

US EPA ARCHIVE DOCUMENT

# Objectives and Targets

## Background and Exhibits

Objectives and targets help a facility translate purpose into action. These environmental goals should be factored into your business plans. This can facilitate the integration of environmental management with your facility's other management processes.

An environmental **objective** is an overall environmental goal, arising from the environmental policy, that a facility sets itself to achieve, and which is quantified where practicable. An environmental **target** is a detailed performance requirement, quantified where practicable, applicable to the facility or parts thereof, that arises from the environmental objectives and that needs to be set and met to achieve those objectives.

You determine what objectives and targets are

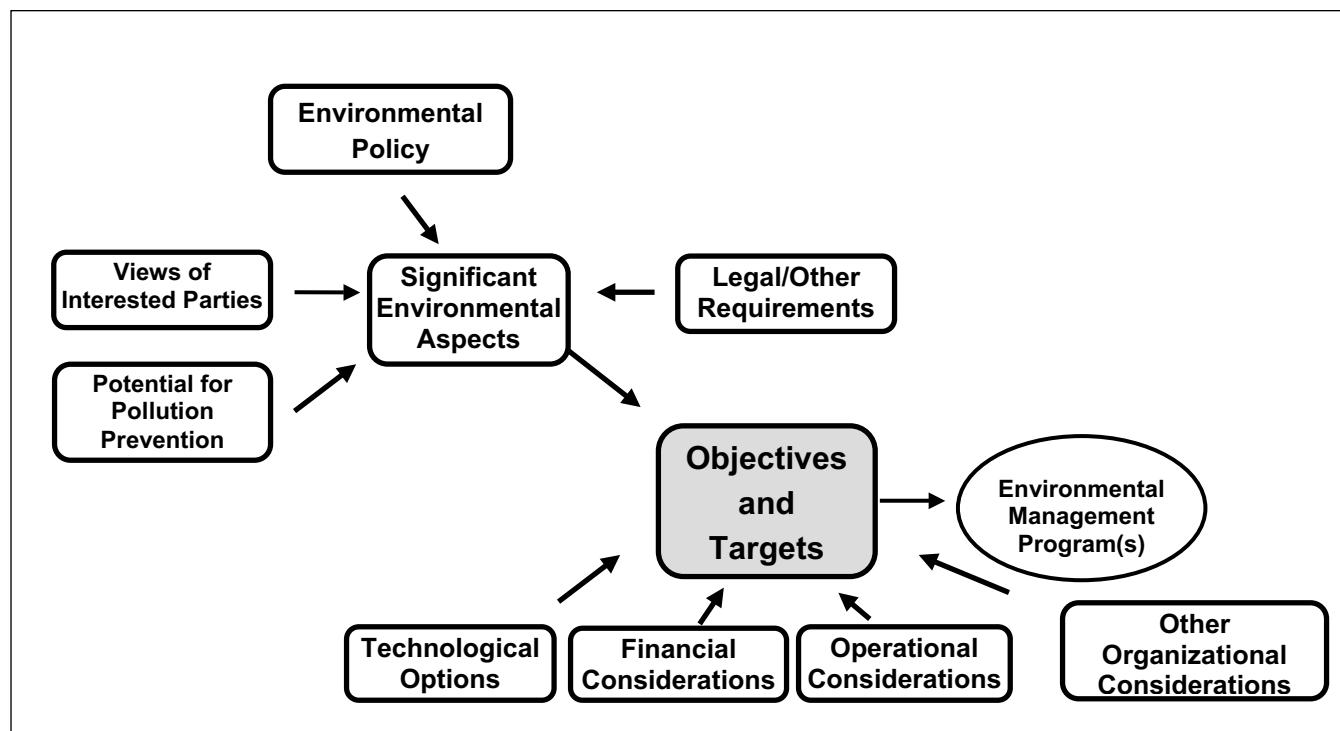
appropriate for your facility. These goals can be applied facility-wide or to individual units, departments, or functions, depending on where the implementing actions will be needed.

In setting objectives, keep your environmental policy commitments in mind. You should also consider your significant environmental aspects (SEAs), applicable legal and other requirements, the views of interested parties, your technological options, and financial, operational, and other organizational considerations including:

- The ability to control;
- The ability to track/measure;
- The cost to track/measure; and
- Progress reporting.

*Exhibit 6-1: Considerations for Developing Objectives and Targets* summarizes these considerations.

Exhibit 6-1: **Considerations** for **Developing Objectives** and **Targets**



Here are some things to think about to expedite the determination of your facility's environmental objectives and targets:

- Involve people in the relevant functional area(s) when setting objectives and targets. These people should be well positioned to establish, plan for, and achieve these goals. By involving people you help to build commitment.
- Get top management buy-in for your objectives. This will help to ensure that adequate resources are applied and that the objectives are integrated with other organizational goals.
- Link the objectives to the actual environmental improvements being sought when communicating objectives to employees. This should give people something tangible to work towards.
- Ensure that your objectives are consistent with your overall mission and plan and the key commitments established in your policy (pollution prevention, continual improvement, and compliance). Targets should be sufficiently clear to answer the question, "Did we achieve our objectives?"
- Be flexible in your objectives. Define a desired result, then let the people responsible determine how to achieve the result.
- Establish objectives to maintain current levels of performance or compliance as well as to improve performance. For some SEAs you might have both maintenance and improvement objectives.
- Communicate your progress in achieving objectives and targets throughout the facility. Consider a regular report on this progress at staff meetings or posting key targets and progress toward them in your facility.
- Consider holding an open house or establishing a focus group with people in the community to obtain the views of interested parties.
- Keep your objectives simple initially, gain some early successes, and then build on them. How many improvement objectives and targets should a facility have? Various EMS implementation projects indicate that it is best to start with a limited number of improvement objectives (say, three to five) and then expand the list over time.

- Make sure your objectives and targets are realistic. Determine how you will measure progress towards achieving them.
- Keep in mind that your suppliers (of service or materials) can help you in meeting your objectives and targets (e.g., by providing more "environmentally friendly" products).
- Know that if an environmental aspect is not significant then it does not need an objective and target.

## Pollution Prevention Tools

As interest in pollution prevention grows and facilities look to move beyond the "low-hanging fruit," it becomes increasingly important to find ways to evaluate the potential benefits of pollution prevention alternatives. Two such tools are Life Cycle Analysis (LCA) and Total Cost Assessment (TCA).

LCA generally focuses on the environmental aspects of a specific product, although it could be applied to processes or services, over its lifetime. LCA looks at each stage, from raw material through production, use, and disposal. Inputs to the analysis include energy use, waste generation, emission, and releases from each stage.

TCA focuses on the total costs of a project or product, including environmental costs, which many assessment methods do not include. This is often done to support evaluations of process or product changes over the long-term. For example, TCA might be used to assess the benefits and costs of continuing to use a VOC-based process versus those of using a water-based process for the same purpose.

Use your answers to the questions provided in *Exhibit 6-2: Element Review Questions* to begin the process of determining your facility's environmental objectives and targets.

Exhibit 6-2: **Element Review Questions**

Questions	Your Answers
<p>Do we have an <b>existing process</b> for setting and reviewing environmental objectives and targets?</p> <p>If so, does that process need to be revised? In what way(s)?</p>	
<p><b>Who needs to be involved</b> in this process within our facility?</p> <p>Should any outside parties be involved?</p>	
<p>When is the <b>best time</b> for us to implement this process? Can it be <b>linked</b> to another existing organizational process (like our annual or strategic planning process?)</p>	
<p>What are our <b>existing environmental goals</b>? How were these developed? Who was involved? What <b>factors</b> were considered in setting these goals?</p>	
<p>Who are our <b>interested parties</b>?</p> <p>How do we <b>obtain their views</b>?</p> <p>How <b>effective</b> has our process been?</p>	
<p>How can we effectively and efficiently <b>track our progress</b> and <b>communicate the results</b>?</p> <p><b>Who</b> is in the best position to do this?</p>	
<p><i>Our next step on environmental objectives and targets is to . . .</i></p>	

## Examples

*Example 6-1: Objectives and Targets Organized by Category* presents sample targets for supply, chemical, energy, and other objectives.

*Example 6-2: Identification of Objectives and Targets for Drydock Painting* is an example of the use of the Identification and Significance Determination and Environmental Aspects and Setting Objectives and Targets Form (EF-003.01) that continues from *Example 5-1: Aspects Form and Flow Diagram for Drydock Painting* in *Module 5*.

Example 6-1: **Objectives** and **Targets Organized by Category**

Objectives	Targets
<p><b>Supplies</b> Increase use of non-hazardous chemicals by suppliers</p>	<ul style="list-style-type: none"> <li>• Increase use of suppliers that provide alternative chemicals by 15% by January 2002</li> </ul>
<p>Reduce amount of supplies used</p>	<ul style="list-style-type: none"> <li>• Implement recycling of supplies (abrasive media, oil, plastic, laser cartridges, metal, paint booth water) by January 2004</li> <li>• Implement reuse program for wooden pallets by January 2004</li> </ul>
<p><b>Chemicals</b> Reduce use of hazardous chemicals</p>	<ul style="list-style-type: none"> <li>• Reduce use of high-VOC paints by 25% by January 2004</li> <li>• Increase use of water-soluble cutting fluids by 15% by January 2004</li> </ul>
<p><b>Energy Use</b> Reduce energy use</p>	<ul style="list-style-type: none"> <li>• Reduce electricity use by 10% by January 2004</li> <li>• Reduce natural gas use by 15% by January 2004</li> </ul>
<p><b>Water Use</b> Reduce water use</p>	<ul style="list-style-type: none"> <li>• Reduce water use by 10% by January 2002</li> </ul>
<p><b>Air Emissions</b> Reduce air emissions</p>	<ul style="list-style-type: none"> <li>• Reduce boiler emissions by 10% by January 2004</li> <li>• Improve material handling practices (for example, use of paint warming cabinets) by January 2004</li> <li>• Improve paint use tracking system by January 2004</li> <li>• Reduce paint overspray by 25% by January 2004 by training personnel on correct spray painting techniques and developing maintenance program for spray painting equipment to allow maximum transfer efficiency (to be supported by paint vendor)</li> </ul>
<p><b>Water Discharges</b> Reduce VOCs in wastewater discharges</p>	<ul style="list-style-type: none"> <li>• Increase use of aqueous cleaners by 20% by January 2004</li> </ul>
<p>Improve habitat and water quality of estuary</p>	<ul style="list-style-type: none"> <li>• Restore fish stocks and habitat by January 2004</li> </ul>
<p><b>Solid/Liquid Wastes</b> Reduce paint waste</p>	<ul style="list-style-type: none"> <li>• Reduce paint waste by 25% by paint mixing at point of use by January 2004</li> </ul>
<p>Reduce hazardous waste</p>	<ul style="list-style-type: none"> <li>• To be achieved by target above and reduction of hazardous chemicals use</li> </ul>
<p><b>Stormwater Discharges</b> Reduce metal concentration in storm water discharge</p>	<ul style="list-style-type: none"> <li>• Improve stormwater collection and filtration system by January 2004</li> <li>• Investigate effectiveness of additional best management practices by January 2003</li> </ul>
<p><b>Spills</b> Reduce occurrence of spills</p>	<ul style="list-style-type: none"> <li>• Reduce spill occurrence by 10% by January 2004 by conducting the following training: (1) all plant personnel will receive awareness training during 2002; (2) all raw material handling personnel will receive spill prevention training during 2003; and (3) all production personnel will receive spill control training to reduce spills that exit the plant during 2003. Also, the Cross Functional Team will develop a team to conduct a root cause analysis of spills during 2002 that will be incorporated into the training program.</li> </ul>

Person Completing Form: John Smith, Environmental Engineer

Area/Process: Drydock Painting

Date: 5/17/01

Example 6-2: Identification of Objectives and Targets for Drydock Painting

ASPECT IDENTIFICATION			SIGNIFICANCE DETERMINATION					OBJECTIVES & TARGETS		
Category/Aspect	Inputs, Processes, Outputs, Products	Quantity or Volume	Legal Requirements/ Voluntary Commitments, Facility Policy	Community Concern	Pollution Prevention Potential	Potential Impact to the Environment	N or S	Rationale for Significance (S) or Nonsignificance (N)	Objective & Type <small>C = control or maintain S = study or investigate I = improve</small>	Target
<b>Energy Usage:</b>										
Electricity/ Paint Mixers	Mix and thin coatings (Pro-3)	10 kw/year	No	No	No	No	N	Does not meet significance criteria, low volume usage	NA	NA
Diesel Fuel/Forklift	Transport coatings and waste to dry dock (Pro-1, Pro-14, Pro-15, Pro-16, Pro-18, Pro-19, Pro-20)	1000 gallons per year	No	No	No	No	N	Does not meet significance criteria, low volume usage	NA	NA
<b>Water Usage:</b>										
NA		NA								
<b>Supplies/Disposables:</b>										
Rags	Inp-3		No	No	No	No	N	Does not meet significance criteria	NA	NA
Gloves	Inp-3		No	No	No	No	N	Does not meet significance criteria	NA	NA
Tyvek Coverall	Inp-3		No	No	No	No	N	Does not meet significance criteria	NA	NA
Filters	Inp-3		No	No	No	No	N	Does not meet significance criteria	NA	NA
Sand Paper	Inp-3		No	No	No	No	N	Does not meet significance criteria	NA	NA
<b>Chemicals:</b>										
VOC Content	Virgin Coatings (Inp-1)		Yes	Yes	No	NA	S	Marine Coating Rule, Air Permit	C-Maintain Compliance	Ongoing
HAP Content	Virgin Thinners (Inp-2)		Yes	Yes	No	NA	S	Marine Coating Rule, Air Permit	C-Maintain Compliance	Ongoing
<b>Air Emissions:</b>										
Fugitive VOCs	Applying Coating (Pro-7)	40 tons	Yes	Yes	Yes	NA	S	Marine Coating Rule, permits of	I-Reduce Fugitive	10% reduction by

ASPECT IDENTIFICATION			SIGNIFICANCE DETERMINATION					OBJECTIVES & TARGETS		
Category/Aspect	Inputs, Processes, Outputs, Products	Quantity or Volume	Legal Requirements/ Voluntary Commitments, Facility Policy	Community Concern	Pollution Prevention Potential	Potential Impact to the Environment	N or S	Rationale for Significance (S) or Nonsignificance (N)	Objective & Type C = control or maintain S = study or investigate I = improve	Target
								operate, toxic air emissions rule	VOCs, HAPs, and particulates	January 2004
Fugitive HAPs	Applying Coating (Pro-7)	10 tons	Yes	Yes	Yes	NA	S	Marine Coating Rule, permits of operate, toxic air emissions rule	I-Reduce Fugitive VOCs, HAPs, and particulates	10% reduction by January 2004
Over Spray, Fugitive Particulate Emissions	Applying Coating (Pro-7)	8 tons	Yes	Yes	Yes	NA	S	Marine coating rule, coating permits to operate, toxic air emissions rule	I-Reduce Fugitive VOCs, HAPs, and particulates	10% reduction by January 2004
<b>Noise/Odor/Radiation:</b>										
Odor from VOCs Fume	Applying Coating (Pro-7)		No	No	No	No	N	Does not meet significance criteria	NA	NA
<b>Wastes:</b>										
Contaminated Scrap	Waste Paint Cans (Out-1)	10,000 lbs per year	No	No	Yes	No	S	Waste Reduction Program	S-Study waste reduction strategy	Complete Study by April 2003
Contaminated Waste	Tyrex Suites, Rollers, Brushes, Filter Masks, Paint Stirrers, Drop Clothes, Masking Tape (Out-5), Debris (Out-6)		No	No	Yes	No	S	Waste Reduction Program	S-Study waste reduction strategy	Complete Study by April 2003
Waste Chemicals	Waste Paint and Solvent (Out-2)	1,500 gallons	Yes	Yes	Yes	NA	S	RCRA (Title C)	C-Maintain Compliance	Ongoing
Solid Waste, Landfill	Consolidate contaminate disposables (Pro-12) and debris (Pro-13)	10,000 and 5,000 lbs per year	No	No	Yes	No	S	Waste Reduction Program	S-Study waste reduction strategy	Complete Study by April 2003
<b>Water Discharges:</b>										
NA										

Example 6-2: Identification of Objectives and Targets for Drydock Painting (continued)



ASPECT IDENTIFICATION			SIGNIFICANCE DETERMINATION						OBJECTIVES & TARGETS	
Category/Aspect	Inputs, Processes, Outputs, Products	Quantity or Volume	Legal Requirements/ Voluntary Commitments, Facility Policy	Community Concern	Pollution Prevention Potential	Potential Impact to the Environment	N or S	Rationale for Significance (S) or Nonsignificance (N)	Objective & Type C = control or maintain S = study or investigate I = improve	Target
<b>Stormwater Discharge:</b>										
VOC-contaminated water			Yes	Yes	Yes	NA	S	Storm water permit	C-Maintain Compliance	Ongoing
Heavy metal contaminated water			Yes	Yes	Yes	NA	S	Storm water permit	I-Reduce heavy metal discharge via storm water runoff	Reduce quantity 50% by 2003
<b>Spillage and Other:</b>										
Spillage	Transport waste cans, cleaning solvents, contaminated solvents and debris to scrap yard (Pro-14, Pro-18, Pro-19, Pro-20)	5 gallons per year	No	No	No	No	N	Does not meet significance criteria, low volume spillage	NA	NA
	Consolidate equipment cleaning solvent into drums (Pro-16)	10 gallons per year	Yes	No	No	NA	S	Volume exceeds "No Spill" Policy limits	C-Maintain Compliance	Ongoing
	Transport coatings and thinners (Pro-1 through Pro-6)		No	No	No	No	N	Does not meet significance criteria, low spillage volume	NA	NA
Spillage, contaminated scrap	Consolidate Waste (Pro-9)	5 gallons	No	No	No	No	N	Does not meet significance criteria, low volume of spillage, scrap is recycled	NA	NA
Coating Thinner Spillage	Consolidate waste paint and solvent (Pro-10)	100 gallons per year	Yes	No	No	NA	S	Volume exceeds "No Spill" Policy limits	C-Maintain Compliance	Ongoing
	Solvent Cleaning of Equipment (Pro-11)	50 gallons per year	Yes	No	No	NA	S	Volume exceeds "No Spill" Policy limits	C-Maintain Compliance	Ongoing
	Consolidate Contaminated Solvent into Drums (Pro-16)	10 gallons per year	Yes	No	Yes	NA	N	Does not meet significance criteria, low volume of spillage	NA	NA

Example 6-2: Identification of Objectives and Targets for Drydock Painting (continued)