

# Standard Process Inc.

## 2015 Green Tier Annual Report

(September 2014 – August 2015)



**GREEN TIER**

**Wisconsin Department of Natural Resources**



## *Our Mission*

*Standard Process is devoted to improving the quality of life by providing safe, effective, high-quality dietary supplements through health care professionals.*

## *Our Corporate Values*

*Standard Process demonstrates commitment to the Whole:*

### **Person**

By fostering the physical, emotional, intellectual, and spiritual health of customers and employees.

### **Product**

By emphasizing the importance of concentrated whole food ingredient sources and herbs in the product line.

### **Process**

By ensuring the highest quality in every stage of development, from farming through shipping.

### **Planet**

By utilizing environmentally safe farming, manufacturing, and business practices.

### **Posterity**

By preserving and strengthening the company for all future generations.

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## Executive Summary

In recognition of our long tradition of commitment to the environment and our commitment to continue to expand our environmental and sustainability efforts, Standard Process was accepted into the Wisconsin Department of Natural Resources Green Tier Program on August 21, 2014. As part of the Green Tier application process we committed to continue compliance with all applicable rules and regulations; continue organic farming practices; implement a formal Environmental Management System (EMS); expand beneficial reuse, waste reduction and recycling efforts; and identify and implement opportunities for additional energy conservation/reduction measures.

As a Tier 1 participant in the program, one of our requirements was to develop and implement an ISO 14001 equivalent EMS within the first year in the program. A major focus of our efforts during this past year was devoted to completing the EMS. We implemented our initial EMS in late 2014 and had a 3<sup>rd</sup> party audit of the EMS in early 2015. The audit verified successful implementation of our EMS as well as compliance with the ISO 14001 equivalency requirement.

In addition to the ongoing reduce, reuse, and recycling efforts as well as continuing our organic farming practices, we also completed several specific environmental and energy related sustainability projects over the past few years. Some of the quantified reductions over the past 4 to 5 years include:

- Electrical Reductions - 1,366,000 kWh/yr (est. 852 metric tons CO<sub>2</sub>e/yr)
- Natural Gas Reductions – 31,300 therms/yr (est. 166 metric tons CO<sub>2</sub>e/yr)
- Water Use Reductions – 560,000 gal/yr
- Wastewater Reductions – 800,000 gal/yr
- Byproduct Solid Beneficial Reuse – 1,000,000 lb/yr
- Byproduct Solids Reductions – 600,000 lb/yr
- Cardboard Packaging Reductions – 100,000 sq ft/yr
- Shoes Recycled – 61 pair

Additional detail is provided in the body of this **2015 Green Tier Annual Report**.

## 1.0 Introduction

Standard Process has a long tradition of commitment to sustainability and the environment. In August 2014 we were accepted into the Wisconsin Department of Natural Resources (DNR) Green Tier program in recognition of our commitment to the environment and superior environmental performance. The Green Tier program recognizes companies that distinguish themselves as environmental innovators and demonstrate a strong commitment to the environment and sustainability beyond simply maintaining a good environmental compliance record. By accepting us into the Green Tier Program, the State of Wisconsin recognized the environmental and sustainability efforts we've already taken and our overall commitment to continuing to expand and focus on those efforts.

**Figure 1-1: Green Tier Plaque Presentation from DNR Secretary Stepp (10/21/2014)**



This is our first annual Green Tier report. This report includes a summary of our goals and accomplishments during the first year in the Program, as well as highlights of some of the environmental projects and accomplishments that we have undertaken prior to acceptance into the Program. Acceptance into the Program was a direct result of our past accomplishments as well as our commitment to continue to be proactive relative to environmental performance and sustainability practices.

## 2.0 EMS Audit Report

As a Tier 1 member of the Green Tier Program, one of the first year requirements was to complete and implement an Environmental Management System (EMS) that is “functionally equivalent”, according to the DNR requirements, in function and scope to an ISO 14001 EMS. Verification that the EMS has been implemented and conforms to the equivalency requirements is also required for the first year in the program.

Standard Process retained Perfect Environmental Performance (PEP), LLC to perform the first-year functional equivalency audit. PEP was on site at Standard Process on March 26 - 27, 2015 to conduct the bulk of the audit. During their site visit, PEP reviewed the EMS documents, communications summary, and other Green Tier/EMS related documents as well as interviewed Standard Process personnel (operators and supervisors) on environmental procedures and practices.

PEP determined that *“the results of the EMS audit indicated that Standard Process’ environmental management system conforms to the “functional equivalency requirements of ss. 299.83”*, and issued a Letter of Conformance at the completion of the audit. A copy of the EMS Audit 2015 Letter of Conformance is included in the Appendix section of this report.

### **3.0 Description of Progress**

As part of the Green Tier application process, Standard Process committed to continue its long tradition of commitment to the environment by focusing on the following items:

- Continuing compliance with all applicable rules and regulations.
- Continuing organic farming practices.
- Implementing a formal Environmental Management System.
- Expanding beneficial reuse, waste reduction and recycling efforts.
- Identifying and implementing opportunities for additional energy conservation/reduction measures.

The following sections provide an update on these commitments.

#### **3.1 Compliance with Applicable Rules and Regulations**

Standard Process remained in good standing with all regulatory agencies throughout the Green Tier Reporting year. No regulatory issues, notices of noncompliance, or other compliance issues were identified during this period.

Throughout the year, we continued to work closely with regulatory agencies and personnel to continue to remain in good compliance with all applicable rules and regulations. The Wisconsin Department of Natural Resources conducted a routine Air Compliance Inspection of Standard Process in February of 2015. The Inspection Report concluded that *“On the basis of record reviews and the inspection completed, it was concluded that the facility is in compliance with all the emission limitations, monitoring, recordkeeping and reporting requirements of the existing facility wide operation permit”*.

Annual environmental reports for the 2014 reporting year were all filed as required by the applicable deadline dates in 2015. Data is being compiled throughout 2015 in preparation for the annual reports that will be due in early 2016.

### 3.2 Organic Farming Practices

Standard Process is proud of our certified organic farm and continues to remain in good standing with Midwest Organic Service Association (MOSA) certification. As an organic certification agency, MOSA is regulated by the National Organic Program (NOP) of the United States Department of Agriculture (USDA).

Additional detail on our organic farming practices can be found on our website at <https://www.standardprocess.com/About-Us/Organic-Farming> .

### 3.3 Implementation of a Formal Environmental Management System

As discussed in Section 2.0, we successfully developed and implemented a formal Environmental Management System that is functionally equivalent in function and scope to an ISO 14001 EMS. As we move into subsequent years of the Green Tier program, we will work to expand and improve the EMS as appropriate to help us continue to move forward with environmental sustainability and our commitment to the environment. We have already established a goal to review the opportunities for improvement (OFIs) that were identified in the EMS audit and determine if changes are needed at this time. We intend to complete the review and address any necessary changes by the end of 2015.

### 3.4 Beneficial Reuse, Waste Reduction and Recycling

Beneficial reuse, waste reduction, and recycling are an integral part of everyday operations at Standard Process. A recycling program has been in place for over 25 years at this facility for common recyclables such as paper, cardboard, glass, metal, plastics, as well as for used oil, print cartridges, electronics, batteries, etc. Additionally, beneficial reuse of byproduct solids on our farm fields has been, and continues to be, an important part of our operations. Presently byproduct plant solids are composted prior to being spread on the fields as a valuable soil amendment. Compost improves soil structure, water holding capacity, and returns important nutrients back to the land where the crops were grown. This process helps sustain the health and quality of our farmland.

Several recent projects, discussed in Section 4, highlight our continued commitment to the principles of “reduce, reuse, and recycle”. Project Closure Reports are prepared at the completion of Engineering projects. An Environmental section has been incorporated into the Project Closure Reports to highlight environmental benefits associated with each project. This helps track our environmental improvements as well as helping project managers continue to focus on the importance of environmental aspects in each project.

### 3.5 Energy Conservation and Reduction

Energy reduction has also been an important aspect of operations at Standard Process for many years. Section 4 of this report also includes information on many recent energy reduction related projects. Many aspects of energy conservation have been incorporated into everyday operations (such as use of energy efficient lighting, high efficiency motors, variable frequency drives, etc.) for improvements to existing equipment and as we move forward with additional equipment and processes.

An Energy Conservation section has also been incorporated into the Project Closure Reports that are prepared at the completion of Engineering projects to highlight the energy benefits associated with each project. As with the environmental improvements section, the energy section helps keep project managers focused on the importance of energy considerations associated with each project.

As an indicator of our commitment to energy conservation in our projects, Standard Process received Focus on Energy rebates on 10 projects in 2014 alone. Focus on Energy is Wisconsin utilities’ statewide energy efficiency and renewable resource program. The program recognizes energy efficiency and renewable energy type projects, and helps verify inclusion of energy conservation measures in our projects.

## 4.0 Environmental Performance/Sustainability Metrics

With this being our first year in the Green Tier program, we are still in the process of developing and refining usable metrics and baseline data. We will likely continue to refine and further develop metrics over the next few years. Since we have a long history of implementing environmental and energy related sustainability type projects, the current environmental and energy parameters already include the benefits of these historical efforts.

The following sections provide information on the status of utilities and environmental sectors associated with our operations. The sections also include specific information on achievements associated with each area over the past few years. We have focused on energy and environmental sustainability for many years. As we move forward, we will work to refine and develop our measurement methods associated with our efforts in these areas.

### 4.1 Electricity

A summary of our annual electricity usage at the Main Plant, Farm Buildings, and other Standard Process Buildings in the industrial park is included in Table 4-1 for 2014 and 2013. Moving forward, we will work with the annual usage rates to establish metrics and baselines for future project.

**Table 4-1: Annual Electrical Usage Summary (kWh/yr)**

	<b>2014</b>	<b>2013</b>
Main Plant	8,351,600	8,787,000
Farm Headquarters	627,600	567,000
Misc. Other Buildings	401,800	416,900

Over the past 4 to 5 years, we have undertaken several energy conservation type projects related to improvements in lighting, HVAC systems, process and infrastructure. A brief summary of the estimated electrical reductions associated with these projects is included in Table 4-2. The estimated CO2 equivalent reductions (*ref.:* [www.epa.gov/cleanenergy/energy-resources/refs.html](http://www.epa.gov/cleanenergy/energy-resources/refs.html)) associated with these projects is also provided.

**Table 4-2: Electrical and CO2e Reductions (past 4 to 5 years)**

<b>Project Type</b>	<b>Electrical Reduction (kWh/yr)</b>	<b>CO2 Equivalent Reduction (metric tons/yr)</b>
Lighting	404,200	278.7
HVAC	224,000	154.5
Process/Infrastructure	608,000	419.2
<b>Total Reductions (per year)</b>	<b>1,236,200</b>	<b>852.4</b>

#### 4.2 Natural Gas

A summary of our natural gas usage at the Main Plant, Farm Buildings, and other Standard Process Buildings in the industrial park is included in Table 4-3 for 2014 and 2013. The annual natural gas usage rates will also be used to develop metrics and baselines to be used for future projects.

**Table 4-3: Annual Natural Gas Usage Summary (therms/yr)**

	<b>2014</b>	<b>2013</b>
Main Plant	492,800	491,400
Farm Headquarters	61,800	56,100
Misc. Other Buildings	10,700	7,800

Over the past 4 to 5 years, we have also undertaken energy conservation type projects related to natural gas usage. These improvements have primarily been associated with insulation of steam system components, increased efficiencies of new fuel combustion equipment, and steam trap audit and associated repairs. A summary of the estimated natural gas reductions associated with these projects is included in Table 4-4. The estimated CO2 equivalent reductions (*ref.:* [www.epa.gov/cleanenergy/energy-resources/refs.html](http://www.epa.gov/cleanenergy/energy-resources/refs.html)) are also provided:

**Table 4-4: Natural Gas and CO2e Reductions (past 4 to 5 years)**

	<b>Natural Gas Reduction (therms/yr)</b>	<b>CO2 Equivalent Reduction (metric tons/yr)</b>
<b>Total Reductions (per year)</b>	<b>31,300</b>	<b>166.0</b>

### 4.3 Water and Wastewater

Tables 4-5 and 4-6 include information on water usage and wastewater disposal for the past 2 years. Wastewater from the Main Plant and other buildings in the industrial park is discharged to the Palmyra municipal sewer system. The farm is currently not served by a sanitary sewer system. The bulk of wastewater from those operations is collected and hauled offsite for disposal.

**Table 4-5: Annual Water Usage Summary (thousand gal/yr)**

	<b>2014</b>	<b>2013</b>
Main Plant	14,833	16,023
Farm Headquarters	2,140	1,794
Misc. Other Buildings	<50	<250

**Table 4-6: Annual Wastewater Disposal (discharged or hauled) Summary (thousand gal/yr)**

	<b>2014</b>	<b>2013</b>
Main Plant (discharged)	11,524	12,117
Farm Headquarters (hauled)	1,770	1,749
Misc. Other Buildings	<50	<50

We have undertaken several water and wastewater reduction type projects over the past few years. The following projects and associated impact on water and wastewater rates were completed within the past year. These projects provide a general idea of the type of projects that have been, and will continue to be, implemented to reduce water usage and wastewater generation rates:

- Wet Cooling Tower Replacement – An existing wet cooling tower for our compressed air system was replaced with a closed loop type system. This project reduced the amount of water lost to evaporation and blowdown. The *estimated water reduction* associated with this project is 55,000 gal/yr.
- CIP System (Farm Mixer) –CIP capabilities were implemented on a juicing mixer at our farm headquarters to replace manual cleaning of the unit. This project has an *estimated annual reduction on water usage and wastewater generation* of approximately 108,000 gal/yr.

- Iron Filter Regeneration –Iron filter regeneration water was diverted (under WPDES permit) at our farm headquarters so that it no longer discharges to the wastewater holding tanks. The water is now returned to the property instead of being hauled off site for disposal. In addition to *eliminating offsite disposal of approximately 300,000 gal/yr of wastewater*, this project also *eliminated approximately 50 to 60 truck trips per year* (and associated fuel burning and exhaust gas emissions) to pick up the water.
- Modifications to Cleaning Methods – Recent changes to the methods used to clean some process equipment has the potential to *reduce water usage and wastewater generation* at the Main Plant by about *400,000 gal/yr* while also improving cleaning efficiencies and reducing cleaning time.

#### 4.4 Solid Waste and Raw Materials

Standard Process has made beneficial reuse of byproduct materials as a soil amendment at the farm headquarters for many years. A composting operation for byproduct vegetable solids was implemented in 2010 to improve management of the solids application and nutrient usage. Over 1,000,000 pounds of byproduct plant solids are composted and ultimately used to improve soil quality at the farm headquarters each year.

Other recent projects and their associated impacts are:

- Secondary Juice Extraction – implementation of a process to extract up to double the usable nutrients from field crops over the previous method, *cutting the byproduct solids generation rates by up to 600,000 lb/yr* and reducing the amount of fuel, labor, and land required to produce juice crops.
- Conversion from Cases to Trays – converted one of our packaging lines from full case enclosure of products for shipping to trays. This *reduced* the amount of corrugated *cardboard used* in packaging (*by over 100,000 square feet/yr*) on this line as well as reduced the amount of waste generated when the case is ultimately opened at its final destination.

The *estimated CO<sub>2</sub>e reductions* associated with these projects (not counting composting) could be as high as *850 metric tons per year* (using the factor for waste recycled versus landfilled from the EPA clean energy website).

## 4.5 Other

In addition to the focused energy and environmental type projects, Standard Process has also had recycling programs in place for paper, cardboard, plastic, glass, metal, print cartridges, batteries, used oil, etc. for many years (25+ years for most materials). Following are a few additional examples of other actions that have an environmental/sustainability impact:

- Standard Process presents trees to employees in recognition of Earth Day and Arbor Day. This tradition began in the 1990s with a tree presented to, or planted for, every employee at the corporate office. Over the years, this has resulted in thousands of new trees taking root in southeastern Wisconsin. *(According to a NC State University fact sheet, a tree can absorb 48 pounds of CO<sub>2</sub> per year. Using this factor, the trees presented each year will ultimately absorb an additional 8 million metric tons CO<sub>2</sub>e per year.)*
- In 2012, Standard Process replaced the existing solvent based parts washer in the Maintenance Department with an aqueous based cleaning unit. This replacement eliminated the use and disposal of approximately 240 pounds of organic solvent per year.
- An indicator of the commitment of our employees to sustainability and the environment was evident in early 2015, when members of the Wellness Department sponsored a shoe drive to collect old athletic shoes for recycling. A total of 61 pair of shoes were collected in this effort. While this may seem like a minor impact, it signifies the dedication of our employees and company in general to sustainability.

## **5.0 Conclusion**

Standard Process is pleased to be recognized by the State of Wisconsin for our commitment to environmental and energy sustainability through our acceptance into the DNR Green Tier Program. We have a long tradition of environmental stewardship and sustainability. A portion of that commitment is summarized in previous sections of this report.

Through the Green Tier Program, we have reaffirmed our commitment to continuing to move forward with environmental and energy sustainability. This commitment is one of our core Corporate Values (see inside front cover). In addition to providing us with an opportunity to reaffirm our commitment to future environmental excellence and sustainability, acceptance into the Green Tier Program also validates the successes of our historical efforts.

**Appendix A**  
**Letter of Conformance – 2015 EMS Audit**



April 3, 2015

Mr. Rick Goetz, P.E.  
Engineering and Environmental Manager  
Standard Process  
1200 West Royal Lee Drive  
Palmyra, WI 53156

RE: EMS Audit 2015 Letter of Conformance

Dear Mr. Goetz,

Standard Process is a Company that has voluntarily entered into a program with the Wisconsin Department of Natural Resources (Department) commonly referred to as "The Green Tier Program." The criteria for Standard Process's participation within this program is found in Wisconsin Statute 299.83 (3) and referred to as "Eligibility for Tier I".

Within the first year of participation in the Green Tier program, the criteria in ss. 299.83(3) (c) (4) require a commitment by the company to complete one of two options. The first option is to self-certify their EMS by providing a significant amount of information to the WDNR. The second option is to hire an external third-party qualified by the Department to perform the initial first-year "functional equivalency" audit. After the initial one-year audit, Standard Process is required to hire a third-party entity to audit their environmental management system at least once every three years.

Perfect Environmental Performance, LLC (PEP) was retained in January 2015 to perform the first-year "functional equivalency" audit of Standard Process' Environmental Management System (EMS). The intention of this audit is to sample the EMS just implemented by Standard Process and determine if it is similar in function and scope to an ISO 14001 EMS and includes procedures equivalent to the 14 requirements identified in ss. 299.83 of the Green Tier Program.

The PEP review used both the ISO 14001 (2004) Standard and the current ss. 299.83 (dg) requirements as the basis for the review. The audit took place on March 26-27, 2015 at the Standard Process Facility. The review included a Level 1-4 documentation review, public document/communications review, interviews of affected operators/managers and observation of practices.

*The results of the EMS audit indicated that Standard Process' environmental management system conforms to the "functional equivalency" requirements of ss. 299.83.*

This document may be submitted to the Wisconsin Department of Natural Resources to verify that your implemented EMS conforms to Green Tier I first-year "functional equivalency" requirements and has been audited by an approved third-party as required by Green Tier.

529 N. Main • Cottage Grove, WI 53527 • Phone: 608.839.0129 • Fax: 608.839.0274 • [www.pep-services.com](http://www.pep-services.com)

Mr. Rick Goetz, P.E.  
April 3, 2015  
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If you have any questions about this determination, please feel free to contact me to discuss them.

Sincerely,

PERFECT ENVIRONMENTAL PERFORMANCE, LLC

A handwritten signature in black ink, appearing to read "Karissa Anderson", is written over a light gray rectangular background.

Karissa Anderson  
Environmental Coordinator, EMS Practice Leader  
RABQSA Certificate Number is E4393  
[tanderson@pep-services.com](mailto:tanderson@pep-services.com)