

2016 Annual Report for WDNR Green Tier Program

SERVICE LITHO-PRINT, INC. 50 W. FERNAU AVE. OSHKOSH, WI 54901

Background

Service Litho-Print, Inc. (SLP) in Oshkosh, WI received formal approval into the Wisconsin DNR Green Tier 1 program on September 3, 2014. SLP is a specialty printing company. The facility currently employs 38 people at a 38,000 square foot facility.

Environmental Management System (EMS) audit report

SLP recently completed a formal EMS. The EMS was written to comply with each of the 15 requirements in Wis. Stats. 299.83(1)(dg) as a functionally equivalent environmental management system. The first internal audit is scheduled to be completed by February 1, 2016.

RESULTS:

Many aspects of the EHS Manager's position rely on a continuous evaluation of our systems and compliances. Daily walks in the facility, weekly and monthly facility inspections and monthly department meetings are all part of a continuous evaluation of the system. Monthly inspections are evaluated and corrective actions are completed immediately, with full support of Management. During the construction of the 2016 annual report, we recognize the importance of this annual internal audit and will complete a full audit by September 9th.

Update: A formal, internal audit was conducted during the week of 09/05/2016. The audit provided a clear representation of how our system is working and where there are opportunities to improve. Our strengths include consistent weekly and monthly audits with immediate corrective actions completed, a strong Quality Management System that provides structure for controlled standard procedures and a history of knowledge and support within the team. Our opportunities include better review of the EMS system itself, more regular meetings and training, and better documentation of improvements that are put in place. Leadership Review of the audit allowed the Leadership Team to see value and opportunity in front of us, and to reinforce their commitment to support those opportunities outlined by the audit.

Progress on Environmental Goals and Objectives

SLP started tracking our Natural Resources in July, 2012. At that time, we researched historical numbers back to 2008, which has become the annual baseline for our metrics. Data has been collected monthly since July, 2012. Our first year in the Green Tier program has been focused on implementing our EMS. The EMS will be a critical component for all Sustainability initiatives moving forward.

When we joined Green Tier in 2014, we committed to focusing on three primary objectives.

- 1. To reduce the use of natural resources by reducing energy consumed.**

SLP tracks Electricity and Natural Gas usage. Our goal is to reduce usage through process improvements, equipment monitoring and when feasible, system upgrades. It takes a team effort to achieve significant impact. Air leak audits, preventative maintenance programs, motion lights, and lighting upgrades have been the driving force of our efforts to date.

Electricity and Natural Gas Tracking:

	Electricity (kWh)	Per Associate Hour	% Change	Natural Gas converted to kWh	Per Associate Hour
2008	1,878,000	18.12		207,473	2.00
2009	1,859,400	20.00	+ 10.3%	329,127	3.54
2010	1,634,080	18.73	- 6.4%	337,712	3.87
2011	1,390,816	17.19	- 8.2%	482,337	5.96
2012	1,539,909	18.57	+ 8.0%	386,731	4.66
2013	1,510,749	18.39	- 1.0%	511,584	6.23
2014	1,373,188	17.82	- 3.1%	573,005	7.44
2015	1,197,394	15.30	- 14.6%	567,409	7.22

NatureWise (ongoing initiative)

In addition to onsite initiatives, SLP joined NatureWise, a Wisconsin Public Service program, in December, 2009. NatureWise is a voluntary program that allows SLP to purchase renewable energy, including energy from wind, solar and biomass. These renewable resources replace some of the electricity generated from other fuels, including coal and natural gas. In 2015, SLP purchased 30,000 kWh (2.51% of total Electricity used).

2015-2016 Objectives

- a. Establish a better understanding of opportunities to reduce electricity usage
 - **Solar Power: Met with Sun Peak, a solar panel company, to understand the process and the benefits of Solar Power. Visited two facilities in Wisconsin that recently implemented solar power.**
 - **LED lights in the facility/building: Lighting technology has significantly improved with the addition of LED lighting. We have met with a company that recently switched a large percentage of their facility to LED lights.**
 - **LED lights for UV ink cure: Switching a press from UV cure to LED cure would result in a large reduction of power used at our facility. In 2015, we met with ALS to discuss the benefits and risks associated with switching our presses over to LED.**

- b. Reduce Electricity usage by 3% (normalized to associate hours)
 - **Our electricity usage reduced by 14.6% from 2014 to 2015.**
 - **Replaced an old compressor with a new variable speed drive compressor.**
 - **Performed annual air-leak audit - corrected leaks immediately.**
 - **New motion lights were installed in two areas at the end of November, 2014 – impact would be in 2015.**

2016-2017 Objectives

- a. Continue to better understand opportunities to reduce electricity usage. We recognize the need to educate ourselves on the continuous improvements in energy saving technology.
- b. Replace the current T-8 lights to LED lights in at least one main area of the facility.
- c. Revisit the project to switch one of our presses from UV to LED to determine if it will be cost effective in 2016-2017.
- c. Reduce Electricity usage by 3% (normalized to associate hours).

2. To reduce overall waste generation, specifically make-ready and run waste

During the process of writing and implementing the EMS, we determined that objective #2 should be edited. The ongoing objective moving forward is **“To reduce overall waste generation”**. This will still include a focus on make-ready and run waste; however, it expands the objective to include other waste streams in the facility.

Recycling and Landfill Tracking:

	Recycled Material (lbs)	Per Associate Hour	Landfilled Material (lbs)	Per Associate Hour	Hazardous Waste (lbs)	Per Associate Hour
2008	407,540	3.93	149,645	1.44	11,440	0.11
2009	759,600	8.17	149,645	1.61	5,460	0.06
2010	673,940	7.72	127,822	1.46	6,597	0.08
2011	607,000	7.50	87,293	1.08	4,840	0.06
2012	808,740	19.10	74,822	1.76	6,432	0.08
2013	428,380	5.22	74,822	0.91	7,920	0.10
2014	450,520	5.85	74,822	0.97	5,720	0.07
2015	464,280	5.90	74,822	0.95	3,350	0.04

The effort to reduce waste due to production is synonymous with the effort to reduce color corrections on press. Color corrections on a job produce more plates and use more make-ready stock. Reducing the number of color corrections will reduce waste. In 2014, we implemented a Process Improvement Team to specifically address color corrections. We have not seen a significant improvement to date; however, we have established new processes and tracking systems that continue to move us in the right direction.

SLP will continue recycling efforts. The recycling program includes offices as well as Production. We will continue to research and strive for 100% recycling on Production materials.

2015-2016 Objective

- a. Improve Waste Management – identify and understand our waste streams better. Track landfill waste better.
 - **Met with Safety Kleen and Waste Management to discuss our waste profiles. There are still many opportunities to improve our recycling numbers since there are currently no outlets for some of our waste.**

- **Met with Waste Management to better understand where our recycled waste goes in Wisconsin. Received a detailed description of how our material is reused or recycled.**
- b. Continue process improvement efforts in Production to reduce make-ready and run waste due to color corrections. Updated this objective to include all process improvement efforts that reduce make-ready and run waste.
- **Examined make-ready and run waste numbers in the Finishing Department that are built in to a job. Reduced the requested percentage of make-ready waste and run waste for all Finishing operations. This greatly reduced the amount of over-production of pieces and therefore reduced the amount of pieces going to the landfill or being recycled.**
 - **Performed an intensive look at pre-press and press operations that can affect color on a job. Implemented new preventative maintenance procedures, trialed new chemistry, changed our chemistry ratios, increased training for operators and added some new tools to the plates and press sheets to assist operators in reading densities.**

2016-2017 Objective

- a. Continue efforts to find outlets for some of our production waste streams.
- b. Track landfill waste better – we worked with our waste management company and were unable to find a way to get more accurate numbers. We base our numbers on how many times a dumpster is picked up. We have two 8-yd dumpsters that are picked up two times per week. During 2016-2017, our objective is to reduce the overall yardage of landfill waste by switching to one 10-yd dumpster picked up one time per week.
- c. Start a closed-loop color system on the 2010 press. This should reduce the number of sheets needed per job for make-ready.

3. To reduce carbon footprint by increasing use of SmartWay® Transport carriers and developing metrics to measure total carbon emissions

SLP continues to utilize SmartWay® Transport carriers for all trucking services that we have control over.

As SLP just finalized the EMS for submission, we have not yet fully achieved the objective to develop metrics to measure total carbon emissions. We currently track VOC emissions, electricity usage and Green House Gases; however we have not finalized which metrics we will track to accomplish measurable goals to reduce Carbon Footprint. The Sustainability Team will continue to research which metrics will best work with our facility and finalize this objective for 2015-2016.

VOC tracking:

VOC (lbs)	Per Associate Hour
-----------	--------------------

2008	14,526	0.140
2009	19,290	0.207
2010	17,193	0.197
2011	11,846	0.146
2012	16,436	0.198
2013	13,798	0.168
2014	12,634	0.164
2015	11,825	0.150

The majority of VOC's released at our facility come from Press Chemicals. The majority of CO₂ released comes from electricity use (see objective #1).

2015-2016 Objective

- a. Finalize metrics to measure total carbon emissions
We have not yet found a metric that makes sense for our facility. We have noted that new methods to track and measure total carbon emissions continue to be created. We will continue to search for one that would work with our facility. We recognize that this may not be the best metric to measure.
- b. Establish a measurable goal to reduce total carbon emissions
Carbon emission / carbon footprint may not be the best metric for our facility. We currently track VOC's and Green House Gases. Based on the trend from 2012-2015, we would like to see a 5% reduction in VOC's per associate hour each year.

2016-2017 Objective

- a. Determine if carbon emission tracking is the best metric for our facility. If so, finalize metrics to measure total carbon emissions
- b. Reduce VOC's per associate hour by 5%