1-2 points

FS Credit 8.1-8.2

Chemical Management for Food Services

Intent

Minimize toxic chemical use in food services preparation and service areas, including cleaning chemicals and pest management.

Health Issues

The health of building occupants and the local ecosystem can be directly impacted by the chemicals and materials used for clinical and facility operations. Sustainable cleaning practices are an essential part of sustainable building. Some cleaning products use toxic chemicals hazardous to human health and the environment. Some chemicals can compromise indoor air quality and cause cancer, reproductive disorders, respiratory ailments (including occupational asthma), eye and skin irritation, central nervous system impairment, and other ailments. In addition, some chemicals used in these products are classified as persistent, bioaccumulative and toxic (PBT), are classified as hazardous waste, and/or otherwise contribute to environmental pollution during their manufacture, transport, use, and/or disposal. Non-toxic and least-toxic cleaning products and materials are available on the market that meet or exceed health care facilities' performance requirements. By working in consultation with infection control committees, hospitals can minimize unnecessary disinfection as part of their toxic chemical reduction and indoor air quality improvement plans. The emerging field of nanotechnology presents potential benefits to society, while also posing risks associated with nanoscale materials' ability to cross biological barriers that protect human organs and tissues. Preliminary studies have reported toxic effects of nanomaterials on the lungs, heart, reproductive system, kidneys, and skin. Given uncertainty about the toxic effects of nanomaterials, a precautionary approach regarding their use is appropriate.

Credit Goals

FS Credit 8.1: Cleaning Products

- Utilize environmentally preferable cleaning products to clean food preparation and food service areas (cafeterias), kitchen equipment, surfaces and dishware. These products may include floor cleaners, drain cleaners, oven cleaners, dish detergent, glass and surface cleaners, and multipurpose cleaners and sanitizers meeting the following criteria:
  - Utilize cleaning products certified under the listed specifications in GGHC ES Credits 1.3-1.4 for available product categories.
  - Avoid phenolics in Food Service applications.
  - Where use of a sanitizer is recommended for previously cleaned food contact surfaces, sanitizer must meet U.S. EPA Efficacy Data Requirements for Sanitizing Rinses, and be in accordance with the U.S. Food and Drug Administration Hazard Analysis and Critical Control Point (HACCP) standard. All sanitizers for food contact surfaces must meet the current U.S. Food and Drug Administration Food Code (2005).
  - If using chlorinated sanitizers, ensure concentrations of available chlorine are no greater than 200ppm for previously cleaned food-contact surfaces in food service areas (per U.S. EPA Efficacy Data Requirements for Sanitizing Rinses), unless required by authorities having jurisdiction (AHJ). AHJs may include state and local health departments and/or the U.S. Food and Drug Administration.

FS Credit 8.1-8.2 continued

Chemical Management for Food Services

- Use of disinfectants for hard surfaces (not food contact surfaces) in Food Services areas shall only occur as the result of explicit evaluation and recommendation by the Infection Control committee using the Infection Control Risk Assessment (ICRA) process. Ensure that the selection of any disinfectant for use on hard surfaces is an EPA-registered hospital-use disinfectant under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requirements.

- Utilize only integrated pest management (IPM) techniques for pest management in the food services area per GGHC ES Credit 3: Integrated Pest Management.

FS Credit 8.2: Cutlery and Food Preparation Equipment

- Develop and implement a policy/program in consultation with the facility's Infection Control Committee and in accordance with the facility's Infection Control Risk Assessment and Audit that prohibits the purchase and use of cutlery and food preparation equipment impregnated with antimicrobials.

Suggested Documentation

FS Credit 8.1

- ❑ Compile and revise annually an inventory of cleaning products used in food services areas in accordance with Credit Goals.
- ❑ Document and annually review use of IPM techniques for pest management in food services areas.
- ❑ Compile and review annually documentation of contractors' agreement to abide by the chemical management program outlined in Credit Goals.

FS Credit 8.2

- ❑ Document and annually review progress of the policy/program to prohibit impregnated antimicrobials from cutlery and food preparation equipment in accordance with Credit Goals.

Reference Standard

U.S. Environmental Protection Agency (EPA), 40 CFR Parts 152, 156, and 158. Exemption of certain pesticide substances from Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) requirements. Amended 1996. Federal Register 1996;61:8876-9, http://www.epa.gov/oecaerth/civil/fifra/index.html

U.S. Environmental Protection Agency (EPA), Efficacy Data Requirements for Sanitizing Rinses (for previously cleaned food-contact surfaces). Jan. 30, 1979, http://www.epa.gov/oppad001/dis_tss_docs/dis-04.htm

U.S. Food and Drug Administration Food Code, http://www.cfsan.fda.gov/~dms/foodcode.html

U.S. Food and Drug Administration Hazard Analysis and Critical Control Point (HACCP), http://www.cfsan.fda.gov/~lrd/haccp.html

FS Credit 8.1-8.2 continued

Chemical Management for Food Services

Potential Technologies and Strategies

Refer to the Potential Technologies and Strategies in GGHC ES Credit 1 and Credit 3.

- ***Credit Synergies:*** *Coordinate implementation of this credit with GGHC IO Prerequisite 1: Integrated Operations & Maintenance Process; GGHC CM Prerequisite 2: Chemical Management Policy and Audit; GGHC CM Credit 1: Indoor Chemical Contaminant Prevention; GGHC ES Credit 1.1-1.2: Environmentally Preferable Cleaning: Policy Development; GGHC ES Credit 3: Indoor Integrated Pest Management; GGHC FS Credit 1: Sustainable Food Policy and Plan; GGHC FS Credit 2: Sustainable Food Education and Promotion; GGHC FS Credit 3: Local, Sustainably Produced Food Purchasing; GGHC FS Credit 4: Reusable & Non-Reusable Products; GGHC FS Credit 5: Hospital Supported Agriculture: Food and Farm Linkages; GGHC FS Credit 6.1: Food Donation and Composting; GGHC FS Credit 6.2: Food Services Recycling; and, GGHC FS Credit 7: Food Vendors.*
- Meet with health department liaison and food services director to determine organisms of concern in foodborne illnesses and review environmentally preferable cleaning product specifications to ensure adequate protection through food storage, preparation, and food service cleaning policies and procedures.
- Work with facilities maintenace and food service staff to identify facility fixes, maintenance activities, and methods to improve physical building pest barriers in the food services area.

Resources

Refer to the Resources section in GGHC ES Credit 1 and ES Credit 3.

European Trade Union Confederation (ETUC) Resolution on nanotechnologies and nanomaterials, http://www.etuc.org/a/5163

European Trade Union Institute – Research, Education, Health & Safety (ETUCI-REHS) NANOCAP Project, http://hesa.etui-rehs.org/uk/dossiers/dossier.asp?dos_pk=18,

Out of the laboratory and on to our plates: Nanotechnology in food and agriculture, http://nano.foe.org.au/node/220

U.S. Centers for Disease Control and Prevention (CDC) Guidelines for Environmental Infection Control in Healthcare, 2003, http://www.cdc.gov/ncidod/dhqp/gl_environinfection.html

U.S. Environmental Protection Agency (EPA), Antimicrobial Science Policies, Disinfectant Technical Science Section (DIS/TSS), http://www.epa.gov/oppad001/sciencepolicy.htm

U.S. Environmental Protection Agency (EPA), Sanitizing Rinses (for previously cleaned food-contact surfaces), DIS/TSS-4 Jan 30, 1979, http://www.epa.gov/oppad001/dis_tss_docs/dis-04.htm