Elements of Sustainable Sports Facility Management: Systematically Applying Environmental Plans, Policies, and Procedures

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“Dropping Knowledge” (Agenda)

• Strategic Environmental Management

• Environmental Management Systems

• ISO 14001 International Standard

• Best Management Practices

• Managing What You Measure

• Internal & External Communication
Is this Environmental Management at the Sports Facility?
"It’s a little more complicated than that..."
Are You Reactive...

- Project-Based
- Piecemeal
- Isolated to the Course
- Something ‘Extra’ to Do
- Inefficient
- Not Completely Effective
Are You Reactive...

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Be Strategic!

- Comprehensive
- Systematic
- Facility-Wide
- Creating Business Value
- Efficient
- Effective
An EMS Framework...

- ID environmental goals
- ID environmental impacts
- ID legal requirements
- Set objectives and targets
- Establish programs to meet these objectives and targets
- Monitor & measure progress
- Train employees
- Review progress and make improvements
18 Elements of ISO 14001-2004

4.1 General
4.2 Environmental Policy
4.3 Planning
  4.3.1 Environmental Aspects
  4.3.2 Legal/Other Requirements
  4.3.3 Objectives, Targets & Programs
4.4 Implementation
  4.4.1 Resources, Roles, Responsibility and Authority
  4.4.2 Competence, Training, Awareness, Communication
  4.4.3 Communication
  4.4.4 Documentation
  4.4.5 Control of Documents
  4.4.6 Operational Control
  4.4.7 Emergency Preparedness/Response

4.5 Checking/Corrective Action
  4.5.1 Monitoring and Measurement
  4.5.2 Evaluation of Compliance
  4.5.3 Non-Conformity, Corrective Action & Preventive Action
  4.5.4 Control of Records
  4.5.4 EMS Audits

4.6 Management Review

P-D-C-A Continual Improvement
Environmental Policy

Environmental Policy

Eparsamangems operates and maintains a golf facility in the State of New York. We have many natural features on and around our facility, therefore the natural environment plays an important role in the golfing experience at eparsamangems. We conduct a range of administration and hospitality activities for the benefit of our members and guests and we regard the environment a core value of our operations. As such, we are committed to proactively manage interaction with the environment by establishing standards of environmental excellence.

To achieve this we will:

- Identify and manage environmental aspects within our operations and apply best operating principles to ensure pollution prevention and the conservation of natural resources;
- Constantly strive to achieve continual improvement in our environmental performance by making business decisions that work towards sustainable outcomes;
- Meet and, where appropriate, exceed the requirements of all relevant legislation, regulations and other requirements to which we subscribe;
- Utilize the e-par Environmental Management System framework to plan, document, measure and monitor environmental performance including setting and assessing environmental objectives and targets and conducting periodic reviews to report on progress;
- Continue to recognize the environmental, recreational, educational and social significance of golf;
- Openly communicate this policy to all employees, contractors, regulators and other stakeholders and make this policy available to the general public and local community;
- Foster an environmentally responsible attitude within our organization by providing appropriate training and competent assessments;
- Ensure all those who work for or on behalf of eparsamangems aspire to our high standards of environmental performance and behavior.

SIGNED: Kevin A. Fletcher, Ph.D.
DATED: 09/01/00
18 Elements of ISO 14001-2004

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P-D-C-A Continual Improvement
Ignorance is NOT Bliss!

Ground Rules

Environmental regs part of the job
for sports field managers

by Patrick White
18 Elements of ISO 14001-2004

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P-D-C-A Continual Improvement
Implementation (Taking Action!)

Canberra Southern Cross Club Woden

Standard Operating Procedure

Title

Hospitality Recycling

Number: 09/2010

Date Issued: 31 October 2010

Purpose and Scope

The hospitality industry produces large volumes of waste from food, beverage and administration functions. Every organisation in this industry has a responsibility to minimise the amount of general waste produced and maximise the amount of material that is recycled as a result of the operations. This procedure has been developed to ensure all recyclable material is separated and recycled to minimise the impact of the Canberra Southern Cross Club on the natural environment. This includes paper, plastic, food, general and green waste. This procedure compliments existing recycling practices within the Canberra Southern Cross Club and is to be employed in all operations at the facility.

Procedure

Ensure anything is thrown into general waste bins are all paper, plastic and glass are placed into recycling bins.
18 Elements of ISO 14001-2004

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P-D-C-A Continual Improvement
You Gotta Check Yourself...Before You Wreck Yourself
18 Elements of ISO 14001-2004

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Management Review
NEXT UP:

Aspects
(What You Do)

Impacts
(How You’re Screwing Up the Planet)

Best Management Practices
(What Can Be Done About It)
Environmental Things to Deal With…

- Waste Management
- Water Quality
- Energy Efficiency
- Water Conservation
- Emissions
- Stormwater Management
- Landscaping
- Pesticides/Fertilizers
- Habitat Loss
Waste Management

• Waste Management is a growing priority in sports facility management
• Responsibility begins with management
• Tracking volume metrics help to set realistic and beneficial goals
• Community and campus/user participation is essential
Reduce Waste Volume
Water Quality Management

- Employ Best Management Practices (BMP’s) or structural controls to control storm water and minimize potential for chemical runoff, nutrient loading, and drift of other inputs
Energy Efficiency

• Tracking and measuring energy usage related to facility maintenance and operation is paramount to improvement
• Realize annual reduction goals through altered practices and infrastructure/equipment upgrades
Water Conservation

• Closely tracking water use and turf’s true irrigation needs leads to safe and healthy sports fields, while promoting responsible property management
Irrigation System and Watering Practices

- Maintain irrigation equipment for maximum efficiency and minimal water waste

- Maintain soil and turf health to maximize water absorption and minimize water loss due to evaporation and runoff
Irrigation Audit (at least annually!)
Reducing Your Carbon Footprint

- US EPA Tier 4 Standard
- 25-74hp Non-Road Diesel Equipment
- Mandated for Equipment Manufactured After January 2013
Landscaping

• Consider reducing the size of managed turfgrass where possible to save water, conserve energy resources, reduce greenhouse emissions, and minimize fertilizer and chemical inputs.

• Replacement of intensively managed turfgrass with climate-appropriate landscaping can save time, money, and overall maintenance while promoting habitat opportunities for wildlife.
Focus on Native Plantings
When its “right”, your landscaping....

- Improves/protects water quality

- Creates positive, progressive, and constructive attitudes about the natural world

- Promotes the concept that natural is both beautiful and desirable

- Reduces maintenance needs, reduces water use, and lessens or eliminates chemical use
Education, Education, Education

• Go to as many classes as possible
• Go online to university turf sites
• Get your crew educated
• Network with your peers
• Get involved with your local STMA chapter
AND FINALLY...

Taking a Measured Approach
(“How You Doin’?” – Joey from Friends)

Informed Decision-Making
(How Not to Act Like a Washington Politician)

Riding the Straight Talk Express
(Telling Your Story)
What to Measure?

Qualitative or Quantitative?
Leading or Lagging?
Simple or Complex?
Your Audience & What’s the Use?
Are they Comparable (In and Out, Normalized)?
Aligned…to Objective & Targets?
Giving You Actionable Information?
Be Consistent Year to Year
### EMS Benefit:

Specific Environmental Action Plans with Clear Roles & Responsibilities
# A Special Note on Risk Assessments

**STEP 1 - What is the frequency of the activity?**

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<tr>
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<tbody>
<tr>
<td>Continuous activity (example gas storage)</td>
<td>Activity occurs 3 or more times per week.</td>
<td>Activity occurs once a month.</td>
<td>Activity occurs only 2 or 3 times per year.</td>
<td>Activity occurs once or less per year.</td>
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**STEP 2 - Assess the severity or consequences (Impact on the environment and the business)**

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<tr>
<td>Positive Impact on environment thus positive impact on business.</td>
<td>Limited and/or localised impact on the environment and/or business.</td>
<td>Reversible Impacts, wider implications to environment and/or business.</td>
<td>Serious long term implications for environment and/or business.</td>
<td>Serious permanent damage to the environment and/or business.</td>
</tr>
</tbody>
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Where your Step 1 and Step 2 assessment points meet that is your risk for that activity.

- Activity returns economic, social & environmental gain
- Environmental Damage up to $500
- Environmental Damage between $500 to $10,000
- Environmental Damage between $10,000 & $50,000
- Environmental Damage over $50,000
A Special Note on Risk Assessments
Internal Communication: Staff Training

<table>
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<tr>
<th>Required ProTraining</th>
<th>Staff to be trained</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleaning golf shoes</td>
<td>All Staff</td>
<td>1 month</td>
</tr>
<tr>
<td>Cleaning golf equipment</td>
<td>All Staff</td>
<td>3 months</td>
</tr>
<tr>
<td>Lighting of amenities areas</td>
<td>All Staff</td>
<td>3 months</td>
</tr>
<tr>
<td>Lighting of outdoor areas</td>
<td>All Staff</td>
<td>3 months</td>
</tr>
<tr>
<td>Lighting of kitchen area</td>
<td>All Staff</td>
<td>12 months</td>
</tr>
<tr>
<td>Use of compact fluoro lights</td>
<td>All Staff</td>
<td>3 months</td>
</tr>
<tr>
<td>Use of LED's in exit fixtures</td>
<td>All Staff</td>
<td>3 months</td>
</tr>
<tr>
<td>Lighting of vending machines</td>
<td>All Staff</td>
<td>3 months</td>
</tr>
<tr>
<td>Use of washing machines</td>
<td>All Staff</td>
<td>3 months</td>
</tr>
<tr>
<td>Use of commercial laundry</td>
<td>All Staff</td>
<td>3 months</td>
</tr>
<tr>
<td>Cleaning carts</td>
<td>All Staff</td>
<td></td>
</tr>
<tr>
<td>Use of dry cleaning services</td>
<td>All Staff</td>
<td></td>
</tr>
<tr>
<td>Lighting of office areas</td>
<td>All Staff</td>
<td></td>
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Do... Tell!

S&P 500 Companies
(as of end of April 2012)

- Companies with No CSR Reports: 47%
- Companies with CSR Reports: 53%

GRI Reports: 63%
GRI Referenced Reports: 5%
Non-GRI Reports: 32%

Source: Governance & Accountability Institute
This is a positive public symbol, but it’s not all... be sure to back intent with real results and data.
There’s Business Value… Measure It

- Average benefits was $90,320
- Average savings: $45,077
- UNC Study, 2003 (86 facilities)
Take Home Lessons

1. Act Strategically, Not Piecemeal & Project-Based
2. Comprehensive EMS is the Framework to Use
3. The Trick is with ID’ing Aspects & Impacts
4. There are BMPs Available… Use Them
5. You Manage What You Measure… So Measure!
6. “The Perfect is the Enemy of the Good”
7. Communicate with Authenticity—Inside & Out
Questions?