ESI Advancement

May 26, 2021

Department of Environmental Quality

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NC Environmental Stewardship Initiative

LAND OF SKY REGIONAL COUNCIL

WRP Waste Reduction Partners

DEQ NORTH CAROLINA Department of Environmental Quality

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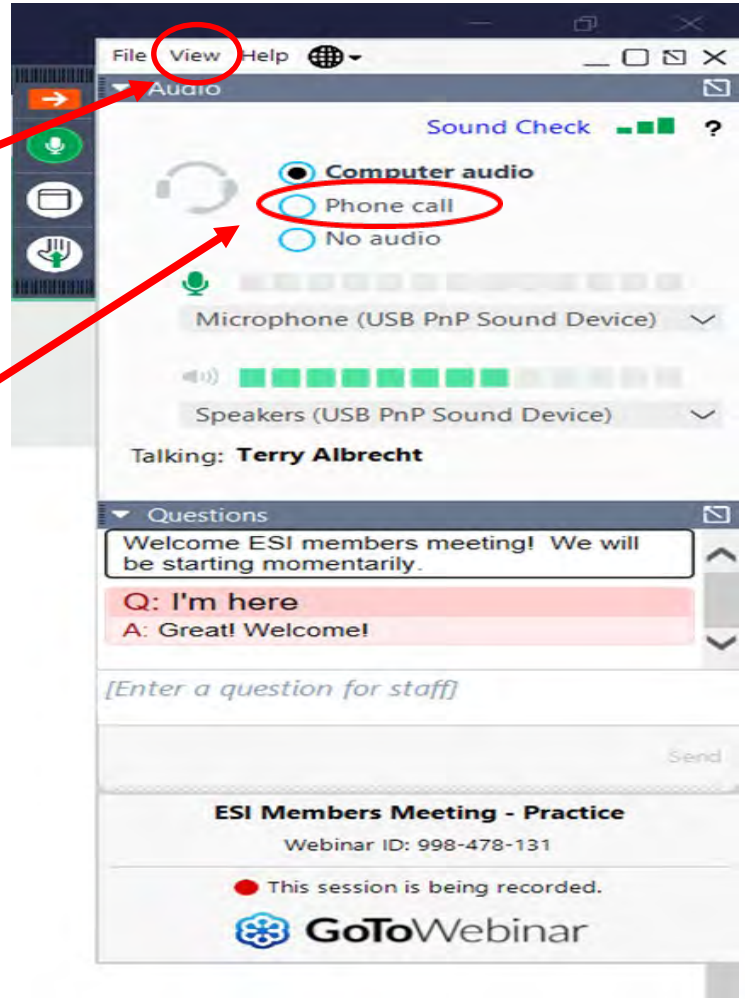


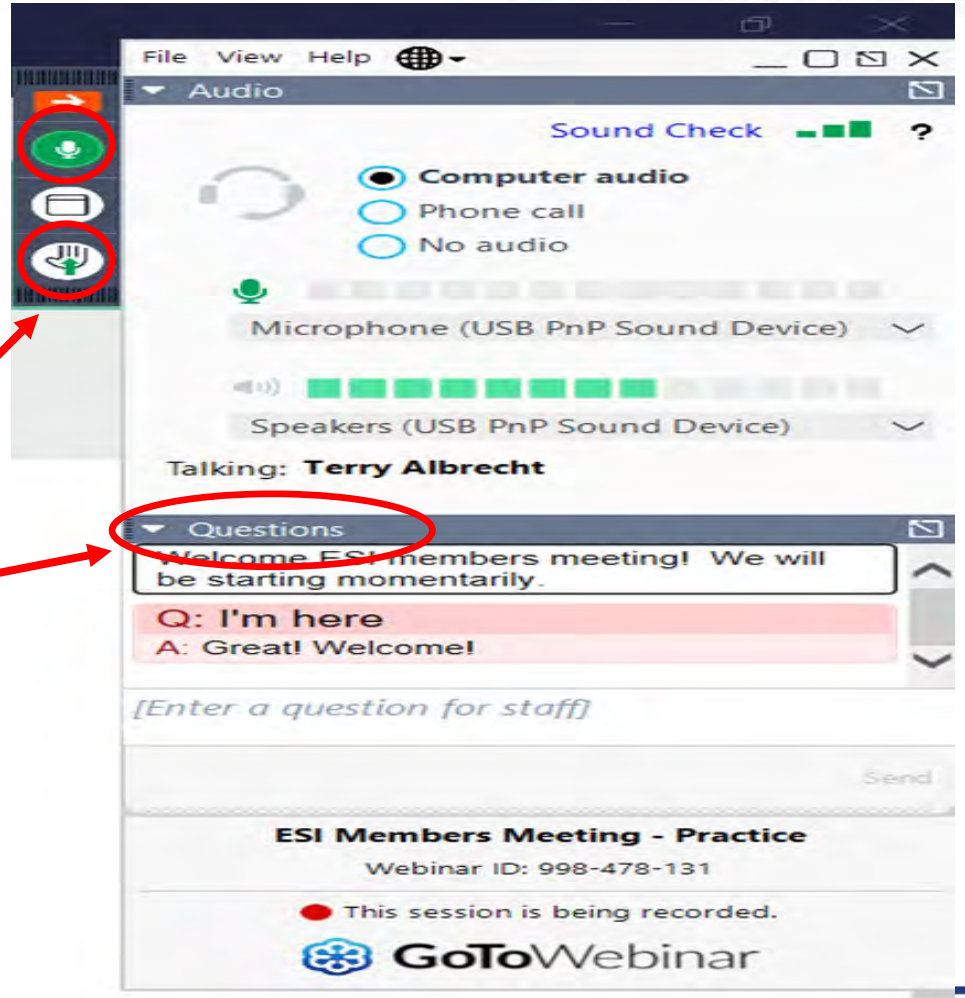
Participation

Mute/Unmute

- Everyone has been brought in muted (red)

How to Ask Questions:

- Raise your hand
  or
- Use the Questions Box



ESI Advancement

- Application process and timeframes
- Criteria for Rising Environmental Steward & Environmental Steward Membership levels
- Insight into site verification visits
- Discussion

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Membership Application and Review Timeframe

Stewards

Rising Stewards

- Applications accepted year round
- DEQ Compliance checks performed quarterly
- Requires on-site verification by ESI staff
- Advisory Board review Spring or Fall
- Renewals every 5 years

Partners

- Applications accepted year round
- DEQ Compliance checks performed quarterly
- Progress reviewed annually through report

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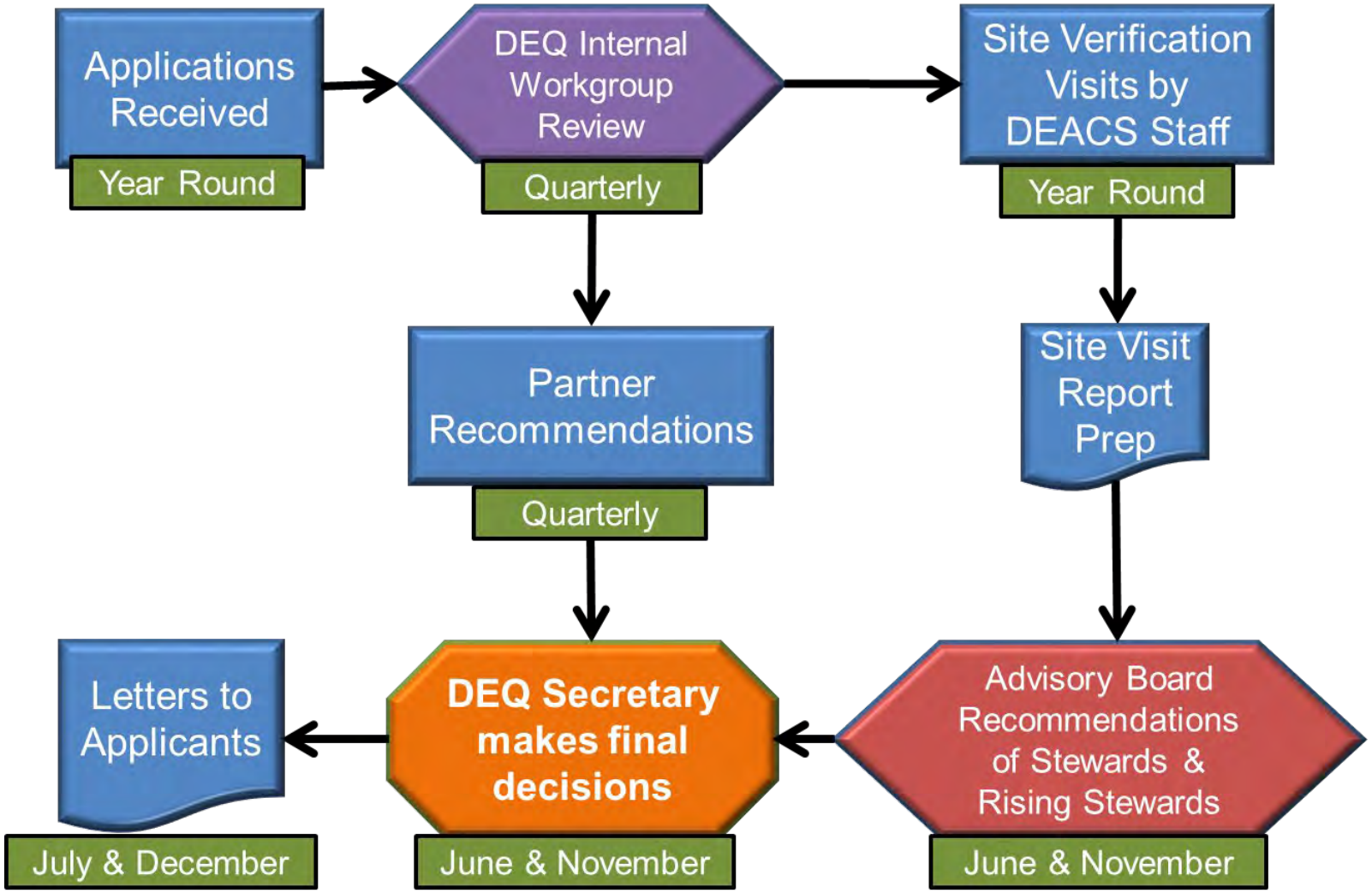
Application Process



ESI Membership Levels*

Stewards

- Set aggressive environmental goals
- Integrate EMS into core business functions
- Communicate with local community
- Agree to mentor other ESI members

Rising Stewards

- Demonstrate mature EMS
- Commit to go beyond compliance
- Set measurable environmental goals

Partners

- Establish environmental goals
- Report annually on goals & compliance
- Not be under criminal indictment/conviction

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*Membership requirements are additive as you move up the hierarchy, e.g. Stewards must also meet the member requirements at the Partner and Rising Steward levels

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Mature EMS

Aspects of an EMS that can provide insight into its maturity:

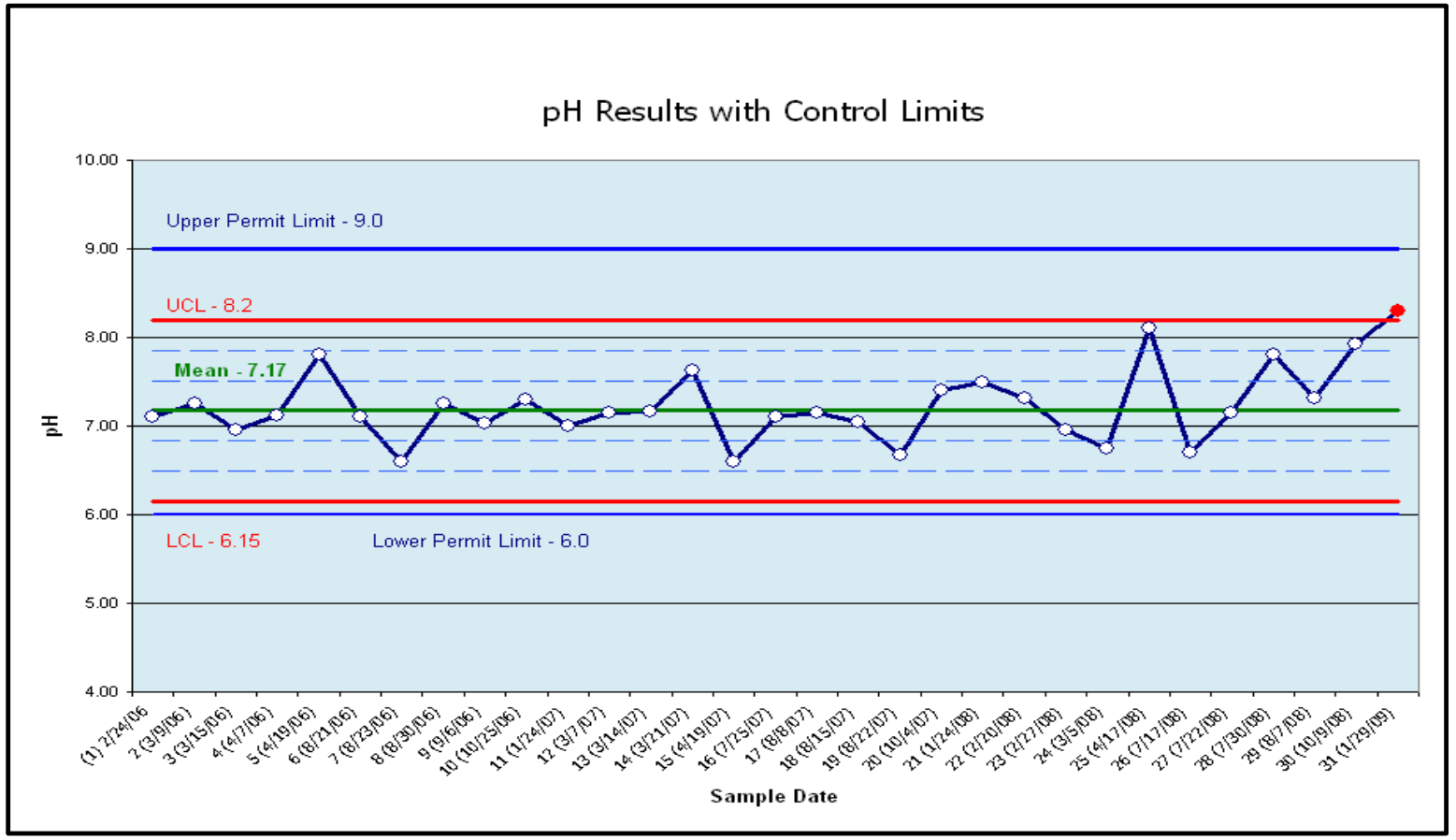
- Third-party certification or Functionally Equivalent – number of surveillance audits
- Frequency and number of internal and external audits
- Frequency of management review
- History of compliance
- Root cause analysis – Corrective Action Systems
- Contractor training on environmental aspects, emergency contacts and safe evacuation procedures.

Beyond Compliance

- Emitting, discharging and/or raw material utilization at levels below permitted or regulated levels
- Controlling, reducing and/or eliminating emissions, discharges, raw materials and resources not currently permitted or regulated that the facility has identified as a potential environmental issue.
- Activities that result in the elimination of an environmental permit or have facilitated the reclassification of the site.
- Frequency of internal inspections/audits, monitoring/sampling or record keeping that is beyond requirements for that regulated activity

Beyond Compliance

Maintaining limits tighter than permitted levels



Beyond Compliance

Not currently permitted or regulated, but reduces environmental impact:

- Water use
- Energy use
- Recycling efforts
- Product substitution

Reclassification

- Large to small or small to very small quantity hazardous waste generator status
- Significant industrial user to just industrial user pretreatment status
- Title V to a synthetic minor, synthetic minor to small air permit
- Reducing any impact to the point of no longer needing a permit
- Taking steps to control potential impacts to the point of needing no permits

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Measurable Goals

Differentiate between “planning” or compliance goals

Examples:

- achieve zero permit violations,
- modify online training programs
- Research based goals

Vs

Quantitative/Measurable goals

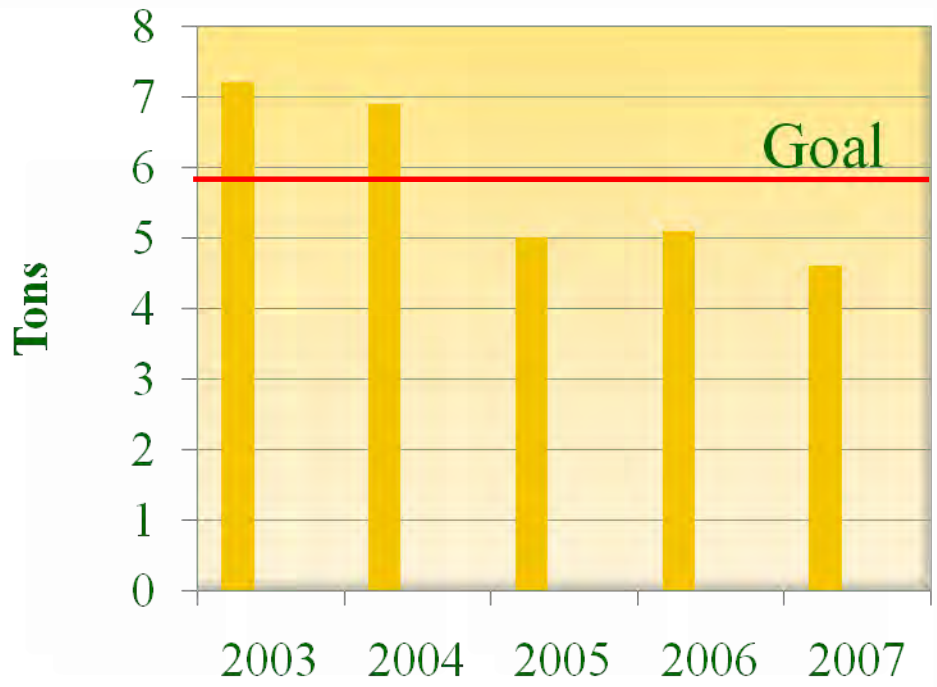
-Ex. Energy, solid waste, water usage reductions

Not all goals have to be measurable, but at least 2 should have demonstrable results.

Measurable Goals

Goal: 85% Reduction of TRI Emissions from CY2000 baseline by CY2010

Baseline year	2000	
Baseline value	39.09	
2007 value	**4.6 tons**	**~85% reduction**
Target (2010) value	5.86	



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Aggressive Goals

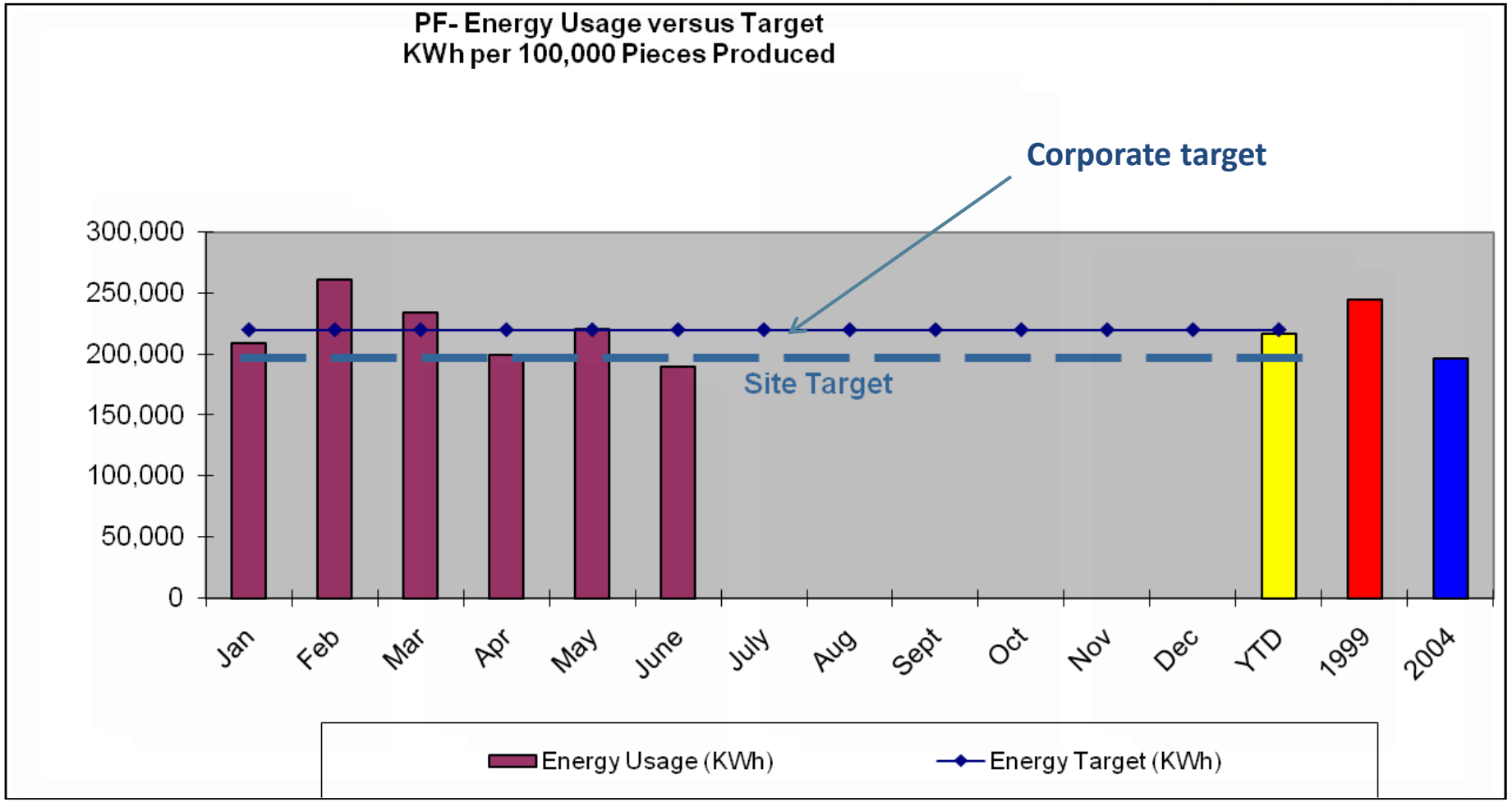
Aggressive goals should:

- demonstrate annual improvements to performance
- be appropriate to the nature, scale and environmental impact of the site
- result in reductions of a site's environmental impact

The aggressiveness of Steward applicants environmental goals can be shown through:

- site-specific targeted reduction in environmental impact
- the techniques and technologies required to achieve the goal
- past accomplishments in reductions
- the breadth of environmental issues addressed in the goals

Aggressive Goals

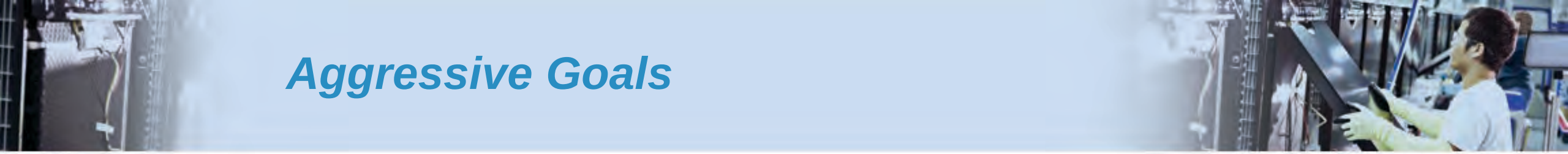


Aggressive Goals

Goal: Reduce facility's electrical usage by 6% by 2019

- Previously, electrical usage reduced by 29% normalized to sales by:
  - Retrofitting all lighting to T8
  - Adjusting task lighting
  - Training employees to turn off lights in unused spaces (culture shift)
  - Installing timers on electric ovens

- Previously, natural gas reduced by 39% normalized to sales by:
  - Installing programmable thermostats throughout the facility
  - Making control adjustments to NG ovens to hold a "low fire state" when not in use



Aggressive Goals

Goal: Reduce waste to energy stream ("trash") by 4%, normalized to sales dollars, or greater by 2019

- Currently Zero Waste to Landfill
- Would like to reduce the amount of material going to waste-to-energy
- Currently composting paper towels.
- Achievement plan:
  - Improve separation, identifying other recycling opportunities, training, and signage.
  - Waste consists primarily of boxed trash and drummed oily waste

Community Involvement

Stewards must have a **LEADERSHIP ROLE** in the community, not only through education and outreach efforts but ideally by **GAINING** input from community members

Examples of Communication

- Internal or external presentations to community leaders, neighbors, educational institutions
- Providing updates/success stories to local area media outlets
- Distribution of annual environmental reports to community leaders, neighbors, educational institutions, etc.
- Participation in environmental events/groups including local, state or national
- External Website
- Activities or programs that educate and seek input from local community on environmental issues

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Community Involvement

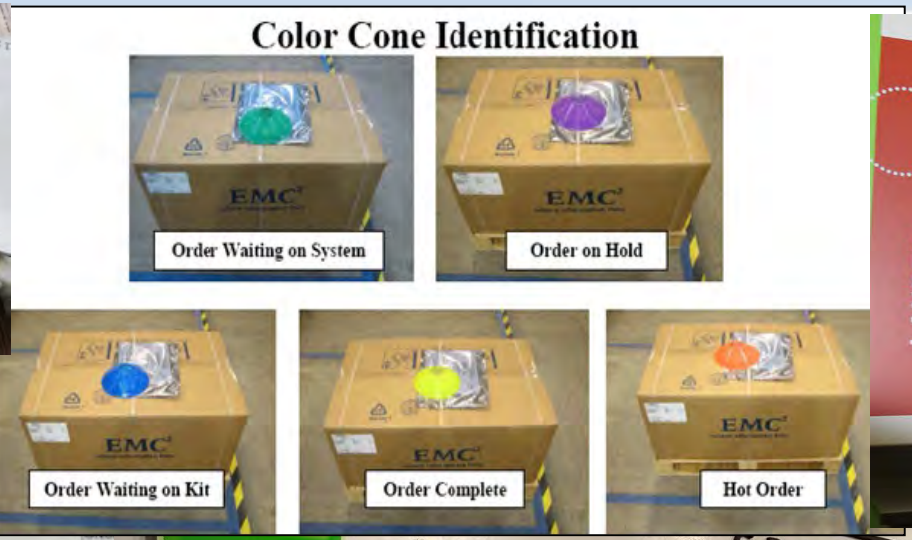
More Examples:

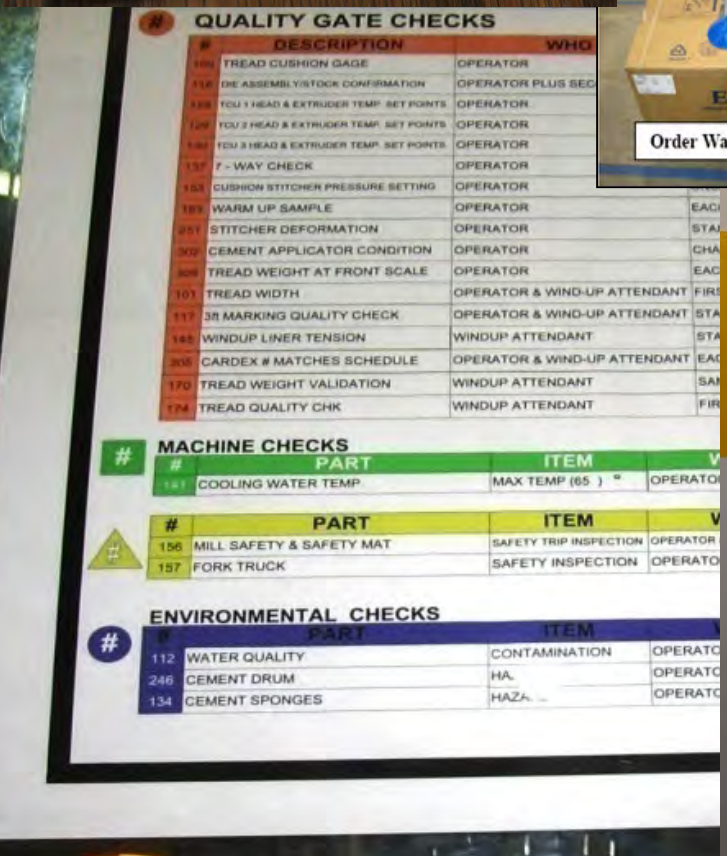
Environmental Fair Participation
Meeting with City Council to discuss environmental activities and goals.
Representation on local emergency planning committee
Facility members active on community action boards
Community Earth Day celebrations
Adopt-a-highway/stream
Participation in environmental education efforts at local schools/youth groups
Hosting environmental group meetings
Presentations of environmental achievements
Community gardens/wildlife habitats with educational content
Participation in other environmental programs (ie Energy Star, WAIT, LEED, WaterSense, etc)

Integration of EMS into Core Business Functions

- Integration of management review meetings concerning env. progress with other business programs including other ISO standards
- Integration of environmental goals with other business goals (Triple Bottom Line approach)
- Frequency and type of communications to employees on environmental issues/progress
- Employee reward and recognition programs
- Development of departmental goals related to environmental issues
- Implementation of process improvement programs that reduce environmental impacts (Kaizen, Six Sigma, Lean Manufacturing, etc.)
- Integration of environmental impact review process into new project assessments
- Environmental staff on pre-construction team
- Corrective Action system available to all employees.
- Integration of sustainable purchasing practices into contract system

Integration of EMS into Core Business Functions





ASSOCIATE REPORT OF ENVIRONMENTAL OR SAFETY ISSUE

Complete Sections 1 and 2 and place in STAR collection box at Security

If you have a suggested corrective action or implement a corrective action please complete Section 4

Section 1: Basic Info

Department: *171*

Date: *9/23/08* ***Location in Facility:*** *Recycling Building*

Area Manager: *Matt Hargett* ***Report Prepared By:*** *John Burke*

Time Of Observation: *11:00am* ***Environmental Conditions:***

Section 2: Description Of Issue *(If this is an issue you can resolve please do and note the action you took)*

Section 3: Applicable OSHA Standard

29 CFR 1910: _____

29 CFR 1926:

Mentoring Opportunities

- Participation on panels or other presentations at the annual ESI Conference and other events
- One-on-one environmental assistance with other ESI members or potential members
- Best practice sharing through ESI events (Environmental Benchmarking Series, Hazardous Materials Roundtable, Energy Efficiency Webinars, etc)
- Working with ESI/WRP to produce e-News articles and case studies on successful environmental projects
- Providing EMS documents for use as examples in ESI classes
- Acting as a host site for ESI internal auditor class

Earth Day 2020 activities by ESI Members:

Pfizer – Sanford, an ESI Member since 2008 and ESI Steward since 2019, conducted a socially distanced planting activity that included potting herbs for its hanging garden as well as tending to two onsite beehives. The herbs grown are integrated into the meals served in the onsite café.

QORVO, an ESI Member since 2005 and ESI Rising Steward since 2007, issued a "Work From Home Earth Day 2020" challenge, rewarding those who shared their earth day celebration photos with an Earth Day t-shirt. Additionally, Qorvo staff shared some home projects, including a home project and share event that worked well. It was mentioned that "The DEACs/ESI assistance was invaluable to get this launched at the last minute change from previous events that were planned and no 'social distancing' allowed."

Site Verification Visits

All Rising Steward and Steward applications undergo verification visits from ESI staff.

Purpose: To verify information on application and collect any additional information related to noncompliance, EMS maturity, environmental goals and other requirements.

Both Rising Steward and Steward applicants should have the following information available for review/reference:

- Minutes from last 2 Management Review meetings
- List of significant aspects and impacts and procedure for identification
- Copies of corrective actions for last 6 months
- Copies of NOV's or any noncompliance information from last 2 years including procedures and process for root cause analysis and correction
- Results from last 2 Internal Audits
- Data that supports goals and other items included in the application

Site Verification Visits

- Example Agendas

ESI New Steward Verification Visit
Organization
Location, NC
Date

Proposed Agenda

10:00 - 10:30	Opening meeting – Facility Overview
	Discussion with Upper Management - Review of policy, scope, external communications, EMS integration, objective & targets, commitment to compliance, resource support, and management review
10:30 - 11:45	Discussion with Environmental Manager - Review of environmental stewardship application.
	Review aspects, impacts and significance, legal and other requirements, environmental compliance history, corrective and preventive actions, communication with community and aggressive goals.
11:45 - 1:00	Lunch
1:00 - 3:30	Completion of information collection
On-site tour of operations, conversations with employees, implementation information	
	Follow-up questions and answers from tour
3:30- 4:00	Closing comments and next steps

New Rising Steward Verification Visit
Organization
Location, NC
Date

AGENDA

8:00 – 8:30	**Opening meeting – Facility Overview**
	Discussion with Upper Management - Review of policy, scope, goals, commitment to compliance, resource support, and management review
8:30 – 10:00	**Discussion with Environmental Manager** - Review of aspects, impacts and significance; compliance obligations
	Rising steward application review; Discussion of environmental compliance history, review of corrective actions, measurable goals data
10:00 – 11:00	**On-site tour of operations** - conversations with employees, floor-level verification of information
11:00 – 11:30	Follow-up questions and answers from tour; Closing comments and next steps

Site Verification Visits

Examples of questions that may be asked:

- How compliance issues have been addressed?
- How internal auditing results and compliance issues are addressed at management review meetings?
- Do goals reflect significant aspects and are they appropriate for the facility?
- Do goals demonstrate a commitment to go beyond compliance?

Ensure all goals are included in the application.

During the brief facility tour, the team will be looking for:

- a basic understanding of operations
- evidence of information on environmental issues communicated to employees
- overall cleanliness and organization of facility

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Site Verification Visits

The verification team will document evidence of the following for Steward applicants:

Communication with local community:

- Identify specific activities carried out to involve and inform the community on program activities and progress toward environmental performance goals as well as environmental education and improvement activities

Integration of EMS into core business

- Verify activities or procedures listed in application

Aggressive goals

- Visit the area or process affected by the goals
- Review environmental management programs
- Review monitoring and measuring data

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Advisory Board Review

- Typically meet in June and November
- Site visit reports are sent to board members prior to meeting for review
- ESI staff that performed visit present on findings and answer questions
- Recommendations are made by the board and DEQ Secretary makes final decision on applications

Dates to Remember

- Applications are open year-round
- For review at June meeting – apply by March 31
  - Site visits will occur by end of April
  - Reports will be complete, including review by applicant, by mid-May
- For review at November meeting – apply by August 31
  - Site visits will occur by end of September
  - Reports will be complete, including review by applicant, by mid-October

- Secretary decisions typically happen within a month of the Advisory Board meeting
- Letters are signed soon after
- Generally ESI staff email and/or call with decision & electronic copy of letter before mailing

Contact Information

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ESI Program Information
https://www.ncesi.org

DEACS Program Information
https://deq.nc.gov/about/divisions/environmental-assistance-customer-service

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Questions??