



Healthy waste reduction – Part 1

by Roger Guttentag

The ongoing national debate over the delivery of healthcare services has done much to highlight its massive share of the overall U.S. economy. Currently, about one out of six dollars – about 17 percent of our gross domestic product – goes toward paying for healthcare costs. It should therefore be not surprising that healthcare activities occurring in hospitals, medical offices, nursing homes and other similar facilities are a significant and growing contributor to both regulated (red bag) and ordinary solid waste generated annually in the U.S.

In this and next month's column, I will be looking at what Web resources are available on how to address non-hazardous healthcare waste through various waste prevention and recycling methods. These resources are generally the product of organizations concerned with pollution prevention (P2), commercial, institutional and industrial recycling (CI2) or sustainable (or "green") healthcare initiatives. However, their intended audiences seem to be either waste reduction professionals with an interest in working with healthcare facilities, or healthcare professionals with environmental management responsibilities. This affects the level of content detail and presentation approach that is used. For this reason, I will initially focus this month on information that appears intended primarily for P2 and waste management personnel.

Getting an overview

There are two websites that I suggest consulting first as part of getting a "big picture" view on this topic. First, the Environmental Sustainability Resource Center (ESRC), which is sponsored by the North

Carolina Division of Pollution Prevention and Environmental Assistance and the U.S. Environmental Protection Agency. Next, I would suggest the Healthcare Environmental Resource Center (HERC) which is part of the Sustainable Manufacturing program of the National Center for Manufacturing Sciences. The ESRC site consists of a directory of topical categories including Hospital and Medical (H&M) and Dental. Choose the link to the former since the Dental category is concerned primarily with the management of hazardous dental materials such as mercury. The H&M section consists of links to online PDF documents such as articles or manuals, other relevant websites and online presentations. However, most of these resources date from prior to 2000, though they still have value as far as providing a history of what issues were addressed and what was achieved.

The HERC site, on the other hand, is organized to provide an introduction to the various waste issues affecting healthcare facilities through subject links located under the Waste Reduction category. There is a clear effort made to distinguish between regulated medical waste (RMW), non-medical hazardous wastes and solid waste. A quick review of the first two is advised since they help to identify what materials fall into these classifications as well as discuss the common mistakes of including non-hazardous recyclable or reusable wastes within the more expensive regulated waste flows.

The HERC waste reduction discussion follows two main pathways: by operational areas such as patient care supplies or food services and with regard to specific materials such as food waste and paper. This consists of bulleted recommendations of

specific actions that should be considered along with links to appropriate supplemental information located on other websites.

Taking action

There are two web-accessible resources that provide a reasonably succinct and useful guide to what healthcare facilities can do to reduce their normal solid waste outflows. The Mississippi Department of Environmental Protection (MDEP) has a section devoted to developing a hospital recycling program. In many ways, the process it describes should be quite familiar to anyone with any experience with other CI2 venues. This includes identifying what materials can be recovered, determining what collection containers are needed, and where, as well as assessing available collection and marketing options. Links are provided to other MDREP references, such as container vendors, as needed.

You can also download the City of Los Angeles Bureau of Sanitation's "Medical Facilities Waste Reduction Guide" that also covers waste prevention, reuse and purchasing actions that can be taken in addition to recycling. One useful feature of this document is a composition profile which shows that paper and organics are approximately 80 percent of the non-hazardous medical facility waste (or 60 percent of the total waste stream when RMW is factored in). Unfortunately, this document does not identify the source of these statistics. A series of recommendations are then presented with respect to specific operational tasks such as custodial service and patient or surgical supplies management. In some cases, brief examples of what a specific medical facility achieved in terms of cost or waste

reduction by implementing a particular recommendation is provided.

Targeting specific materials

In researching this column I came across resources for recycling two specific products from medical facilities— rechargeable batteries and surgical blue wrap. You can download from The Rechargeable Battery Recycling Corporation's Call2Recycle website "Five Facts You Should Know about Battery Recycling in Hospitals" that discusses the reasons why rechargeable battery recycling is growing in importance for medical facilities and the recycling services that Call2Recycle can provide at no charge. A useful feature of this factsheet is a detailed listing of the various types of equipment that use rechargeable batteries within different departments such as biomedical, security and nursing stations.

The "Hospital Blue Wrap" (HBW) fact sheet, which can be downloaded from CalRecycle, lays out the reasons for focusing on HBW as a waste reduction target. HBW is a polypropylene plastic (No. 5)

Web Address Directory

Call2Recycle -Battery Recycling Solutions for Hospitals	http://tinyurl.com/Call2Hospitals
City of Los Angeles – Medical Facility Waste Reduction	http://tinyurl.com/LAMedWaste
Environmental Sustainability Resource Center – Best References	http://wrrc.p2pays.org/indsector.asp
Healthcare Environmental Resource Center – Waste Reduction Overview	http://tinyurl.com/HERCWaste
Hospital Blue Wrap	http://tinyurl.com/HospBlue
Mississippi Department of Environmental Quality – Hospital Recycling Program	http://tinyurl.com/MSHospRecycling

that is used for wrapping surgical instruments for sterilization. It is a non-hazardous recyclable material that is frequently disposed with the more costly RMW. It is CalRecycle's argument that hospitals can achieve significant cost savings by keeping clean HBW segregated for recycling. Recommendations are made on how a HBW recycling program can be established as well as contacts for sources of additional assistance.

Next Month

My survey of medical facility waste prevention and reduction web resources will continue next month by focusing on those sites that are principally oriented to health-care professionals.

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