

Barilla's Ames EMS Journey

Presented by:

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Barilla America, Inc.

Ames, Iowa

- Founded in 1877 with the goal to simply make “*good food*” and has evolved into “*Good for You, Good for the Planet*” (GYGP)
- Ames, IA site started as a Greenfield site in 1999 as a mill and pasta plant with two production lines.
- Today site has eight processing lines that operate 364 days/year 24/7 and produced 179,000 tons of pasta cuts in 2022.
- Barilla released its first corporate sustainability report in 2009
- Before ISO14001: Site’s Environmental Goals could be considered as:
 - Reactionary versus proactive
 - Lacking an overall strategy or roadmap from year to year
- The site became ISO 14001 certified in 2015,
- Since then the site has used its EMS to establish programs and goals that focus on continuous improvement, sustainability, and compliance.



Barilla America - Ames Plant Environmental Policy



The Barilla America, Inc. - Ames Plant is committed to reducing its impact on the environment. Our policy is to comply with all legal & other requirements, follow our corporate leadership's mission, assess our aspects & impacts, prevent pollution, minimize our footprint & maximize our overall sustainability through continuous improvement in the framework of the Good for You Good for the Planet (GYGP) Barilla Lighthouse long-term vision.

During annual strategic planning, we will review our environmental performance and initiate objectives & targets that will further reduce our impacts on the environment. Our commitment extends to our customers, our staff, and the community in which we operate.

ISO14001:2015 Standard is the Framework of Site EMS

Two teams drive EMS at Site Level

- Site Leadership Team (Site Director & direct reports)
 - Champions EMS at the site
 - Factors it into site's overall strategies and operation
 - Provide the leadership and support for it to function
- ISO Cross Functional Team
 - Represented by each department
 - Members represent every level of the site's organization
 - Lead and direct EMS activities from informal and informal leadership roles

Site EHS professional manages the formal administration of the program

External EMS Support provided by:

- Corporate EHS (Italy)
- External Consultants
- ISO14001 certifying agency

Challenges



An effective EMS helps:

- Identify critical SWOTs for the org
- Prioritize and ensure compliance
- Incorporate environmental objectives into every day processes to drive continuous improvement
- Improve the financial health and overall sustainability of an organization.

ISO14001:2015 Standard is the Framework of Site EMS

- Understand the needs and expectations of interested parties
- Compliance Obligations
- External and Internal Issues
- The Environmental Aspects, Impacts, and Lifecycles of Activities and Processes
- Monitoring and Measurement
- Long and Short Term strategies and how to achieve them
- Management of Change
- Training Awareness and Competency
- Non-Conformance and Corrective Action Planning
- Emergency Preparedness and Response
- Performance/Continuous Improvement

Zero Waste to the Landfill

One of Barilla's long term EMS goals was to be zero to the landfill by 2020. Challenges that came along the way included:

- 2017-18 Expansion project that increased semo pasta production by 30% and production footprint by 30%, increasing construction and process debris
- The remaining waste streams were difficult to unravel
- Current Recycling Partners lacked the resources or expertise to help with the remaining waste streams
- Global Pandemic disrupted everything.

Impact to progress: Site had reversed progress (in 2018 went from 90% to 85% rate)

Response

- Leveraged partnerships outside of the organization (ISBF) to find different recyclers and feedback on ideas
- Revisited old ideas (i.e. Energy Recovery vs Landfill) and compared pros/cons
- Worked with affected team members and contractors to revise processes and make it easier to separated
- Invested in upgrades that also addressed production and quality concerns to increase "buy in" (Self contained commodity dumpster)

Effect:

- As of Q1 2023, the site's actual recycling rate is 99.87%
- Created Visible Improvements that team members can own and control.



Improving the site's Power Factor

The site's growth and consumption of electricity caused an inverse of its power factor rating because site infrastructure had not accounted for the impact with the increased input.

The site had reached the point where the inefficiency factored into our rate.

The site followed the Plan Do Check Act model to address this by providing the monitoring and measurement to justify the expense based upon the ROI

Result

The site added PF correction capacitors to the electrical system

- Currently realizing predicted cost savings and ROI
- ROI was less than one year
- Delayed phase II because Phase I was so effective
- Can now identify where PF is most needed and would drive value
- Created a turn key cost savings
- Shared the lessons learned



Where to Start



- Review the EMS Standard you want to adopt.
- Identify informal and formal leaders within your organization that can drive and support it.
- Assess organization's current EMS to identify what's missing.
- Try some of the tools to identify the potential benefit of a formal EMS
 - SWOT Analysis
 - Critical Aspects/Impacts/Life cycles
 - Auditing
 - Document Control/ Management of Change
- Create an EMS that fits your organization's size and complexity.
- Learn from your failures, celebrate your successes, and grow from both.



Questions?