



## **The Seven Principles of Environmental Stewardship Final General Performance Indicators**

May 1, 2002

### **I. INTRODUCTION**

**Purpose.** On June 4, 1999, the United States and Mexico reached a major milestone in establishing a framework for advancing sustainable development in North America. The foundation for this regime is a document known as "*The Seven Principles of Environmental Stewardship for the 21<sup>st</sup> Century*". The three public sector signatories to this public-private partnership are the United States Environmental Protection Agency, the Mexican Secretaria de Medio Ambient y Recursos Naturales (SEMARNAT) and the Border Environmental Cooperation Commission (BECC). The original private sector signatory was the United States - Mexico Chamber of Commerce. Together, these four partners have combined their resources to plan, implement and institutionalize a voluntary sustainable development regime in concert with various industry sectors. This structure and process will have developed general performance indicators that are measurable. In addition, these partners will develop sector specific performance indicators, capacity building, third-party verification and training for the implementation of best practices and measurable performance indicators. Sector workshops along the border are planned for the energy sector, the transportation sector, the manufacturing sector and the infrastructure sector over the course of the next year.

**Methodology.** The methodology that resulted in the promulgation of these general performance indicators has been to solicit broad-based stakeholder participation needed to develop a consensus on the performance indicators and best practices associated with each principle. Assisting in the employment of this methodology were expert representatives from various state, federal and private sector organizations such as SEMARNAT, EPA,

New Mexico's Green Zia program, the Arizona Amigos program, Resources Renewal Institute, USMCOC, etc.

The methodology also employs aspects of the Administrative Procedures Act, urban planning principles for public participation and other inclusive and transparent decision-making processes and communication techniques.

Two workshops were designed and organized after significant input from federal and state governments, non-governmental organizations (NGOs) and private industry. The first workshop held in Mexico produced a "draft" set of performance indicators and best practices that were published for public comment on the Chamber's website. These draft performance indicators served as a baseline for the second Workshop that was held in the United States. After a thirty-day public comment period, a final set of General Performance Indicators (GPIs) resulted. These have been summarized below for a final report to the EPA and the general public.

**Workshop Organization and Output.** The organization of the general performance indicators mirrors the format of the workshop. Each breakout session at the workshop had a facilitator whose primary purpose was to elicit input from the stakeholders at the table, while striving to develop an overall consensus on the performance indicators and best practices regarding the separate principle considered at each breakout session. Immediately after consensus was reached at the end of these sessions, the written output was processed into a power point presentation, to be presented to all participants in plenary session. After the luncheon speech, each of the "real-time" work products for each principle was projected onto a screen so that the entire plenary could review and comment on their own and the other six principles' performance indicators. In this manner, the work product of each table was further enhanced by comments by all of the meeting participants.

After the review of all seven principles' best practices, recommendations and performance indicators, the plenary then reviewed over-arching aspects of the seven principles; third-party verification, training, capacity building and institutionalization. The chair of the plenary made changes needed for overall consensus, whereupon the raw form proceedings were amended to the satisfaction of the whole group and the work product was accepted.

In the following days, the work product was then circulated to all participants for further review and comment by placement on the Internet.

After a thirty-day comment period, further comments have been reviewed and integrated into the final set of General Performance Indicators (GPIs). These GPIs will serve as the new baseline for holding Sector Specific Workshops to develop Sector Specific Performance Indicators (SSPIs) for significant sectors of the economy.

Based on continuing interest from the stakeholders, the following sectors will be the workshop subject matter during the next year: Energy, Transportation, Infrastructure and Manufacturing (Tanning). Third year sectors will be: Manufacturing (automobile and electronics): agriculture, telecommunications and health care/pharmaceuticals.

## II. THE TEXT

**Note:** In order to retain the actual language elicited from the above methodology, the *verbatim* text was sent to the participants of both workshops and to the public via the Chamber's home page for comment. This was to assure the integrity of the process of consensus building. Comments from some of the participants and partners suggested that a "better explanation of the concept could be expressed "...by simply crafting a complete sentence for each of the sections, explaining more fully the concept..." This is especially important for those respondents who did not attend either workshop. The comment was well taken and using editorial discretion, without changing the substance of the content, the language has been expanded to better explain and flesh out the concept.

In addition, some comments viewed conceptual overlap between principles and sought clarification of that overlap, *i.e.*, "cross-walking between principles". This comment is well taken, but some overlap of concepts into more than one principle may be appropriate. While acknowledging this "conceptual overlap among principles", the editor reserves judgment about how to organize "concept overlap" in the final edition of these General Performance Indicators.

Another comment suggested that "... an explanation of the concept, how it relates to the Principle..." would be useful for the first-time reader and reviewer. The editor, employing editorial discretion, has provided explanations for each of the principles to facilitate review by other respondents. The original stakeholder material is included in the following sections in italics, while the explanation is in regular text format.

Another suggestion was that this document be morphed into a "guidance document" for future training, in general language and a clear definition of key terminology. This can be done after the next comment period.

Another commenter suggested that the introductory material explain how the principles include best business practices, success stories (or past accomplishments) and performance indicators. The commenter further suggested that these best practices and performance indicators should be written in plain English and have complete sentences.

### **III. PERFORMANCE INDICATORS**

**Background.** The methodology employed was designed to gain consensus among the stakeholders and maintain the integrity of the output from the workshops, from table discussion to "flip chart" to Power Point to presentation to the Plenary and adoption. One commenter suggested that while the methodology was valid for consensus among the stakeholders present at the stakeholder meetings, that those commenters and the public, who were not present, may not understand the "raw text".

In order to maintain the integrity of the work product, no substantive textual changes were made from the time the facilitator of a table reached a consensus and it was placed contemporaneously onto the "flip chart". The "flip chart" was then taken to a "scribe" who transcribed the text into a Power Point presentation, after which it was presented to the Plenary, where after appropriate amendments or modifications, the text was adopted by consensus. The "raw text" is what stakeholder participants commented upon and in which some respondents suggested editorial changes be made.

In keeping with the comment, the two editors of these performance indicators are exercising their expert discretion to make the text more readable and understandable to those who commented and to members of the public who were not present. See Section IV. METRICS - PERFORMANCE INDICATORS. To maintain the integrity of the stakeholders' work product, no substantive changes were made to the body of the work product. Below is the revised text for public comment on the Internet for the next thirty (30) days.

## RESULTS OF STAKEHOLDER WORKSHOPS

### I. STAKEHOLDER OBSERVATIONS AND COMMENTS.

#### **PRINCIPLE #1: Top Management Commitment**

1. External
  - a) ***Cultural effectiveness (binational):*** Management should establish policies and procedures that are culturally relevant and effective in a binational framework.
  - b) ***Recognition:*** A company or organization implementing policies and processes that support the 7 Principles should be recognized for their endeavors. The company should also recognize employees that effectively implement these policies and procedures.
  - c) ***Accountability:*** A company's policies should be designed to improve accountability to the public for its actions, *e.g.*, through reporting to the public. A company should hold its employees accountable for implementing management's policies.
2. Internal
  - a) ***Organizational framework:*** Companies need an internal organizational structure designed to implement environmental management objectives efficiently and effectively.
  - b) ***Programmatic emphasis:*** There should be a clear programmatic element in the company aimed at continuous environmental improvement.

#### **PRINCIPLE #2: Compliance Assurance and Pollution Prevention**

1. External
  - a) ***Preventing, as well as addressing past pollution:*** Company objectives should include "end of pipe" (remediation) and "beginning of pipe" (pollution prevention) solutions.
  - b) ***Understanding cross-media effects: Compliance and remediation activities should avoid resolving*** problems with one media, such as water, if the resolution causes an adverse impact on another media, such as air, *e.g.*, "air stripping" to treat contaminated water might result in air pollution problems.
  - c) ***Important to address border, then remainder of media:*** Some important border programs currently address water and solid waste as priorities, but other media, *e.g.*, air quality, need to be addressed as well.
2. Internal

- a) ***Integration into the corporate culture:*** The objectives of compliance and pollution prevention must be an integral part of the corporation's organizational and production frameworks. Emphasis on clean production goals should be unquestioned.
- b) ***Full cost accounting:*** Internal accounting procedures should include "end to end" or life cycle costing of products so that the full cost of production and marketing a product takes into account external costs of the product during its life cycle, including impacts on or hazards to the environment, including any potential liabilities

**PRINCIPLE #3: Enabling Systems**

- 1. External
  - a) ***Best type of Environmental Management System (EMS) to match company needs:*** There are numerous alternative EMSs that enable compliance with laws and prevent pollution. A company should select an EMS that best suits its production and operational situation.
- 2. Internal
  - a) ***Size of company (financial):*** Small and medium sized companies have more difficulty affording environmental management systems. Large companies can assist Small to Medium Sized companies (SMEs) through mentoring programs or training programs.
  - b) ***Type of processes used (simple vs. complex).*** Tradeoffs should be evaluated when considering simple vs. complex solutions. The overall goal should be to achieve the best outcome that will assure pollution prevention, many of which can save the company resources and improve the financial bottom line. The type of production influences the type of process to be used. Environmental auditing can determine the relationship between the processes.
  - c) ***How an environmentally advanced company can enlist less advanced players in the Supply Chain:*** Companies with more advanced environmental management approaches should consider "mentoring" their supplier chain to help promote the Seven Principles' environmental standards throughout the industry sector. This would also improve their own standing through increased "vertical" compliance within the industry.
  - d) ***Analysis to determine EMS to best suit needs:*** An audit, including production analysis would provide an understanding of both output and waste streams associated

with the production process. This information would help a company select the most appropriate EMS model.

- e) ***Following total quality management (TQM) principles: Plan, Do, Check, Act.*** This is the accepted cycle of actions for a total quality management (TQM) system. Within this framework, any EMS can be evaluated as to its ability to implement and support each of these steps (*see* the attached preliminary EMS Evaluation Matrix).

#### **PRINCIPLE #4: Measurement and Continuous Improvement**

1. External
  - a) ***Environmental actions should be an integrated process for prioritizing and identifying environmental aspects and impacts for; communities; neighbors; NGOs; governments; customers and suppliers.*** An impact and/or cost/benefit analysis could forecast both the costs and the positive benefits to each of the above groups. Measuring each element by its impact before and after would give a useful evaluation “yardstick” for determining improvements.
  - b) ***Third party verification:*** The use of "third party verification" will promote confidence in a company's performance and improvements in environmental performance.
  - c) ***External reporting: how/what:*** A company can use “goal setting” *via* public reports such as annual reports, which should include what the goals and how they are to be achieved. Future reporting can include measurable improvements made against such goals.
2. Internal
  - a) ***Resources should be available within a company (not prescriptive):*** *e.g.*, company policies and resources should support continuous improvement without having this be mandated.
  - b) ***Start with environmental internal aspects and impacts analysis – evaluate at process levels:*** For example, an initial audit of production processes and impacts should be made.
  - c) ***Measurement level: (micro system) company action plan:*** This type of plan will detail at which levels of production specific actions would need to be made and measured.

- d) ***Time horizons: short-, medium- and long-term:*** Plans of action have short to longer time frames, the results of which can more readily be measured.
- e) ***An effective environmental management system (EMS)*** is an integrated process for prioritizing and identifying environmental aspects and impacts for company and employees, considering all elements of what should be done.
- f) ***Third party verification*** is an external process for confirming whether improvements have been made. Initial external and follow up audits are examples.
- g) ***The challenge of designating an organizational entity to report performance data and information.*** As a specialized information process, this would consider potential or inadvertent releases of proprietary production information.

**PRINCIPLE #5: Public Communications**

- 1. External
  - a) ***To identify and communicate*** with government, media, customers, investors, bankers, NGOs, unions, community residents, other businesses, competitors and consumers some kind of community outreach and ongoing public input process would be useful.
- 2. Internal
  - a) There should be options and projects ***to identify and communicate with shareholders, managers, employees, unions, and suppliers***, e.g., task forces, committees, mentoring information and communications channels.

**PRINCIPLE #6: Industry Leadership**

- 1. External
  - a) ***Acknowledgement of industry's role and leadership level*** could occur through the top management commitment principle, in terms of the company's visibility and determination to work with other sector-related companies towards continuous improvement and environmental stewardship.
  - b) ***Compliance with 7 Principles Stewardship plan*** would be a good faith effort to demonstrate industry leadership.
- 2. Internal

- a) *Development of strategic plan for implementing environmental stewardship* means identifying the external and internal constraints,
- b) *Development, implementation and assessment* of continual improvement via internal indicators of success.

**PRINCIPLE #7: Community Environmental Stewardship**

- 1. External
  - a) *Outside economic interests, power brokers, outside control* was expressed as a concern for implementing the 7 Principles and EMS approaches.
- 2. Internal
  - a) *Adjusting vested interests for the common good* can be through seeking “win-win” solutions.

**II. EXAMPLES AND BEST PRACTICES**

**PRINCIPLE # 1: Top Management Commitment**

- 1. External
  - a) *Recognized and accepted EMS approaches (e.g., ISO 14000, Cleaner Industry, CEC Guidelines, CERES, etc.)* should be considered for maximizing credibility.
  - b) *Third party recognition programs* are powerful incentives. One such program, the Green Zia Program is similar to the Malcom Baldrige Award for private sector entities.
- 2. Internal
  - a) *Clear EMS policies and responsibilities* that leave no question as to their intent and how they would be implemented.
  - b) *Public accountability* as part of the company’s “culture of compliance.”

**PRINCIPLE #2: Compliance Assurance and Pollution Prevention**

- 1. External

- a) **4 Rs (recover, reclaim, recycle, reuse)** are excellent guidelines for pollution prevention and remediation, working with external resources and companies.
3. Internal
- a) **Raw material substitutions or conservation, e.g., reduction or change from solvent based paint to water based paint.** Process auditing can identify opportunities for all of these actions, and reduce costs as well.
  - b) **4 Rs (recover, reclaim, recycle, reuse).** The same formula is applicable to internal process planning.
  - c) **Substituting renewables for non-renewables:** (e.g., solar, wind, nuclear). Energy efficiency audits can identify these opportunities and cost savings.

**PRINCIPLE #3: Enabling Systems**

1. External
- a) **Customers and supplier involvement.** Some companies involve their customers in their environmental management activities, e.g., conservation with customers, and mentoring about best practices with suppliers and/or mandates for suppliers to use certain practices such as the 7 Principles.
2. Internal
- a) **Total Quality Management (TQM), (Plan, Do, Check, Act)** is an industry-accepted approach to all management systems, including environmental management systems.
  - b) **Leadership and Planning (vision + strategic objective + resources)** can be done by top down policies that call for planning and implementation of systems or processes at the day to day operational level, with accountability for results emphasized.
  - c) **Information and analysis** through research, analysis and process selection, based upon requirements.
  - d) **Employee involvement (accountability)** is key to enabling the process at the operational level.
  - e) **Process management for energy efficiency, conservation and pollution prevention (implementation):** many approaches or strategies may be available to accomplish all of these. Management should determine the techniques and tools that accomplish these in a cost-effective manner.

- f) **Results, e.g., compliance assurance review.** This is the “check” part of total quality management, being followed by “action” to remedy any problems. It is like quality assurance.

**PRINCIPLE #4: Measurement and Continuous Improvement**

- 1. External
  - a) **Incentives, benefits and rewards: Tiered recognition programs.** Recognition of the company and of its subsidiaries, suppliers or affiliates.
  - c) **Public rewards system:** like the Green Zia Program
  - d) **Industry – sector specific awards: Can be competitive to see the best performing company (henceforth “best practices.”)**
  - e) **Disclosure to interested parties, e.g.,** through Annual Reports, goal setting and measurement, *inter alia*.
  - f) **Frequency of reporting (Annual report or more frequent.)**
  - g) **Flags, seals, logos, “bugs” and banners advertising conformance with the Seven Principles standards** can be a positive action for a company in a competitive world. This “seal of approval” would be issued only after a “third party verification” using the performance indicators of a sector as the criteria. This public aspect fosters accuracy of claims.
- 2. Internal
  - a) **Established baseline for continuous improvement (short and long-term). Objective criteria and cost-benefit analysis includes economic and environmental aspects.**
  - b) **Periodic reporting (at least annually)** keeps the “do”, “check” and “act” aspects of TQM stimulated.
  - c) **Incentives, benefits and rewards (internal recognition by division or employee)** are essential to obtaining the desired behavior and results within the company.
  - d) **Flags, seals, logos, “bugs” and banners to highlight performance** are part of the recognition and pride factors.

**PRINCIPLE #5: Public Communications**

- 1. External
  - a) **Communication with stakeholders about the management policy to implement recognizable EMS programs and benchmarks such as ISO 9000, 14000, Industria Limpia, CEC guidelines and Responsible Care** demonstrates good faith, open and transparent actions.

2. Internal
  - a) ***Communication with stakeholders about the management policy to implement recognizable EMS programs such as ISO 9000, ISO 14000, Industria Limpia, CEC guidelines, and Responsible Care*** gives the company's program internal legitimacy as part of the corporate culture and emphasis within the company hierarchy.

**PRINCIPLE #6: Industry Leadership**

1. External:
  - a) ***Stewardship Planning*** identifies needs, goals and actions needed to make it a reality.
  - b) ***Benchmarking*** provides a powerful impetus for improvement over time.
  - b) ***Greening of supplier chain:*** Companies have policies requiring their suppliers to be in compliance to do business with them, or mentor them to help them into compliance.
2. Internal:
  - a) ***Recognition programs/awards:*** Positive incentives are in place to foster internal conformance with policies.
  - d) ***Strategic planning:*** Maximizes efficiency of the processes to be used.
  - e) ***Internal indicators of continuous improvement success:*** This can happen when companies are transparent about their own goals and how they will know if they attained them. (Measurement factors).

**PRINCIPLE #7: Community Environmental Stewardship**

1. External:
  - a) ***Other successful models, recognition of success, e.g., successful partnerships.*** There are numerous examples of company-community cooperation in this regard. Many companies advertise such programs and projects as "Success Stories".
2. Internal:
  - a) ***Models of successful partnerships*** can be replicated within companies, divisions, and industry sectors.
  - b) ***Rewards and recognition of management for establishing successful communities and organization*** are excellent forms of advertising for a company.

### III. RECOMMENDATIONS TO IMPLEMENT PRINCIPLE

#### PRINCIPLE #1: Top Management Commitment

1. External
  - a) **Companies that communicate EMS policy to public** are seen as more open, transparent and committed.
  - b) **Provide transparent process** through keeping the public and the entire company apprised of policies and progress.
2. Internal
  - a) **Create culturally effective organization and management system**, particularly in instances where diversity or international aspects of doing business apply.
  - b) **Establish clear corporate environmental policy** so there is no doubt as to intent of management.
  - c) **Provide for governance** through organizational structures to manage and evaluate the process.
  - d) **Regular reporting** should be in effect to emphasize the company's commitment.

#### PRINCIPLE #2: Compliance Assurance and Pollution Prevention

1. External
  - a) **Economic compliance incentives to stay with program** can be effected by internal recognition, awards and promotion.
  - b) **Know who the external stakeholders are (from beginning to end of process)** for purpose of establishing committees and activities to ensure interaction with the stakeholders.
  - c) **Create partnerships among stakeholders to assist in technical support for better compliance.** This invites broad-based input to the company's processes and a sense of mutual investment in the outcome, thereby supporting "win-win" results.
2. Internal
  - a) **Create database to share and find information on "best practices" and "success stories"**.
  - b) **Incentives to stay with program** should be a part of the company's day to day operational and performance milieu.
  - c) **Know internal stakeholders from beginning to end**, such as the decision makers and the decision takers.

### PRINCIPLE #3: Enabling Systems

#### 1. External

- a) **Promote and support community awareness** of the tools available to resolve and/or prevent problems.
- b) **Establish mentoring among consumer and supplier communities** to promote the “greening” of the supplier chain through shared technical information and techniques.
- c) **Utilize technology to assure compliance (from agencies, associations, etc., to promote cleaner production)**. There are many resources for this information through EPA, associations, and the private sector (experts).
- d) **Practice P2 and natural resource conservation** to minimize the impacts of the business on the environment.
- e) **Regulatory and legislative advocacy** for the use of effective systems, e.g., such as ISO 14000, Cleaner Industry, Responsible Care, CEC Guidelines, CERES and others.
- f) **Appropriate property transfer** that assures responsibility and accountability through disclosures and other actions.

#### 2. Internal

- a) **Institute accountability at leadership level** through the use of credible enabling systems and assignment of responsibility to specific personnel.
- b) **Develop "road map" for EMS (plan for the plan)**. This assumes that the EMS selected will be based on specific operational requirements and goals. (“Plan” part of Total Quality Management).
- c) **Set clear goals that include compliance, financial resources (\$), and P2, waste minimization to ensure end-to-end process improvement, even beyond compliance levels, wherever possible.**
- d) **Implement actions to achieve goals** as part of the “DO” aspect of Total Quality Management.
- e) **Develop incentives to meet goals** in order to foster and assure compliance now and in the future.

- d) ***Practice P2 and natural resource conservation*** as a matter of company “culture”.
- e) ***Ensure equipment reliability***, which speaks to both worker safety and environmental protection.
- f) ***Institute safety practices for incident-free operations*** as part of pollution prevention (P2)
- g) In keeping with the “***PLAN – DO – CHECK – ACT***” total quality management approach, ***determine appropriate type and level of EMS and process:***
  - *Procedures*
  - *Select champions*
  - *Training*
  - *Implementing actions*
  - *Document with internal tools*
  - *Review*
  - *Revise*

**PRINCIPLE #4: Measurement and Continuous Improvement**

- 1. External
  - a) ***Find effective ways to disclose with charts, graphs, and other visual aids to track and report results.*** The public is more likely to read and interpret these than written reports.
  - b) ***Consider external reporting on the percentages (%) of improvement basis*** as a convenient tool to demonstrate progress rather than reporting only static (isolated) numbers.
  - c) ***Establish and support a third party entity*** such as an industry or trade association or sustainable development center ***to foster improved performance (sector to sector) via:***
    - i. Maintaining database of best practices*
    - ii. Serving as center of excellence (e.g. research)*
    - iii. Independent verification (performance validation)*
    - iv. Recognition (incentives, benefits and awards)*
    - v. Training and outreach to manufacturers*
  - d) ***Mandatory reporting*** per each nation and state’s regulatory requirements are expected obligations of companies.
- 2. Internal
  - a) ***Report via employee meetings and internal communications under*** the company requirements and

- policies, utilizing wherever possible, visual aids and graphics to show improvements against baselines.
- b) ***Assign organizational entity responsibility for reporting*** to ensure the quality and quantity of reporting against goals and baselines.

**PRINCIPLE #5: Public Communications**

- 3. External
  - a) ***Communicate with external stakeholders the company's success*** in meeting benchmark standards and following best practices to derive the benefits of public recognition and engender confidence in the company's performance.
- 2. Internal
  - a) ***Train internal stakeholders to meet benchmark standards and follow identified best practices.*** Provision of training to employees also relates to top management commitment.

**PRINCIPLE #6: Industry Leadership**

- 1. External
  - a) ***Encourage "greening" of supplier chains*** through accepting a mentor role in the relationship and through doing business with suppliers that are in compliance.
  - b) ***Practice organizational benchmarking within industry sector*** to raise industry standards for performance and compliance.
  - c) ***Benchmarking across sectors*** can raise standards overall as a "best practices" culture.
  - d) ***Recognition awards*** should be given to those companies and/or industries that use benchmarking and other tools to improve environmental performance.
  - e) ***Develop vehicles for sharing information*** within and between sectors, such as a center for sustainable development, an association or other institutional vehicle.
  - f) ***Encourage trade groups, professional organizations to promote 7 Principles for Stewardship*** such as is being done in the process that carried out these stakeholder meetings.
  - g) ***Mentoring projects. Larger company mentoring mid-and smaller-sized firms on "green" practices*** could include written or verbal information, training, and partnering, etc.
- 2. Internal

- a) **"Greening" of suppliers** within the supplier chain in a sector is advocated.
- b) **Organizational "benchmarking" and "best practices"** within sectors or supplier chain is advocated.
- c) **Develop strategic plan to implement environmental stewardship** within the company and within the supplier chain. Create organizational structure to implement this strategic plan.
- d) **Develop vehicles for sharing information in company**, such as regular meetings, printed materials, newsletters, etc.
- e) **Comply with stewardship plan. Develop, implement, and assess continual improvement via internal indicators of successful stewardship to show commitment to performance progress.**

**PRINCIPLE #7: Community Environmental Stewardship**

- 1. External:
  - a) **Provide training and "seed funding" to establish and support community-based organizations** that can partner with the company for a better environment.
  - b) **Community group members should represent individual perspectives, not just affiliations.**
- 2. Internal:
  - a) **Recognize successful establishment of "Sustainable Communities"** by involving communities in the development and measurement of indicators of sustainability within each community and its region.

**IV. METRICS – PERFORMANCE INDICATORS**

**PRINCIPLE #1: Top Management Commitment**

- 1. External
  - a) **Recognition by third parties.** What type of recognition and how often company is recognized are measures.
  - b) **Independent verification:** What is the quality of the independent verification? *e.g.*, credibility of the third party,

standards used as measures (such as compliance with regulations, etc)

- c) **Annual Report to public.** What the company says it will do, vs. what it has done (*i.e.*, progress) are critical to reporting.
- d) **Transparent program.** Willingness to set goals and measure company's own performance against their own goals. Openness to receive public comments. Candid statements about areas needing improvement and actions demonstrating dedication to improving this area. (Measures would be desirable).

2. Internal

- a) Chief Executive Officer (**CEO**) level **published policy**. Examples of policy published in publicly available reports (*e.g.*, Annual Report).
- b) **Effective EMS in place:** Selection and use of EMS that best fits the needs of the company's business or production processes, *e.g.*, appropriate safeguards and measures if company produces hazardous byproducts.
- c) **Culturally sensitive approaches:** These should fit the implementation of EMS models, such as ISO 14000 or the international family of standards to the operational *milieu*, taking into account host country's standards and laws, organizational structures and operational customs.
- d) **Responsibilities clearly assigned, communicated and recognized.** Policies should be communicated, organizational roles assigned, published, reviewed and recognized (for achievements, if applicable).
- d) **Governance structure in place: Organizational assignments and management structure** established and published to implement, review and recognize progress.

**PRINCIPLE #2: Compliance Assurance and Pollution Prevention**

1. External

- a) **Use of TRI to demonstrate and communicate company's actions and successes.**
- b) **People use your company as model in community for great pollution prevention practices (good PR & stewardship).** Measures could be articles in periodicals, TV or radio spots, invitations to speak, etc.

2. Internal

- a) ***Measurable progress long term – Research and Development (R&D) and all corporate areas are involved.***  
Examples of programs and projects that demonstrate this involvement, with results of progress clearly demonstrated.

**PRINCIPLE #3: Enabling Systems**

- 1. External
  - a) ***EMS elements checked against the 7 Principles:***  
Establishment of cross-comparison of various EMS elements with the 7 Principles (*see* Preliminary Matrix attached hereto.)
  - b) ***External accountability established (reporting, etc):***  
Reporting system is in place and company welcomes input from community and other stakeholders.
- 2. Internal
  - a) ***Is an Environmental Management System (EMS) in place?***
  - b) ***Internal accountability established (responsibilities clear):***  
Are *assigned personnel* evaluated for their performance relative to implementing the process?
  - c) ***Plan goals include P2 and compliance:*** Company plans address both beginning and "end-of-the pipe" solutions, as well as tying EMS actions to compliance standards.
  - d) ***System is sustainable with resources:*** Company budget includes both current and future implementation of EMS.
  - e) ***Action plan in place.*** Course of action to evaluate situation (audit), institute compliance measures, evaluate outcomes (check) and create actions to resolve problems are used.
  - f) ***Checks and corrective procedures in place.*** *See* above and the attached matrix developed on the PLAN-DO-CHECK-ACT model

**PRINCIPLE #4: Measurement and Continuous Improvement**

- 1. External
  - a) ***Disclosure of percentage (%) of improvement per year.***  
Company establishes status as baseline for future comparison and an action plan, and then discloses (*e.g.*, in Annual Report) the percentage (%) improvement each year.
  - b) ***Number of external (independent) audits.*** Company uses independent auditors that are qualified for baseline and follow on progress reports.
  - c) ***Environmental performance goals met:*** Comparison of original goals with performance over time.

- d) ***Nonrenewable resource use minimized:*** Energy audits performed regularly, with improvements in energy use demonstrated and documented.
  - e) ***Non-conformance performance improvement.***  
Quantifiable improvement on compliance.
2. Internal
- a) ***Quantity of audits per year (internal).*** Quality of response to the audits is also an important measure.
  - b) ***“Non-conformance” corrective actions performed.*** *See* above.
  - c) ***Number corrective and preventative actions scheduled and closed on time.***
  - d) ***Corrective and preventative action ratio.*** Compare corrective vs. preventative actions over time.
  - e) ***Environmental performance goals met:***
    - i. ***Pollution prevention***
    - ii. ***Utility usage*** (units consumed)
    - iii. ***Non-renewable resource use*** compared to renewable.
  - f) ***Integration of environment and safety.*** Level of attention paid to avoiding accidents through worker safety.

**PRINCIPLE #5: Public Communications**

1. External
- a) ***Performance included in Annual Report***
  - b) ***Number of publications produced*** containing information of interest to stakeholders.
  - c) ***Number of open meetings in which community can interchange information about company’s performance***
  - d) ***Amount and percentage (%) of investment in special media promotion (PBS, etc.,)***
  - e) ***Percentage (%) of marketing efforts that communicate the benchmark standards.*** Change in the percentage (%) over time.
3. Internal
- a) ***Number and percentage of employees trained in best practices***
  - b) ***Number of environmentally related certifications in best practices training, auditing and management.*** Change in number over time.

- c) *Number of graduate degrees paid by company, particularly in environmental engineering, management and related fields.*
- d) *Effectiveness of training in relation to services and product quality.*

**PRINCIPLE #6: Industry Leadership**

1. External:
  - a) *Acknowledgement of industry's leadership.* Recognition by third parties.
  - b) *Supplier chain recognized as green.* Track record on compliance of industry leader and their supplier chain.
  - c) *Sector benchmark standards met.* Benchmark standards published and achieved (reported).
  - d) *Mentoring projects in place,* and with how many suppliers or smaller companies mentored?
  - e) *In place vehicles for sharing information (sector, trans-sector), e.g.,* committees, task forces, associations or research efforts supported.
  
2. Internal:
  - a) *Strategic plan in place to develop, implement and assess continuous improvement.* Published and communicated?
  - b) *Internal indicators of continual improvement* arrived at by internal stakeholder and employee input, in addition to management policies and goals.
  - c) *Recognition programs and awards used.* Are people recognized and given awards for positive performance towards the goals?
  - d) *Vehicles for sharing information in place, e.g., company newsletters, broad report reviews, etc.*

**PRINCIPLE #7: Community Environmental Stewardship**

1. External
  - a) *The community is able to show measurable results in improving both environmental stewardship and sustainable development,* with results based on input of community stakeholders in determining the critical measures of sustainability.
  - b) *Community group members represent individual perspectives, not just affiliations.* Individuals are able and

encouraged to express their own viewpoints as well as those of their affiliated organizations.

- c) ***Total community engagement (business, government, academia, NGOs, religious groups, etc.)***. Industry assembles or attracts input from a broad array of stakeholders and welcomes their input.
- d) ***Commitment to social aspects***. Company develops track record of community outreach and actions that support capacity building in the community, such as training, involvement, partnership activities, etc.

2. Internal

- a) ***Amount of local involvement, e.g., number of hours spent, meetings held, number and contributions of volunteers***. These are measures of how employees are involved in company-sponsored environmental activities, as well as how many are involved on their own time.

**NOTICE TO ALL STAKEHOLDER COMMENTERS: Please submit all comments by electronic mail to [charles@usmcoc.org](mailto:charles@usmcoc.org) or [vwgray@aol.com](mailto:vwgray@aol.com), not later than June 1, 2002.** |