

# **REAR ADMIRAL WILLIAM M. BENKERT**

## **ENVIRONMENTAL EXCELLENCE AWARD**

### **Application Package requirements**

- May not exceed a total of **40 pages!**
- Font – Times New Roman
- Size – 12 Point
- 8.5” x 11” pages

Sections may be organized any way the applicant chooses; the page numbers of outlines are simply to be used as a guide for new applicants.

### **Sections**

- Executive Summary (1-2 pages)
- 1.0 Introduction (2-3 pages)
- 2.0 Background (2-3 pages)
- 3.0 Environmental Objectives, Policies, and Targets (5-7 pages)
- 4.0 Pollution Prevention and Safety Management (5 pages)
- 5.0 Environmental Outreach (4-5 pages)
- 6.0 Partnerships (5-7 pages)
- 7.0 Performance Measurement & Results (7-10 pages)
- Elements or examples from Sections 3.0 to 7.0 (supporting information)
- \*These pages will be counted toward your total application submission.

## **Executive Summary**

Include the following information:

- The organization's name and street address.
- A short statement that sets the theme of the application and captures the organization's dedication to environmental excellence.
- A short summary of the organization's history and a description of the products and/or services the organization provides.
- Name, title, telephone, and facsimile of the senior member of management.
- Name, title, telephone, and facsimile of the organization's Award Application Report contact and alternate contact, including phone & email.
- Number of full-time employees for each of the last three years.
- Number of vessels or quantities of product transferred or handled each year, or other measure of activity.
- Designate the award category for which the organization is applying.

## 1.0 Introduction

## 2.0 Background

**3.0 Environmental Objectives, Policies, & Targets:** [200 points] An organization's environmental policies should be consistent with its objectives and targets. Describe these elements and the linkage between them.

- (1) Does the organization identify and evaluate risk to help prioritize objectives and targets? Organizations should identify the risks associated with their activities, processes, products, and services. Illustrations of up to three such risks should be given.
- (2) Does the organization have specific objectives set for environmental performance throughout the organization? Up to three objectives should be illustrated.
- (3) Does the organization show that their environmental objectives are established with the involvement of those who are responsible for achieving them?
- (4) How does the organization communicate environmental objectives and policies to its employees?

There are 3-point levels – 00 to 200 – They cover the range from no environmental objectives to “world class” environmental objectives, risk assessment, and group involvement.

- 00-74 Points: Organization identifies environmental objectives and targets. Examples are offered regarding compliance with these. However, there is no evidence of environmental risk assessment. Information presented in qualitative manner.
- 75-124 Points: Organization identifies environmental objectives and targets. Examples are offered regarding compliance with these. However, there is no evidence of environmental risk assessment. Information is presented in qualitative manner; however some quantitative data is provided.
- 125-200 Points: Organization objectives and targets exceed required environmental standards. Institutional environmental risk and prioritizing assessment processes evident. Management controls are incorporated in each objective. Very active involvement of those responsible for meeting objectives. Sound systematic, control mechanisms in decision making. Highly developed and well-integrated performance indicators are linked with decision making.

### Examples from past winners:

- *The quality control program encompasses all aspects of fleet operations and exceeds all national, international, and local regulations applying to ships.*
- *The company set a senior executive position responsible for such matters. This executive visits company ships and other port call related facilities to implement programs, train staff, and audit performance.*

- *The safety goal is zero defects. The safety and pollution record is monitored by the management of each division, and by the board of directors at each board meeting.*
- *The corporation has 9 distinct expectations with regard to environmental performance:*
  - *Conduct of business will be in an environmentally sound manner.*
  - *Prevention is the primary concern. Any environmental hazards associated with company activities will be evaluated, measured, and managed to ensure compliance with this policy.*
  - *The most qualified personnel are selected for hiring and training will be used to further enhance their skills.*
  - *Emergency response plans are used, and employees are trained in the most appropriate response methods for such incidents and of mitigating damage to the environment.*
  - *Employees must accept responsibility to comply with clearly defined environmental policies and procedures.*
  - *The corporation will apply the latest appropriate technological advances to maintain a leadership role in its respect for the environment and will apply continuous efforts to improve environmental performance where benefits justify costs.*
  - *The corporation will cooperate with others in industry business authorized government agencies, Federal, State, and local governments, and with the community to learn about and be responsible to environmental impact of its activities-*
  - *The corporation will work with industry, government, and others to foster timely development of appropriate laws and regulations based on sound science and consideration of uses, costs, and benefits-*
  - *The corporation will take reasonable steps and candidly advise employees, appropriate officials, and the public in the event of any known health or environmental hazards caused by its activities and will provide factual information as to any adverse environmental impact attributable due to its operations.*

#### **4.0 Pollution Prevention, Preparedness, Response, and Safety Management: [150 points]**

Organizations are encouraged to develop, implement, and assess pollution prevention, preparedness, response, and safety management practices, procedures, or programs. Proactive or innovative approaches to these elements, with an emphasis on human factors should be highlighted.

- (1) Organizations are encouraged to develop, implement, and assess safety and pollution prevention management practices.

- (2) Proactive approaches to safety with an emphasis on human factors should be highlighted.
- (3) The term “human factors” can be broadly defined as acts or omissions of personnel which adversely affect the proper functioning of a particular system or the successful performance of a particular task.
- (4) Areas such as specialized training program and emergency response planning should be addressed.

There are three point levels – 00 to 150 points – They range from no environmental management practices to “world class” practices.

- 00-49 Points: Organization demonstrates good environmental management practices. No cost-benefit analysis is conducted. No long-term benefits or trends are demonstrated.
- 50-99 Points: Organization demonstrates excellent environmental management practices. There is a planned approach. Rudimentary cost-benefit analysis conducted. Demonstrated long-term benefits and positive trends in most major mission areas. Benefits and trends show quantification. Noteworthy trends are offered.
- 100-150 Points: Organization demonstrates superlative environmental management practices. Results are linked to management practices. Distinct and innovative practices are shown. Economic feasibility is demonstrated. Sophisticated, quantified cost-benefit analysis is offered. Excellent long-term benefits and sustained trends shown.

Examples from past winners:

- *The program includes the following operating categories: Solid waste management, Waste minimization, Liquid waste management, Spill prevention, Hazardous material and chemical management, Minimizing potentials for shoreside excursion impact, Water and energy conservation*
  - *No waste will be disposed in an ecologically sensitive area, and in other areas only biodegradable materials would be discharged.*
  - *A sorting at source policy is used. Creation of large waste store rooms has now allowed extended cruise time in inland waters or longer times at sea. A special training program ensures onboard staff is trained in procedures to ensure that waste items are either properly recycled, incinerated, or stored for a landing ashore into an approved garbage reception facility.*
  - *Processors include: waste containers at point of use for sorting at source, incinerators and shredders, compactors, glass crushers, tin and aluminum bailers, food waste pulpers, oil sludge burning capabilities, food burning capabilities, and ash handling systems.*

- *The company submits for periodic risk management audits by external auditors. The company has independent third-party audits conducted of every vessel annually, and periodically submits to audits by the International Loss Control Institute, ...independent auditors certified compliance with the American Waterways Operators “Responsible Carrier” program.*
- *Each division shall protect its people by tailoring to its own needs a Safety/Personal Injury Prevention Plan. These included: Fleet safety committees, Fleet safety/Personal Injury Prevention Plan, Safety training sessions for every vessel on every tour, and Safe Operation Awareness Program system to provide timely notification to the fleet of safety issues.*
- *Oversight of the safety performance is incorporated into board of directors meetings.*
- *The company implemented a company-wide bonus program. One half of this bonus depends upon the shore or vessel side employees’ safety record. If the company spills more than 1,050 gallons out of a total 250,000,000 barrels moved, every single employee loses one-third of the safety portion of his or her bonus.*
- *The company developed a cash incentive program, awards which are awarded to vessel crews based upon their safety records and vessel audit results. Over five years \$100,000 was awarded under this program.*
- *The program includes personnel competencies at higher levels than the law requires, for example; licensed engineers in manned engine rooms. Training programs include simulator training for masters and mates, and comprehensive firefighting training for all crewmembers. A high level of vessel maintenance is maintained. Material condition of the vessel is checked through standard checklists at the beginning of each tour. Tank coatings are included for all barges and virtually all vessels are American Bureau of Shipping classed.*

**5.0 Environmental Outreach:** [100 points] This element focuses on the external informational and educational process that demonstrates an organization’s commitment to environmental protection. This could include educational or informational programs, written materials, public appearances or sponsorship of environmentally focused events. Describe the audience, desired environmental objectives and a description of benefits received.

- (1) This element focuses upon educational or informational programs that demonstrate an organization’s commitment to environmental protection.
- (2) This might include educational or information programs ranging from written materials to public appearances.
- (3) Aspects considered in this element include a description of the audience, a description of the desired environmental objectives, and a description of the benefits achieved.

There are three point levels – 00 to 100 points – They range from no education and communication programs to “world class” programs.

- 00-33 Points: Organization demonstrates multifaceted environmental education/communication program that is vaguely linked to environmental policies and objectives of the organization. Emphasis on internal education, though there are some indications of external focus evidenced through demonstrated program deployment in well defined “external customer” areas. Positive results are demonstrated.
- 34-66 Points: Organization demonstrates an excellent and creative environmental education/communication program which is sound, systematic, distinct, and original with innovative ideas incorporated. The program is clearly linked to organizational environmental policies and objectives in major mission areas. Emphasis is on external as well as internal education. The program is focused both internally and externally with demonstrated deployment of the program in well defined customer areas. There is a clearly defined evaluation and improvement system outlined. Effort is made to measure program effect.
- 67-100 Points: Organization has world class, creative, highly developed, and well integrated environmental education and communication program. The program is distinct, unique, and innovative and includes original written materials. The program is linked to the organization’s environmental objectives in all operations and targets specific audiences. Environmental awareness is evident at all levels of the organization. The program is focused both internally and externally with strong evidence in the external focus (e.g., use of partnerships and media). Demonstrated program deployment is found in well defined “customer” areas. Effect of the program is clearly measured. Program benefits are demonstrated. The organization includes some form of third party (e.g., NGO letter or newspaper account) validation attached in the appendix.

Examples from past winners:

- *Earth Day is a special event at the company when children and their parents are invited to Company facilities for a half-day program (including lunch). This annual event is intended to help instill an environmental ethic in younger children and to make them aware that “the environment” is not something that exists in the countryside alone. Park Rangers make a presentation on native plants in the city. The Aquarium presents a program on fish and other aquatic creatures living near the city, and various exhibitions and programs help make children (and parents) aware of the abundant natural life that exists, even in a great city.*
- *Older children and teenagers from local schools are invited each year to America Recycles Day at the company. Exhibitions demonstrate the uses of recycled materials and participants are shown, among other things, how a new bike can be made from old parts. The Department of Environmental Conservation, The City Department of Environmental Protection, and the City Sanitation Department participate. The even highlights the use*

*of recycled materials and points out the value of many things normally considered “waste”. The Company also sends out three million ‘pledge to recycle’ cards, distributes pledge cards to employees and publicizes the event in Company publications. Since the Company began sending pledge cards out in its October billing, at least one other similar company has followed suit.*

- *Approximately 18,000 copies of the Company’s Environmental Health & Safety (EH&S) Annual Report are mailed each year; about 4,000 of these go to the public, including environmental groups and public officials. The report also is posted on the Company’s commitment to environmental excellence, to reports on progress, and highlight programs that support the effort, the report offers a detailed account of the Company’s performance on six key indicators.*
- *The Company supports a number of efforts on behalf of environmental education for urban youth. In 1998, three summer interns were brought into the EH&S Department from a high school in the City. They were shown the full range of the Company’s environmental programs. This allowed the students to return to the environmental program at their high school with first-hand knowledge of the complexity of achieving excellence in this area. They were also informed of some of the career opportunities in the area of environmental compliance and engineering. This past summer, two college interns were used to survey employees to determine the effectiveness of Con Edison’s environmental communications efforts.*
- *The Company supports “Green Horizons”, a program to acquaint urban high school students with career opportunities in environmental services. This is an annual event, held this year at the Botanical Garden for about 200 students. Speakers are made available to schools and civic groups to explain the Company’s environmental protection programs, and to discuss specific environmental issues where the Company is doing and at making information available to the public.*
- *Bay Environmental Sustainability Trust: Recognizing that the Bay is a valuable and significant resource of the State, the Company, as part of the conversion project at its Plant, will establish the Bay Environmental Sustainability Trust for the environmental betterment, enhancement and sustainability of the Bay. Funding up to \$200 million will be provided by the Company over 20 years for governmental, educational, and nonprofit organizations to conduct research and to implement projects that serve to protect, preserve, and improve the Bay, including its water quality and habitats.*



**6.0 Partnership:** [250 points] Environmental partnerships are formed with other organizations sharing similar goals. Describe these partnerships with external stakeholders including the common goals, the types and degree of resources extended, and the benefits derived through partnerships.

- (1) Environmental partnerships are formed to pool resources with other organizations sharing similar environmental/conservation goals.
- (2) This element challenges organizations to describe up to three such partnerships with external stakeholders including the common goals, the types and degree of resources extended and the benefits derived through partnering.
- (3) Organizations are encouraged to include letters from their environmental “partners” describing the value of their commitment in the Appendix.

There are three point levels - 00 to 250 points – They range from no partnerships to “world class” partnerships.

- 00 - 74 Points: Some evidence of a systematic approach to an environmental partnership. For example, there is evidence of an adequate, sustainable plan to reach defined, specific environmental/conservation objective(s). Some commitment/involvement/cooperation with partners formed with generally positive results. No effort to address resource allocation.
- 75 - 149 Points: Sound, systematic approach to at least two environmental partnerships demonstrated. Excellent, integrated, sustainable plan to reach well-defined, comprehensive environmental objectives evident. Implementation aspects of plan discussed. Very good commitment/involvement/cooperation with partners included NGOs or trade associations. Partnerships are distinct, strong, and productive ( coalition members diverse, broad-based). Based on environmental principles and a sense of environmental stewardship. Unique approaches, cutting edge solutions to environmental/economic obstacles offered. Partnership has good history of delivering environmental/conservation benefits. Resource allocation clearly addressed.
- 150 - 250 Points: Three highly developed, highly-integrated, sound, systematic approaches to environmental partnership(s) demonstrated, with comprehensive environmental objectives evident. Excellent commitment/involvement/cooperation with partners. Partnerships are world class, highly integrated, highly developed, superbly diverse and broad-based. Approaches environmental/economic obstacles in proactive, decisive manner (i.e., troubleshoots). Partnerships are based on a myriad of environmental principles and strong sense of environmental stewardship. Benefits of partnerships clearly demonstrated; assessment mechanisms fully developed. Resource allocation clearly addressed. Effective implementation strategy demonstrated. Examples of letters or newspaper accounts of partnerships included.

Examples from past winners:

- *There is much to be learned about the sources, transport and fate of mercury in the State environment before meaningful controls can be established. The Company was one of the founding participants of The South State Mercury Science Program which now counts eight State and Federal agencies, three universities and two utility groups as other major contributors. In the words of a peer reviewer attending the May 1997 program review, 'the center of global mercury research has now shifted to South State.' The Company has contributed over 2.5 million dollars to assist in the accomplishment of this important research. Major projects sponsored in whole or jointly by the Company include:*
  - *The State Atmospheric Mercury Study: Data from this five-year, state-wide monitoring program, now in its final stages, indicate that at least 70% of air-borne mercury deposited on South State comes from global rather than local sources.*
  - *Power plant emissions monitoring: Direct monitoring from The Company's oil-fired power plants show a maximum of only 0.03% of the total atmospheric mercury impacting South State could be attributed to this source.*
  - *Historical Contamination of Mercury: Modern and museum specimens of coastal and freshwater wading birds and prey species of the panther are being analyzed for mercury. These specimens, going back at least a century, are showing spatial patterns of contamination similar to that observed in present-day studies.*
  - *The State Aquatic Ecosystem Mercury Cycling and Modeling Project: A model to predict mercury cycling has been developed and calibrated for the State environment. It is expected to be used to integrate mercury input data, and chemical and biological processes from other studies to develop a broad understanding of the magnitude and extent of the mercury problem, and the most promising management solutions.*
- *The Company, a spill cooperative and the US. Coast Guard have been engaged in a research and development study with a laboratory to gain an understanding of the important environmental parameters that affect the behavior of LAP IO spilled on water. This research examined weathering characteristics and fate and transport studies through the development of laboratory (microscale) and flume tank (mesoscale) testing methods. Additionally, the study has begun the development of a data base of the physical and chemical characteristics of LAP IO products transported in United States waters for the purposes of modeling and predicting their behavior in the event of a spill. The weathering study was completed in 1995 and was funded by the Company and a spill cooperative. The second and major portion of the research was funded by the US. Coast Guard and the Cooperative and was completed in 1996.*

**7.0 Performance Measurement and Results:** [300 points] Applicants should be able to demonstrate methods for measuring and monitoring performance against all aspects of the organization's environmental management system, including objectives and targets and issues pertaining to stakeholders. It is desirable that the organization achieve positive results, but it is also important that an effective measurement system be in place so that results and modifications to the management system can be made if needed. Measures are developed which gauge employee awareness of environmental objectives and targets and included in the application. Results for performance measures should be graphically reported in terms of baseline quantitative comparisons. Meaningful trend analysis should be offered. Illustrate how results are reported and linked to distinct and innovative practices. Economic feasibility is clearly demonstrated. Sophisticated, quantified cost benefit analysis is offered.

- Applicants should be able to demonstrate methods for measuring and monitoring performance against all aspects of the organization's environmental management system, including objectives and targets and issues pertaining to internal and external stakeholders.
- These performance measures should track performance over discrete time frames.
- Senior management should then be able to analyze environmental performance to determine areas of success and to identify activities requiring corrective action and improvement.

Applicants should:

- (1) Identify up to three environmental performance measures
- (2) Describe the relationship between these performance measures and the organization's environmental objectives and targets, and
- (3) Provide trend analysis for up to three performance measures.

There are three point levels - 00 to 300 points - They range from a lack of any measurable performance to extremely advanced and quantified performance.

- 00 - 99 Points - Quantitative positive results in environmental excellence in at least one performance measure. Linkage of achievements and policy goals generally discussed. No base line measurement and no trend analysis.
- 100 - 199 Points - Good to excellent results in environmental excellence. Results show positive trends. Measurement(s) reported in relation to deviations from base line(s) with rudimentary trend analysis.
- 200 - 300 Points - Excellent, world class results in environmental excellence for three performance measures. Results are graphically reported with baseline quantitative comparisons. Meaningful trend analysis is offered.

Examples from past winners:

- *By working closely with its many suppliers plastic has been replaced by biodegradable materials, thus reducing plastics by one third For example: Towels linens and uniforms now arrive in paper or retied with string; Breakables are in biodegradable wrappers not plastic bubble wrap; Cardboard boxes instead of plastics beverage six packs, Styrofoam cups replaced with hot paper cups; Cooking oil is recycled, water conservation systems conserve water and heat; Reusable kegs for drinks, reducing bottles and cans; Highly concentrated chemical cleaners use 1/30 of former volume and eliminate excessive plastic containers.*
- *Liquid Waste Management includes: Refit of ships with reduced effluent systems; Work with US Navy Research and Development units for gray water reduction treatment. Chemicals were reduced from 1 060 to less than 300. Approved chemical lists have been implemented Product substitution has been implemented as well.*
- *Water conservation restrictive flow devices have reduced water consumption by 28 percent. This has reduced the amount of fuel needed for desalinization.*
- *Corporation targets are measured against these expectations to set future goals and objectives. Environment Health and Safety Scorecards are then used. These are reviewed at monthly safety meetings and quarterly Loss Control Tours conducted by Company Department Heads.*
- *Six key success factors are then set; these include integrity management, financial performance, customer satisfaction, community and government, people management, and asset utilization. Example objectives from a Critical Success factors worksheet include: 0 PPL spills to water, 0 pipeline leaks; 0 odor complaints, 0 noise complaints; 0 fire/explosion. Primary responsible personnel are identified for each area of responsibility.*
- *The system includes the investigation and analysis. This element sets standards for reporting incidents, incident near misses and events. Event sequences are assessed, any inappropriate actions or equipment problems associated with the event the direct cause identified by a structured incident review manual and any apparent programmatic causes associated with the direct causes and recommended corrective actions to prevent recurrence. This is termed a root cause system of evaluation of events. All completed evaluations are communicated to all employees through bulletin board postings and discussions at all safety meetings.*
- *Improvement with trend analysis performed to identify areas for program development and mitigating measures to achieve daily improvement. Performance is reported and tracked on the environmental health and safety scorecard.*
- *The company then provided a four paragraph summary of specific details of environmental performance related to the objectives from the Critical Success factors*

*worksheet. Examples of data collection tools and related worksheets were provided as attachments in the appendix.*

- *The Corporation has identified specific areas to measure for spills. Trend data is monitored to evaluate overall corporate performance.*
- *Received 9 Chamber of Shipping Jones F. Devlin Awards. Twice before finalist for the William M Benkert Awards. Received the ECO Leadership Award by a prominent business journal. The company received an Advanced Level One Rating under the International Safety Rating System by the Loss Control Institute and one of the major companies name to the National Environmental Development Association (NEDA) Honor Roll.*