5 Determine Your Facility's Significant Environmental Aspects

What

Significant environmental aspects (SEAs) are the aspects of your facility that have potentially significant impacts on the environment.

Who

The EMS Coordinator and CFT determine which of the environmental aspects are significant. The EMS Coordinator updates these determinations whenever the environmental aspects of the facility change.

Why

Prioritizing your environmental aspects helps your facility's management focus on managing the environmental aspects that have the greatest current or potential impact to the environment.

How

There are many ways to determine the significance of your environmental aspects. Whatever way you choose, be sure to document your decision process. The point is to look at all of your aspects and determine—in a common sense, systematic way—which of their impacts is environmentally significant. One way to determine the significance of your environmental aspects follows:

1. The EMS Coordinator uses the lists of environmental aspects (Sample Form 2) and compiles a master list of environmental aspects on Sample Form 4: Determining Significant Environmental Aspects. Where appropriate, aspects are grouped. For example, if consumption of energy is listed as an aspect in several areas, the Coordinator could choose to group these so that energy use appears once on the master list.

2. The CFT then rates each aspect according to its impact in the following categories:

- Regulator concerns;
- Pollution;
- Risk, including effects of chemicals and materials, impact on workers, impact on the surrounding community, impact on the environment, safety, and noise; and
- Natural resource use.

3. Using Sample Form 4, aspects are assigned a relative value of 1 to 5, where:

    1. 1 stands for low impact (or risk, or potential for regulatory issues);
    2. 2, for medium-low;
    3. 3, for medium;
    4. 4, for medium-high; and
    5. 5, for high.

The CFT uses information recorded on Sample Form 2 and Sample Form 3 to assist in rating each impact.

4. A total score is developed for each aspect by adding the scores for each category. With all but the last column of Sample Form 4 complete, the CFT makes a final determination concerning which aspects are significant, based on the magnitude of the impact. As a general guide, the aspects that score the highest points are considered significant. The CFT, however, should use its best judgment in determining significance.

5. Aspects identified as significant are listed on Sample Form 4.

6. At this point, the CFT could make an initial effort to develop indicators for the SEAs.

7. Repeat this procedure on an annual basis.

Sample Form 4: Determining Significant Environmental Aspects

1=Low; 2=Medium-low; 3=Medium; 4=Medium-high; 5=High

Operation	Aspect	Impacts	Regulatory Concerns	Pollution	Risk	Natural Resources	Overall Score	Significant?
General administration	Paper waste	Depletion of trees, landfill space	1	1	1	1	4	No
General administration	Vehicle emissions	Air quality degradation, use of oil, landfill space	1	1	1	1	4	No
Laboratory operations	Lab wastes	Landfill space, air pollution from transport	1	1	2	1	5	No
Laboratory operations	Air emissions	Air quality degradation, worker health	1	1	2	1	5	No
All operations	Non-hazardous solid waste	Landfill space, air pollution from transport	3	1	2	2	8	No
All operations	Use of energy	Depleting energy producing resources, air quality degradation	1	1	4	4	10	Yes
All operations	Use of water	Depletion of water supply	1	1	4	4	10	Yes
All operations	Sludge generation	Landfill space, air pollution from transport	3	2	4	4	13	Yes
Surface preparation / finishing processes	Metal and cyanide emissions	Air quality degradation	3	3	4	4	14	Yes
Surface preparation	Organic emissions from degreaser	Air quality degradation, worker health	4	3	3	2	12	Yes
Metal finishing processes	Metal use	Landfill space, air pollution from transport, use of natural resources	1	3	4	4	12	Yes
Chrome plating	Chromium air emissions / human exposure	Air quality degradation, worker health	4	4	3	4	15	Yes
Wastewater pretreatment	Chemical use	Use of natural resources, water quality degradation,	1	2	2	2	7	No
		landfill space, air pollution from transport						
Wastewater pretreatment	Air emissions	Air quality degradation, worker health	2	2	2	2	8	No
Building / ground maintenance	Herbicide/ pesticide	Water quality degradation	1	1	2	1	5	No
Building / ground maintenance	Air emissions	Air quality, use of oil	1	1	1	1	4	No