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# How can an EMS lead to Installation Sustainability?

29<sup>th</sup> Environmental and Energy Symposium  
Richmond, VA

April 7-10, 2003



TETRA TECH, INC.

Installation Sustainability

Slide - 1

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# Presenter Introduction

Phil Wood, EMS Specialist

- Private Sector Experience
- Army, Air Force, Navy EMS
- EPA Performance Track



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# Discussion Topics

- What is sustainability?
- What is an EMS?
- Ten Dimensions of Sustainable Development
- The Triple Bottom Line



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# Sustainable Development

- “Development that meets the needs of the present without compromising the ability of future generations to meet their own needs”  
*Brundtland Commission 1987*
- Built environments that reduce our ecological footprint and promote better management of the natural resources on which we depend, at the least cost over the life of the development
- “Capacity for continuance into long term future”  
*Sustainability: Integrated Guidelines for Management (1999)*
- SD involves economic, environmental, and social aspects of development...(and operation)



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# Three Linked Elements of Sustainability

- **Economic:** Including, for example, wages and benefits, labor productivity, job creation, expenditures on outsourcing, expenditures on research and development, and investments in training and other forms of human capital. The economic element includes, but is not limited to, financial information.
- **Environmental:** Including, for example, impacts of processes, products, and services on air, water, land, biodiversity, and **human health**.
- **Social:** Including, for example, **workplace health and safety**, employee retention, labor rights, human rights, and wages and working conditions at outsourced operations.



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# What is an EMS?

- It is the part of the Organizations' overall management system that includes:
  - Organizational Structure
  - Planning Activities
  - Responsibilities
  - Practices, Procedures, Processes
  - Resources
  
- for developing, implementing, maintaining, reviewing, and correcting and improving an organization's approach to environmental management.



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# Ten Dimensions of Sustainable Development

- Ethics, Values and Principles
- **Accountability and Transparency**
- **Triple Bottom Line commitment**
- **Environmental Process Focus**
- **Environmental Product Focus**
- Socio-Economic Development
- Human Rights
- **Workplace Conditions**
- **Engaging Business Partners**
- **Engaging Non–Business Partners**



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# A Systems Approach

- Guiding Vision and Goals
- Organizing Framework
- Clear DIMC system
- Indicators and Assessment Criteria
- Comprehensive data collection for analysis





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# A Systems Approach (cont.)

- Assessing and managing organizational priorities
  - Helps determine priorities in the choice of priorities
  - Triggers the identification of priorities that may be more important in the future
- Reflects the values, biases, interests, and insights of their designers
- Some system properties are not evident from simply looking independently at the parts
- Capacity to “anticipate and prevent”



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## Wide Ties and Polyester Slacks

- Triple Bottom Line
- Dow Jones Sustainability Index
- “Will increasingly be regarded as a measure of value”
- Goal of business is to maximize profits
- Enron!



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# Sustainable Development – a Holy Grail or a Holistic Goal

- “Mission is mission is mission”
- Vision and Sustainability Gap
- Positive Impact
- Brand and reputation
- Environmental
- Multiple measures
- Strategy



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# Summary

- EMS is a start
  - Systematic approach to management
  - Based on comprehensive data collection
  - Priorities established
- Need to develop a more sophisticated understanding of the business case for sustainable development
- More holistic, strategic approach to management required

