

EFCOG Best Practice #58 EMS “Green Lights”

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Brief Description of Best Practice:

EMS “Green Lights” are an EMS awareness and communications tool. Green Lights are issued on an ad hoc basis and are aimed at EMS-related topics ranging from EMS itself, to recycling, to permit compliance and other topics. Green Lights are distributed in meetings, as part of monthly safety messages issued by e-mail, posted on the Bechtel Jacobs Company (BJC) home page and other home pages.

Why the best practice was used:

As a result of an internal assessment in 2007 it was noted that there was an overall lack of awareness of EMS, what it was, who it applied to, how it was implemented, etc. The Green Light was instituted in response to that and has been incorporated into an EMS Communications Plan that relies on a variety of means to increase knowledge of EMS.

What are the benefits of the best practice:

There is recognition of “Green Lights” among employees. They know that it involves something from the “Environmental side of the house”. Many more people know what an EMS is and what it represents and that their work is a part of it.

What problems/issues were associated with the best practice:

Thus far there have not been any problems or issues.

How the success of the Best Practice was measured:

There are no data, per se, but it is evident from meetings and conversations on the topics of the individual Green Lights that people are reading them, remember them, and like them. Thus far there have been four Green Lights prepared on individual topics (aluminum beverage can recycling, green purchasing, “No discharge certification” and plastics recycling). People are responding and reacting to the Green Lights and when brought up in discussions they can converse on the topics.

Description of process experience using the Best Practice:

The “Green Light” grew out of an earlier communication tool, an “Environmental Pager”, typically a 1-page brief summary of facts about a law, program, or topic of interest. With the need to increase awareness and educate people on EMS a number of options were undertaken including EMS training as a part of annual combined (multipurpose) training, visual aids, and procedure revisions. Monthly employee communications were also included. Rather than using the Environmental Pager format, the Green Light was created. It looks different, has a different focus, and has a “green” attitude. People now recognize “Green Lights” and what they represent. The practice is a key part of our EMS and serves to integrate our various green efforts and messages into our overall ISMS.

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Green Light on Environmental Management System (EMS)



BJC's Green Purchasing Program

- Green Purchasing is the acquisition of products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose.
- Other Names for Green Purchasing:
 - Affirmative Procurement
 - Environmentally Preferable Purchasing (EPP)
 - Purchasing recycled, recovered or reclaimed products
- Green Purchasing is another component of how BJC implements our EMS. Two key procedures that address green procurement are:
 - BJC-PR-1303, Purchase Card System B-Card
 - BJC-DE- 1005, Requisition Process for Materials and Services (recently revised)

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Green Light on Environmental Management System (EMS)



Examples of Green Products:

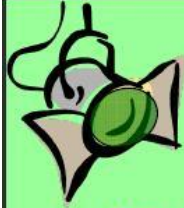
- Alternative fuels/vehicles (e.g., ethanol, bio-diesel, hybrid vehicles)
- Environmentally-friendly and less toxic cleaners (e.g., citrus-based)
- Energy and water efficient products (e.g., solar-powered equipment)
- Products without toxic or hazardous ingredients
- Recycled paper, recycled printer toner cartridges
- Computers manufactured with smaller amounts of toxic metals

What can you do to increase use of Green Products?

- Specify recycled/bio-based products when making purchases
- Ask suppliers about equivalent “Green” products
- Evaluate current products that you use and consider alternatives
- Contact your project EC&P Lead or BJC's Pollution Prevention Coordinator, Lesley Cusick, at 241-9440 for assistance in finding “green” products.

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**Green Light on
BJC Plastics Recycling**



Starting in June 2008, BJC will be recycling plastics – here are some Q&A about this new initiative

Why are we doing this?

At the beginning of 2008 BJC had company-wide EMS targets and objectives. Plastics recycling was one of our targets.

But why?

If we don't recycle, the plastics go to the landfill and take up valuable and limited landfill space. That's a waste of a resource. Besides, the recycled plastics also have other uses – they are resources themselves.

What kind of plastics can be recycled?

1 and #2 plastics. 1&2 plastics will include most of the bottles used for water, milk, juices and sports or energy drinks.



**Green Light on BJC Plastics
Recycling**



How can you tell what number plastic you have?

look at the bottom of the container for the number in the triangle.

Do you need to do anything special to the containers?

Please empty them of liquids. You may compact them, too, to save recycling space.

Can you leave the caps on the bottles?

Caps on or off is fine.

Where do you take your recyclables?

There will be nearly 60 dark green colored barrels on site for your plastic recyclables. The barrels will be labeled "for 1&2 plastics."

Please don't mix plastics and cans – we need to keep them separate.

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Green Light on BJC Plastics Recycling



What do you do if the barrel you use is full?

Contact Mary Wilson in our General Maintenance Organization and she will arrange for a pick-up as quickly as possible. Mary's number is 576-8413.

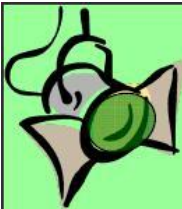
What happens to the plastics? Where do they go?

The plastics will be accumulated on site and picked up as needed by the Roane County Solid Waste Department.

Is there anything else I need to know about BJC plastics recycling?

Yes – Our plastics recycling benefits the Michael Dunn Center (MDC). The Roane County Solid Waste Department employs workers from MDC. The more we recycle the more it benefits MDC!

If you have questions on recycling, contact Lesley Cusick (241-9440) BJC P2 Coordinator. Information on the MDC can be found at <http://michaeldunncenter.org/index.php>.



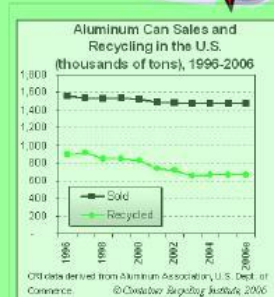
Green Light on Environmental Management System (EMS)




• BJC's EMS identifies two specific objectives related to waste prevention, recycling and reuse:

- Protect the environment through waste prevention
- Prevent pollution, and maximize recycle and reuse potential


• A decrease in the recycling rate of aluminum cans nationwide has been observed over the past several years




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Green Light on Aluminum Can Recycling




Number of cans not recycled in the US so far this year (as of March 24) is 29,500,000,000. Total weight is 350,000 tons! Reference: Container Recycling Institute.



- **Pollution:** 1 ton of cans produces 5 tons of caustic waste
- **Energy consumption:** 3% of the world's electricity goes into making aluminum cans. If the US increased can recycling by 6%, 2.8 millions barrels of crude oil would be saved.
- **Environmental destruction:** Hydroelectric dams for aluminum production ruin habitats
- **Atmospheric Emissions:** Aluminum smelters release ozone precursors and toxic emissions




Green Light on Aluminum Can Recycling



Besides the obvious environmental benefits, why is recycling important?

- Increasing our recycling rate of aluminum cans is one of BJC's Environmental Management System (EMS) targets for CY 2008.
- 100% of proceeds from recycling of aluminum cans is donated to the Michael Dunn Center.

What can you do?



- Recycle, Recycle, Recycle.
- Do not discard cans in sanitary or industrial waste containers.
- Contact your project EC&P lead or ES&H Rep if your project does not have aluminum can recycling receptacles.