



IOWA
Department of
Natural Resources

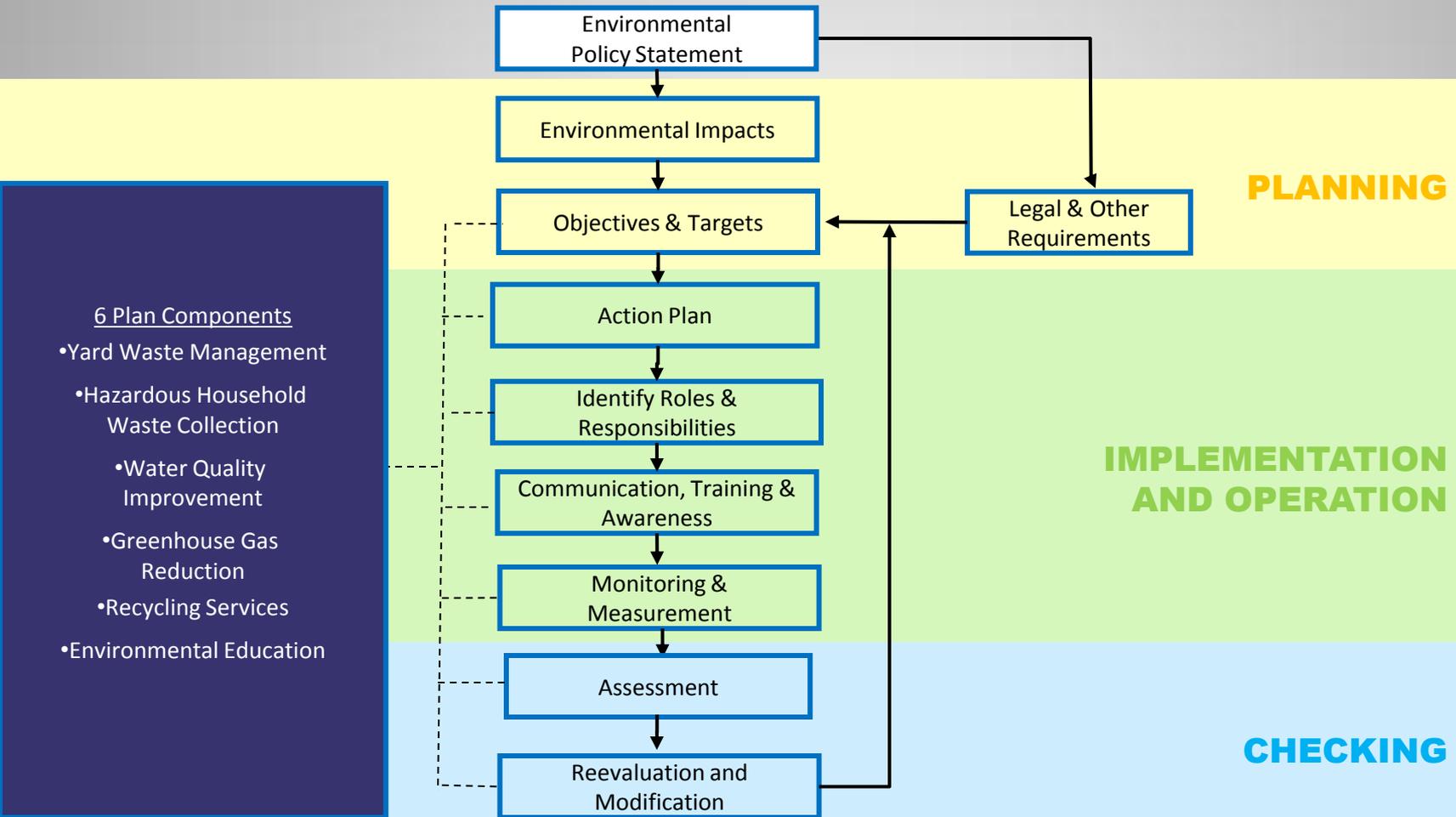
Environmental Management Systems

Objectives and Targets Implementation



G R E S H A M
S M I T H A N D
P A R T N E R S

Iowa EMS Framework (HF 2570)



Objectives and Targets Are Essential in Reducing Environmental Impacts



Overview of EMS Process for Adopting Objectives and Targets/Action Plan/Resources



- ◉ Identify Activities which Could Impact the Environment and Assemble List of Aspects and Impacts
- ◉ Develop Significance Criteria and Identify Significant Aspects/Impacts
- ◉ Determine/Establish Organizational Strategies Related to the Environment
- ◉ Set Objectives and Targets for Significant Impacts with Available Resources in Mind
- ◉ Develop Action Plans to Achieve Objectives and Targets
- ◉ Identify and Report Metrics that Documents/Verifies Progress
- ◉ Continually Review and Report Progress



Two Important Considerations

- Consider the Six Plan Components
 - *Yard Waste Management*
 - *Hazardous Household Waste Collection*
 - *Water Quality Improvement*
 - *Greenhouse Gas Reduction*
 - *Recycling Services*
 - *Environmental Education*
- These are Significant Activities and Impacts!*
- Potential Availability of Financial Resources for Assistance in the Development of the EMS and Objectives and Targets

Introduction to Objectives and Targets

Objectives and Targets (IA Code 455J)

- ⦿ Establish Specific and Measureable Environmental Goals for the Organization for Each of the Six Plan Components
- ⦿ Targets Must be Specific and Quantifiable

S.M.A.R.T.

Environmental Strategy

Before Setting Objectives and Targets
Consider Organizational Strategies related to
the Significant Aspects/Impacts and Iowa
Code requirements (Aspirational Goals)



Greenhouse Gas Reductions – Organization Strategy
Related to Climate Change

Environmental Education – Consider Lifestyle or
Cultural Change that the Organization is Attempting to
Affect

Objectives and Targets

◎ Objective Definition

- The Objective is the Environmental Goal
- The Overall Environmental Change You Want to Achieve

◎ Target Definition

- Detailed Performance Requirement
- Specific Outcome of the Objective
- Targets are Necessary for Achieving the Stated Objectives
- Targets are a Measureable Outcome of the Change

Examples

- **Strategy:** Reduce organizational contributions to climate change
 - *OT: Reduce Greenhouse Gases by 5% by December, 31, 2017*
 - *OT: Reduce Water Consumption by 5% per Year every year through 2020*
- **Strategy:** Educate our residents concerning individual ability to improve our local environment
 - *OT: Increase recycling rates by 10% by December 31, 2017*
 - *OT: Develop environmental educational program concerning proper e-waste management by March 1, 2017*

Objectives and Targets Considerations

- ◉ Six Plan Components
- ◉ EMS Fenceline (What is in Organizational Control)
- ◉ Environmental Policy
- ◉ Legal and Other Requirements
- ◉ Views of Interested Parties
- ◉ Is It Reasonable?
- ◉ It Technology Available?
- ◉ Are Financial, Operational, and Staff Resources Available?



Objectives and Targets Considerations

- ⦿ While Setting Objectives and Targets, Consider How You Will Monitor and Measure?
- ⦿ Is There Baseline Data Available?
- ⦿ Is There Environmental Performance I Want to Measure Outside of My Objectives/Targets?



Building Objectives and Targets

- Discuss and Document Organizational Environmental Strategies Around the Significant Aspects/Impacts, as well as HF Requirements
 - Identify Any Existing Objectives and Targets
- If You are Starting From Scratch, Begin with Each of the Six Plan Components
 - Identify Potential Objectives and Targets
 - Discuss with Responsible Staff Members
 - Consider Building a Team Around Each Objective and Target
 - Gather Baseline Data, if Any
 - Draft Objectives and Targets; Review and Finalize with Management

Objectives and Targets– Best Practices

- ◉ Set Objectives and Targets After Understanding Organizational Goals
- ◉ Start with Existing Environmental Goals
- ◉ Set Objectives and Targets which are as Specific as Possible and Quantifiable
- ◉ Review and Receive Approval from Senior Management
- ◉ Be Practical, Understand your Organization's Limitations
 - Don't Over Commit
- ◉ Consider Availability of Baseline Information
- ◉ Ultimate Goal is to Reduce Environmental Impacts



Objectives and Targets Example – Scott County

Internal Objective	Target
Minimize the Landfill's impact on water quality.	Reduce number of disturbed land by eight acres by 2015.

External Objective	Target
Increase internal and external awareness of the solid waste infrastructure in our region.	Develop an Integrated Waste Management Orientation Packet by March 2016.

Objectives and Targets

Example-West Central



West Central Objective									
<i>Decrease recycling materials from going to landfill</i>									
Target	Metric	Yard Waste	Water Quality	Greenhouse Gas Emissions	Recycling Services	Household Hazardous	Environmental Education	Other	
<i>Pilot project to increase metal recycling by 5% from year through May 2016 versus year through May 2015</i>	<i>Tonnage delivered</i>				X				
Action Plan	Deadline	Responsibility	Key Resources			Notes / Status			
1 Discussion with Executive Board on March 8, 2016 to rent a machine to pick metal from loads of waste at the landfill.	3/8/2016	Mary	Executive Board, Local equipment dealers, Quandt Auto Salvage						
2 Discuss with landfill operators when would be the best time to start this project.	3/30/216	Dave	Landfill operators						
3 Meet with equipment dealers to get prices for a rental machine to arrive on site May 1, 2016.	4/15/2016	Dave	Equipment dealers and landfill operators						
4 Secure roll off boxes for the project	4/15/2016	Dan	Quandt Auto Salvage and contracted haulers						
5 Start pulling metal from the working face.	5/1/2016	Dave	Landfill operators and general public						
6 Keep track of tonnage pulled in May 2016.	5/31/2016	Dan	Staff						
7 Review the program and consider renting for another month.	5/31/2016	Mary	Landfill operators						
8 Consider purchasing a machine in FY 2017 and discuss the concept of pulling corrugated cardboard from working face along with the metal.	9/1/2016	Mary	Executive Board, Equipment Dealers and Executive Board.						

Action Plan

Action Plans

- Road Map for Achieving the Objectives and Targets
 - Can Be As Specific or as General According to Organizational Needs
- Listing of Specific Tasks or Activities with Assigned Responsibilities and Associated Due Dates
- Consider Needed Resources
 - Financial, Staff, Equipment, Etc.
- Action Plan Items May Require Input from External Parties (Outside Fenceline)
 - Consider Ability to Control Schedules and Priorities



Action Plans

- ⦿ Set Action Plans for Each Objective/Target
 - Responsible Person/Is there a Team or Committee?
 - Schedule with Steps for Implementation
 - Monitoring and Measurement
 - Costs
- ⦿ Determine a Schedule and Method for Periodic Review/Update
- ⦿ Don't Forget to Document the Action Plan with Objectives and Targets

West Central Objective

Decrease recycling materials from going to landfill

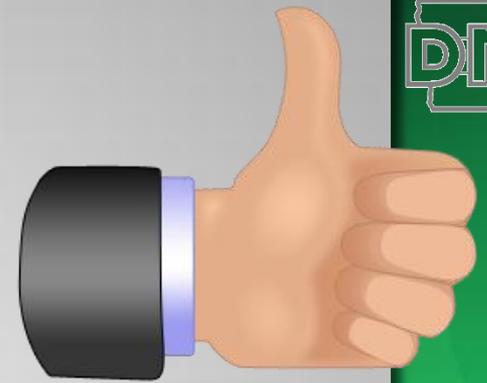
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Action Plans

- If You Have a Multi-Departmental or Multi-Organization Objective/Target
 - Identify Existing Committee or Work Group that Can Facilitate the Action Plan Item
 - Or Develop a Committee
 - Identify Responsible Individual(s) by Organization
 - Schedule Regular Meetings or Reporting
 - Keep Meeting Minutes To Track Progress, Assignments, and Commitments
 - Discuss and Resolve Monitoring and Measurement Data
 - Elevate When Necessary

Action Plan Implementation

- Implement a Process for Reporting and Tracking
 - Keeps the EMS and Objectives and Targets on Track
 - Allow for Reassignment if Needed
 - Require Reporting on a Schedule
 - Monthly, Quarterly, Semi-Annually
 - Especially Important for Action Items that Are in Sequential Progression
- ***Update Objectives and Targets and Associated Action Plans as Needed***



Action Plans– Best Practices

- Make the Action Plans Work for Your Organization
 - Consider Amount of Detail and Information in the Action Plan to Achieve the Desired Result
- Evaluate Existing Management and Reporting Tools to Achieve the Action Plan Items
 - **Remember....Don't Re-Invent the Wheel!**

	Objective	Target	Metric	Yard Waste	Water Quality	Green house Gas	Recycling	HHM	Env Ed
K	Reduce carbon footprint at DMASWA facilities (internal) Mitigate climate impact	Reduce by 50% by 12/31/2012	tons of CO2e			X			X
	Action Plan	Deadline	Responsibility	Status		Key Resources			
1	Temporarily use ICLEI GHG assessment	6/30/2010	Paul			staff time, GHG report			
2	Establish baseline GHG assessment (IDNR)	6/30/2010	Chuck/Paul			staff/consultants time/protocol			
3	Construct a LFG collection, monitoring and flaring system	9/10/2010	Chuck			money, time, equipment			
4	Develop beneficial use of DMASWA landfill gas	12/31/2012	Chuck			staff/consultants time			
5	Implement protocols and procedures to reduce GHG production from excessive and inefficient fossil fuel use and refrigerant management in staff, contractor and customer operations.	12/31/2011	Doug			time, money, model protocols			

**Reducing Environmental Impacts
is the Main Focus of the EMS =
This is Achieved Through
Objectives and Targets and Action
Plans**



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QUESTIONS?



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