

Appendix A

Definitions

Site:

An organization with operations that are contiguous and under the same local management would be considered one site. An organization with operations in multiple locations should have each location interested in the program apply as an individual site. Exceptions may include multiple locations that have integrally related operations under the same local management (i.e. land applications sites, temporary offsite activities, etc.). All exceptions will be reviewed on a case-by-case basis.

Certifying official:

The highest level of management/authority for the site in question.

Significant Violations:

For the purposes of the Environmental Stewardship Initiative, a significant violation is defined as a civil penalty, a special order of consent, an injunction, a temporary restraining order, a stop work order, or more than two Notice of Violations (NOV) from one DENR division. Exceptions can be made if the regulatory program determines that the nature of the violations resulting in more than two NOVs is not environmentally significant.

If there are one or two NOVs from multiple DENR divisions, then DENR will review the applicant's compliance patterns and responsiveness to determine if the NOVs, as a group, will be considered significant.

The Advisory Workgroup will consider NOVs and special orders of consent on a case-by-case basis, using this definition as guidance.

Normalization Factor:

Please enter the numerical value used to normalize the data (i.e. normalization factor). This factor will be used to determine the non-normalized value for the unit in question. For example: If the baseline value for nitrogen reduction is 0.025 pounds per pounds of production and the total production was 250,000 pounds, 250,000 should be entered here.

Example 1 Goal (Objective): *Reduce Disposal of Solid Waste*

Target: *Reduce annual solid waste disposed of in landfill 10 % by 2006 from 2003 baseline*

Performance Data	Year	Value	Units	Normalization Factor
Baseline -	2003	100	Tons	N/A
Current Status -	6/05	40	Tons	N/A
Target -	2006	90	Tons	

List the top Pollution Prevention or Process Efficiency Improvements that ...

achieved reduction/increase prior to the baseline: [1\) Implemented cardboard recycling program, 2\) recycling pallets](#)

have been or are being implemented since the baseline to meet the target: [1\) Eliminated incoming packaging for major raw materials \(returnable packaging\), 2\) achieving 100% cardboard recycling](#)

are possible future activities to meet target: [1\) Expand recycling program to include plastic waste](#)

Example 2 Goal (Objective): *Reduce surface water pollution*

Target: *Reduce annual total nitrogen discharged per pound produced 20% by 2006 from 2003 baseline*

Performance Data	Year	Value	Units	Normalization Factor
Baseline -	2003	0.025	Lbs per lbs of production	250,000
Current Status -	6/05	0.023	Lbs per lbs of production	120,000
Target -	2006	0.020	Lbs per lbs of production	

List the top Pollution Prevention or Process Efficiency Improvements that ...

achieved reduction/increase prior to the baseline: [1\) eliminated the use of ammonia as a raw material](#)

have been or are being implemented since the baseline to meet the target: [1\) Identified other major sources of nitrogen in raw chemicals, 2\) switch suppliers of major chemical with nitrogen constituency](#)

are possible future activities to meet target: [1\) Evaluating a new technology to remove nitrogen from wastewater](#)

Appendix B

Aggressive Goal Guidance

In this section of the application, applicants should list those goals it feels show the aggressiveness in which the site is addressing its environmental issues.

- Goals not listed will not be considered in assessing the aggressiveness of the site's efforts; therefore, it is in the applicant's best interest to list as many of the current goals as possible.
- These goals must include pollution prevention and/or process efficiency improvement activities which have had a major impact in progress toward the goals and demonstrate a commitment to go beyond compliance. Pollution prevention projects include activities that result in the reduction, reuse or recycling of a raw material, byproduct or waste. The applicant should be prepared to show what type of impact the past or present pollution prevention and/or process efficiency improvement activities have had at the site in achieving the progress to date. It is important that progress toward goals has not been solely achieved by production changes not associated with environmental efforts.
- Goals should demonstrate annual improvements to performance, be appropriate to the nature, scale and environmental impact of the site and result in reductions of the site's environmental impact.
- These goals must be included in the framework of the EMS (i.e., approved by top management, communicated to appropriate employees, etc.).
- The aggressiveness of these environmental goals can be shown through both the site-specific targeted reduction in environmental impact, the techniques and technologies required to achieve the goal, past accomplishments in reductions, as well as the breadth of environmental issues addressed in the goals listed (i.e., the number of significant aspects and impacts addressed or other environmental concerns).

Appendix C

Going Beyond Compliance Guidance

In this section of the application, applicants should list those activities taken at the site within the last five years as well as planned future activities to go beyond compliance. If these activities are related to one of the performance goals please list it there only. Examples of going beyond compliance include:

- Emitting, discharging and/or raw material utilization at levels well below permitted or regulated levels (local, state or federal) or complete elimination of these activities for specific pollutants, pollutant parameters and/or chemical usage.
 - List the permitted level and the actual average level emitted or discharged for the last complete reporting year and the average level year to date.
- Controlling, reducing and/or eliminating emissions, discharges, raw materials and resources not currently permitted or regulated (local, state or federal) for your organization 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.
 - Examples include going from a large to a small conditional exempt quantity hazardous waste generator status, significant industrial user to a industrial user pretreatment status, TitleV to a synthetic minor to a minor or small, etc.
- Frequency of internal inspections/audits, monitoring/sampling or record keeping that is beyond requirements for that regulated activity (local, state or federal).
 - List the actual frequency of internal inspection, monitoring/sampling or audits, and the number required by the regulations.
 - Inspections/audits beyond requirements would include those third-party inspections/audits performed by personnel other than regulators.
- Level of internal inspections/audits, monitoring/sampling or record keeping that is beyond regulatory requirements (local, state or federal).
 - Describe the issues that are checked or the equipment inspected, what is monitored or sampled, or what type of records are kept that are beyond regulatory requirements.

Appendix D

Examples of Communication

- Internal or external presentations to community leaders, neighbors, educational institutions, etc.
- 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 Web site
- Other activities or programs that educate and seek input from local community on environmental issues

Appendix E

Examples of Integration into Business Functions

- Having management review meetings more frequently than annually
- Integration of management review meetings for environmental progress with other business programs
- Integration of environmental goals with other business goals (i.e., Triple Bottom Line approach)
- Frequency and type of communications to employees regarding progress on environmental goals and environmental issues.
- Employee reward and recognition programs for success related to environmental efforts/goals
- 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
- Corrective and preventative actions reporting system or other reporting system available to all employees.

Appendix F

This Functionally Equivalent Checklist is meant for use as a guide by DENR staff to determine if an organization's environmental management system (EMS) substantially meets requirements for an EMS as described in ISO 14001:2004. Text below and requirements for each of the elements is summarized from the ISO 14001 standard that is the reference document. This checklist should be used consistent with the On-Site Verification Protocol for N.C. Department of Environmental and Natural Resource's Environmental Stewardship Initiative (ESI).

✓	Requirements	Comments
4.1 General Requirements		
<input type="checkbox"/>	Define and document the scope of the EMS	
4.2 Environmental Policy		
<input type="checkbox"/>	Commitment to continual improvement, prevention of pollution, and compliance with applicable legal and other requirements	
<input type="checkbox"/>	Documented, implemented and maintained	
<input type="checkbox"/>	Communicated to all employees & contractors	
<input type="checkbox"/>	Available to the public	
<input type="checkbox"/>	Approved by top management	
4.3.1 Environmental Aspects		
<input type="checkbox"/>	Establish and maintain a procedure for identifying environmental aspects and related impacts of activities, products or services for all areas within scope of the EMS as well as significant impacts	
<input type="checkbox"/>	Identify significant aspects	
<input type="checkbox"/>	Information is documented and kept up-to-date	
4.3.2 Legal and Other Requirements		
<input type="checkbox"/>	Key regulatory requirements have been identified and the organization has determined those that apply to its environmental aspects	
<input type="checkbox"/>	Procedure for keeping up-to-date on regulatory requirements	
4.3.3 Objectives, Targets, and Programs		
<input type="checkbox"/>	Document objectives and targets considering,	

✓	Requirements	Comments
	at a minimum, the organization's significant aspects and legal and other requirements	
<input type="checkbox"/>	Establish, implement, and maintain a program for achieving objectives and targets, including designation of responsibility, means, and time-frame	
4.4.1 Resources, Roles, Responsibility, and Authority		
<input type="checkbox"/>	Management shall ensure availability of adequate resources to establish, implement, maintain, and improve the ESM.	
<input type="checkbox"/>	Document roles, responsibilities and authorities for key roles in EMS	
<input type="checkbox"/>	Identification of EMS representative to ensure the EMS is implemented, maintained, and reported to top management	
4.4.2 Competence, Training, and Awareness		
<input type="checkbox"/>	Ensure employees and those working on their behalf whose work may create a significant impact on the environment are competent and retain records	
<input type="checkbox"/>	Procedure for employees, and those working on their behalf, for awareness training to include policy, significant aspects, potential impacts, roles and responsibilities, and consequences of departure.	
4.4.3 Communication		
<input type="checkbox"/>	Procedure for internal communication	
<input type="checkbox"/>	Procedure for receiving, documenting, and responding to external communication	
<input type="checkbox"/>	Document decision to communicate externally about significant aspects.	
4.4.4 EMS Documentation		
<input type="checkbox"/>	EMS documentation includes: Environmental policy; objectives and targets; scope of EMS; main elements of the EMS and their interaction; records as required by the standard; other records as determined by organization	
4.4.5 Control of Document		
<input type="checkbox"/>	Procedures exist for approving; reviewing and	

✓	Requirements	Comments
	updating and re-approving documents; ensure revision status is identified.	
<input type="checkbox"/>	Current versions of relevant documents are available where operations essential to the effective functioning of the EMS are performed	
4.4.6 Operational Control		
<input type="checkbox"/>	Document procedures stipulating operating criteria for those operations and activities associated with the identified significant environmental aspects including plans for maintenance	
<input type="checkbox"/>	Establish, implement, and maintain procedures related to significant aspects and communicating applicable procedures to suppliers, including contractors	
4.4.7 Emergency Preparedness and Response		
<input type="checkbox"/>	Establish, implement and maintain procedures to identify potential emergency situations and potential accidents, and how it will respond to them	
<input type="checkbox"/>	Tested response procedures	
<input type="checkbox"/>	Revise procedures following testing, accidents and/or emergency situations if needed	
4.5.1 Monitoring and Measurement		
<input type="checkbox"/>	Procedures developed for monitoring and measuring key characteristics of operations that can have a significant impact (refer to 4.3.1)	
<input type="checkbox"/>	Procedures for tracking environmental performance and operational control of objectives and targets	
<input type="checkbox"/>	Maintain calibration records for equipment used to monitor significant aspects	
4.5.2 Evaluation of Compliance		
<input type="checkbox"/>	Procedures and records for periodically evaluating compliance with applicable legal and other requirements	
4.5.3 Nonconformity, Corrective Action, and Preventive Action		

✓	Requirements	Comments
<input type="checkbox"/>	Procedure for dealing with actual and potential nonconformities and corrective and preventive action to mitigate environmental impacts	
<input type="checkbox"/>	Process identifies and addresses the cause of actual or potential problems	
<input type="checkbox"/>	Process evaluates the need for action to prevent nonconformities and implements actions to avoid their occurrence	
<input type="checkbox"/>	Procedures and documents are updated following corrective or preventive action	
<input type="checkbox"/>	Record results and review effectiveness of corrective actions taken	
4.5.4 Control of Records		
<input type="checkbox"/>	Establish and maintain records to demonstrate conformity with the EMS and standard	
<input type="checkbox"/>	Procedure for id, storage, protection, retrieval, retention, and disposal of records	
4.5.5 Internal Audit		
<input type="checkbox"/>	Audits program and procedures in place	
<input type="checkbox"/>	Audits performed on a periodic basis to determine conformance to EMS and standard and results reported to upper management	
4.6 Management Review		
<input type="checkbox"/>	Record evidence of top management reviews at intervals that assure the continuing suitability, adequacy and effectiveness of the EMS	
<input type="checkbox"/>	Management review shall address at a minimum audit results and progress on objectives and targets	