives and Targets submitted with our Green Tier application and to analyze the results of the Environmental Aspects evaluation performed in the second half of 2014. Below is an update on our initial objectives and targets, followed by a description of new objectives and targets established at the end of 2014.

The BEC Team determined that each of the initial objectives were complete, in the sense that no further work needs to be done at present. The Team does not want to close them, however, because conditions may change in the future and require the Team to resurrect activity on the objective. The Team has deemed the objectives to be tabled or dormant, but not closed or complete, and will review the objectives annually to see if any further action could be taken given new or changed circumstances .

A summary of initial objectives and targets submitted with The C.A. Lawton Co.'s Green Tier Application follows:

OBJECTIVE #1: To reduce the volume of waste foundry system sand and dependence on new sand supply, the BEC Team will research the viability of installing a thermo-reclamation unit to supplement the current reclamation system for sand recycling. The team will present their findings to the Executive Team by September 30, 2013.

Tabled. All research was completed and a report was submitted to the Executive Team presenting the pros and cons of switching to this form of sand reclamation,

along with a Capital Appropriation Request. Consideration for installing a thermo-reclamation sand process has been postponed until business justifies the upgrade and the EPA determines whether or not thermo-reclamation equipment qualifies as an incinerator under the Boiler MACT

Objective Update-2014. Status unchanged; review by calendar year-end 2015.

OBJECTIVE #2: To improve the environment and encourage a thriving natural habitat surrounding our facilities, we will make intelligent landscaping improvements by identifying and installing native trees and plants that are sustainable in our local ecosystem by the end of spring, 2014.

Tabled. The company installed a variety of bird and bat houses, added donated trees, and consulted a landscaper for guidance with additional native trees and a landscape proposal for future consideration.

In 2014, the company removed a significant portion of a berm that bordered the north and west property line. Although this project was not considered as a step toward Objective #2, it is relevant in this report because the contaminated soil removed from the property qualified as beneficial re-use material as fill for the Wisconsin Department of Transportation (DOT) Highway 41/43 Interchange project.

The end result of removing this material was positive in significant ways. The company was able to remove contaminated soil from the property, improving the quality of permeable on-site land (which contributes to the intent of Objective #2), and instead of disposing of the berm soil at the landfill requiring 21,600 cubic yards of landfill space, it was beneficially used as fill in the highway project. This project was a success for all parties—Calco was able to remove contaminated, but non-hazardous soil from the property; and the DOT obtained fill it would have otherwise needed to purchase.

Objective Update-2014. Status unchanged; review by calendar year-end 2015.

OBJECTIVE #3: To save energy used to operate the compressed air system in production, the team will develop a management system to be implemented in all operations to minimize air leaks. Related to compressed air management, the team will investigate slow start options to reduce peak demand and battery-

operated drills as an alternative to pneumatic drills. The program will be implemented by December 31, 2013.

Tabled. Compressed air energy conservation alternatives were studied and evaluated. Based on the information accumulated, it would not be cost effective to pursue soft start systems for compressed air demand management at this time. Instead, the company has taken steps to educate the workforce on air leak management and repair, supplied all areas of operations with parts and tools to fix identified air leaks, and will schedule annual air leak audits by industry experts to help maintain the current system in an energy efficient manner.

The evaluation of battery-operated drills as an alternative to pneumatic drills has been assigned to the cleaning room supervisor as an ongoing project separate from the BEC team. The cleaning room supervisor is evaluating alternatives to pneumatic-powered hand tools, and Objective #3 has been modified to eliminate the investigation of battery-operated drills as an alternative to pneumatic drills.

Objective Update-2014. Status unchanged; review by calendar year-end 2015.

OBJECTIVE #4: To improve energy efficiency for facility heating, the BEC Team will explore options to recycle heated air through makeup air unit upgrades and/or heat exchanger/heat recovery for the foundry roof vents. In addition, the team will look at energy efficient options to preheat scrap metal. The team will provide its findings to the Executive Team by September 30, 2014.

Tabled. After further investigation, recycling heated air back into the foundry is not a feasible, cost-effective option. The Team learned that incorporating air filtration systems for particulate and volatile organic compounds would require extensive duct work additions and a load study for roof capacity to support auxiliary equipment.

The Team recommended that until other economic air recirculation systems are developed, The C.A. Lawton Co. should implement other methods of cost containment, such as closing the roof vents over the weekend and shutdown periods when the building is vacant, installing remote control door openers on material handling equipment to limit the time that overhead doors are open, and hire a contractor to seal holes and leaks in the building.

An unanticipated benefit resulted from the team's investigation of this objective-- Calco was able to apply the knowledge gained from researching air recirculation options to a separate project underway in the casting cleaning room. During the second half of 2014, four (4) ventilated cleaning booths were installed. Each ventilated cleaning booth is equipped with fresh air supply and dust extraction. Instead of exhausting the cleaned air from the baghouse through a stack to the atmosphere, the extracted air is routed through a HEPA filter and the purified, ambient-tempered air is recirculated into the main bay of the foundry. The resulting modification allowed the company to save money on heating costs, avoid regulatory costs related to a permit revision, and provided an additional source of air supply to the foundry facility.

Objective Update-2014. Status unchanged; review by calendar year-end 2015.

The BEC Team reviewed environmental aspects and impacts in October, 2014. The team identified three (3) new objectives, approved by the Executive Team. They are:

OBJECTIVE #5: Explore and determine ways to recycle and/or reduce the volume of foundry Styrofoam waste sent to the landfill by 15% by the end of fiscal year 2016 (April 2, 2016).

OBJECTIVE RATIONALE: This Objective was set by the BEC Team because of the large volume of Styrofoam waste generated at the foundry. Presently, the Styrofoam (expandable polystyrene-EPS) waste is sent to the landfill, which takes up a significant amount of space, both in collection containers on-site and at the landfill. The team needs to determine if there is a secondary use for the EPS, and whether size and condition (dirtiness) is an obstacle.

OBJECTIVE #6: Increase Calco employee recycling participation by reducing recyclables in trash by 50% by December 31, 2015.

OBJECTIVE RATIONALE: This Objective was set by the BEC Team because recycling in the City of De Pere is mandatory. Despite that ordinance, significant volumes of recyclable material were appearing in trash cans throughout the organization. The team did not know why this was occurring.

OBJECTIVE #7: Reduce the volume of chemicals sent to the landfill by 20% by fiscal year-end 2016 (April 2, 2015) by means of replacing the mobile mixer.

OBJECTIVE RATIONALE: This Objective was set by the BEC Team because the existing mobile mixer is a source of significant chemical waste when calibrating the mixer each shift. Replacing the mobile mixer will improve production efficiency, and reduce chemical usage and associated costs.

LOOKING AHEAD:

As Calco's Environmental Policy states, ". . . (The company) strives to meet or exceed sound environmental practices in all facets of its operations. We believe that the virtues of sustainability and sensitivity to the environment and its protection are critical to our success as a business, an employer, and a community member, while balancing fiscal responsibility and corporate continuity. This premise is a fundamental part of our business strategy." The company believes it can reach a superior level of performance by integrating the new EMS into the company's culture as a way of managing operations. The EMS will be critical to minimizing environmental risks and costs, and maximizing competitiveness and profitability.

The C.A. Lawton Co. will continue to look for new and innovative opportunities to be a leader in sustainable business practices. Future opportunities may include new transportation options for employees, environmentally specific collaboration with key material suppliers, and increased stakeholder involvement. Finally, as a member of Green Tier, The C.A. Lawton Co. will reach out to other members to exchange ideas and projects. Together, we can continue to make a meaningful impact on protecting our limited resources, while growing viable businesses in our communities and in Wisconsin.

CONCLUSION:

The first full year as a Green Tier member has been significant for The C.A. Lawton Co. Milestones include the implementation of the EMS, conclusion of the

company's initial objectives and goals, and the definition of new objectives and their anticipated direct benefits, which are:

- **Objective #5-Explore and determine ways to recycle and/or reduce the volume of foundry Styrofoam waste sent to the landfill by 15% by the end of fiscal year 2016 (April 2, 2016).** Reducing expandable polystyrene (EPS, Styrofoam) waste going to the landfill will impact the pattern shop and foundry floor.
- **Objective #6-Increase Calco employee recycling participation by reducing recyclables in trash by 50% by December 31, 2015.** Educating the company workforce on current recycling practices has the potential to carryover to employee families and their recycling practices at home.
- **Objective #7- Reduce the volume of chemicals sent to the landfill by 20% by fiscal year-end 2016 (April 2, 2015) by means of replacing the mobile mixer.** Purchasing a new mobile mixer will reduce chemicals going to the landfill and improve productivity in foundry operations.

Each of the new objectives has the potential to directly touch and improve almost every facet of the organization, and those benefits flow through to our local communities and the environment as a whole.

WISCONSIN DNR GREEN TIER		Rev. 7/23/2013		
SUSTAINABILITY METRICS		Period Covered: Jan 1, 2014 - Dec 31, 2014		
Company Name:	The C.A. Lawton Co.			
Facility Name:	The C.A. Lawton Co.			
Address:	1950 Enterprise Drive			
City, State, Zip:	De Pere, WI 54115			
Environmental Coordinator:	Katherine Jungwirth			
Coordinator Phone:	920-983-4095			
Coordinator E-Mail:	kjungwirth@calawton.com			
Metric	Not Collected/ Not Available	Quantity	Units	Period - if not Calendar Year
DEMOGRAPHICS				
Sales	N/A			
Money saved because of material or process improvements	N/A		\$	
Profit or Loss	N/A		%	
Employees		125	Each	
Multiple between highest paid and lowest paid employee	N/A		%	
Alternative Transportation Support	N/A		\$ or ?	
Total Purchases	N/A		\$	
In-State Purchases	N/A		\$	
% of Purchases Made from Companies that participate in Green Tier or Green Masters:			%	
LAND				
Total Land		28.2	Acres	
Paved/Covered Land		7.66	Acres	
ENERGY				
Electricity - Foundry ONLY (Furnaces)		10,406,761	kWh	
			% reduction	
Natural Gas - Foundry ONLY		4,792,450	btu	
Renewable Energy		0	%	
WATER				
Total Water Used - Total Company		5,182,400	gallons/year	
			% reduction	
Water Recycled/Reused		0	gallons/year	
			% reduction	
Regulated Pollutants Discharged		0	lbs/ year	
			% reduction	

AIR				
Total Air Emissions		91,318	lbs/ year	
			% reduction	
Ozone-Depleting Substances		N/A	lbs/ year	
			% reduction	
Greenhouse Gas Emissions		4,580,954	lbs/ year	
			% reduction	
WASTE				
Hazardous Waste Disposal		3,405	lbs/ year	
			% reduction	
Non-Hazardous Waste Disposal		6,565,580	lbs/ year	
			% reduction	
Material Recycled/ Reused		70,974,060	lbs/ year	
			% increase	
Recycled/ Reused Content	N/A		% of product	
TRANSPORTATION				
Hybrid Vehicles	N/A		Each	
Gasoline Used	N/A		Gallons	
Diesel Used	N/A		Gallons	
Alternative Fuels Used	N/A			
ADDITIONAL METRICS				
Please list all other certifications (for example: LEED, Energy Star, ISO 14001):				