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MWM MEDICAL WASTE MANAGEMENT

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Cover Photo Courtesy of Kate Worley at Minnesota Waste Wise.

The recycling industry is a complex process industry driven by commodity markets. As a consequence, making the case for recycling blue wrap material may be difficult on economics alone.

The Hard Case for Blue Wrap Recycling

BY PERRY A. TRUNICK

Most of the successful blue wrap recycling programs in place at hospitals and medical centers today started as grassroots efforts to reduce the amount of waste the hospital was sending to the landfill. The typical story starts with some concerned operating-room team members recognizing that the blue wrap coming into the facility covering sterile surgical kits was nearly as clean going into the waste stream. Here are some of their best practices.

The cloth-like appearance and texture of the polypropylene may be part of the success of blue wrap, but it is also part of the reason it was not more widely recycled. Carrying a number 5 resin identifier for recycling purposes, blue wrap is in a class with a variety of industrial and food packaging products. Its durability makes it a candidate for a number of products once it is recycled. If that would make it popular for recycling, the fact it cannot be used again in its original medical application means the original producer is less likely to be interested in taking it back. Others may be skeptical of its source – surgical services – and avoid it over concerns they might be forced to deal with bio hazards. In the latter case, its distinctive appearance turns it into a recycling pariah.

The real hazard is not biological. Indicator strips attached to the blue wrap surgical kits use a lead-based indicator. That, and the adhesive, have raised concerns for potential recyclers. But, indicator tapes have been developed that eliminate the lead hazard, leaving only the adhesive to deal with. In either case, the indicator strip can be removed before the blue wrap is disposed of in a recycling container.

Speaking Volumes

Hospitals in the United States produce nearly 6 billion tons of waste per year. Only about 15% of hospital waste is infectious or medical waste. That's the waste that is highly regulated and requires the most care and cost in disposal. The other 85% looks a lot like any other institutional waste stream where the institution provides lodging, foodservice, and has administrative and operations functions.

At 45%, the largest component of hospital waste is paper, including corrugated packaging, according to the Environmental Protection Agency (EPA). Plastics follow at 15%, and then food, metals, and other at 10% each. Glass (7%) and wood (3%) round out the non-hazardous waste list.

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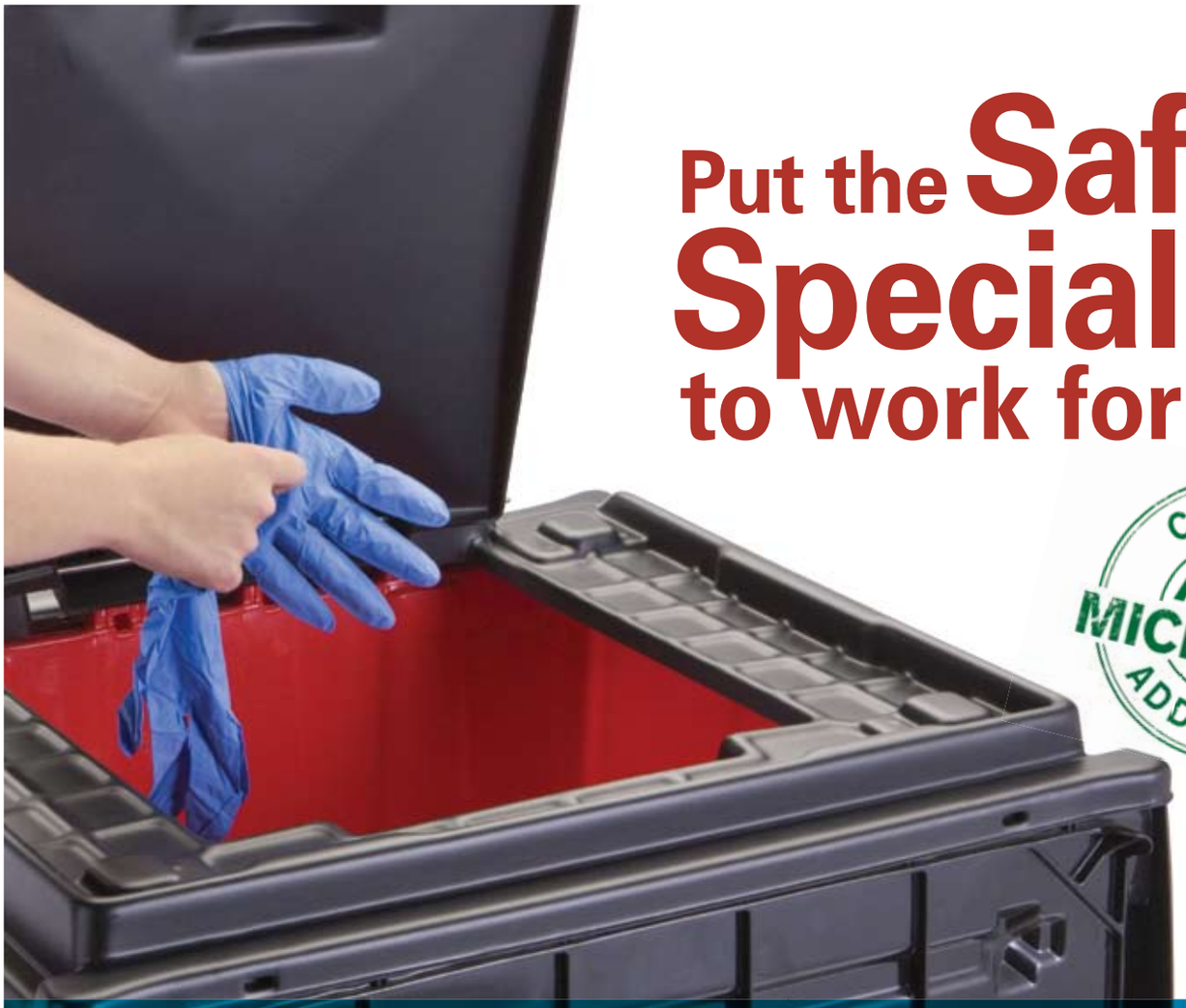

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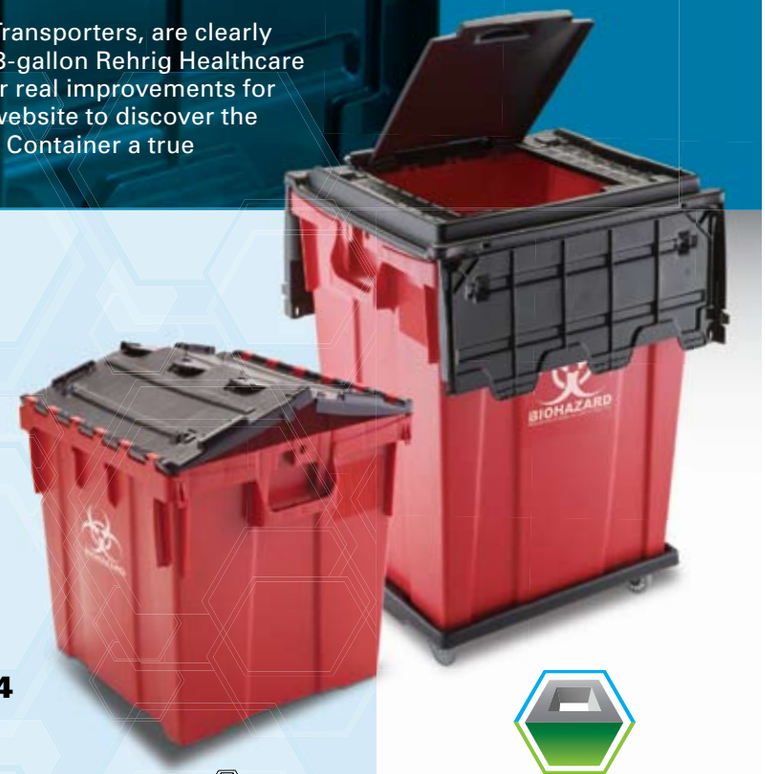

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The Hard Case for Blue Wrap Recycling

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Hospital plastics waste can include anything from the stretch wrap used on pallets of goods down to the plastic drink bottles used by patients, visitors, and staff. The total volume may be skewed by the fact that, in some cases, the blue wrap used in surgical services may be placed in bags with medical waste. This can be an unnecessary expense for the hospital. One estimate suggests 19% of the waste coming from surgical services is blue wrap. A Minnesota Medical Center fact sheet for blue wrap recycling indicates blue wrap represents 20% of operating room waste or 5% of total hospital waste.

Why all of the concern? One medical center with six operating rooms determined it produced 20,000 pounds of blue wrap waste in eight months. Another found it consumed 81,000 sheets of blue wrap material per year. A Maryland study said U.S. hospitals generate 7 tons of waste per day. Of the surgical waste in that total, 19% was blue wrap. For one hospital that put in a blue wrap recycling program, it recycled 8 tons in 12 months.

Separation and Diversion

Whichever way you count the volumes the simplest approach to reducing disposal costs may be to separate the unstained blue wrap from regulated medical wastes and avoid the higher disposal costs. One medical center determined its operating rooms were generating 50 tons of blue wrap waste per year – 25% of their waste stream. As red-bag waste, it cost $20,000 per year in disposal fees. When blue wrap was separated at the source and disposed of as municipal solid waste, the cost on that portion of the waste stream dropped to $1,250.

Blue wrap is an effective replacement for hard cases, but some hospitals have been able to return to sterile, reusable hard cases. If the initial cost of the cases can be amortized over a suitable period, the business case for hard cases can sell the investment. But, many hospitals can't afford the initial cash outlay, or they have space constraints that make storage of the hard cases difficult.

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WASTE AUDITING – Do You Know Where Your Waste Goes?

BY TOM BADRICK

In just a few short years, the healthcare community has made great progress toward sustainability. It wasn't that long ago when it was considered progressive to have a recycling program. But as healthcare sustainability has matured, expectations have changed. It's no longer enough to have a recycling program. Healthcare facilities must also be able to account for the materials they recycle and report the efficacy of their efforts.

Outside the healthcare sector, many successful companies run nearly zero waste operations. Such efficiency has eluded the healthcare sector thus far. We can get there, but it will take vision and time. But, they say every journey must begin with a first step, and the first step toward zero waste is to find out precisely where your waste is really going. That's right – we're talking about a waste audit.

Why is it important to know where your waste is really going? Well, by now we have all heard of green washing. Many of us have actually seen blatant examples of it in action. You need to know where your waste is going because if you don't, you have a credibility problem. Credibility is not the exclusive province of external service providers. It's important for your organization from top to bottom, from your co-workers to your outsourced services. All it takes is one lapse to do irreparable harm to your reputation. You have to be on top of your game.

If you have a recycling program, you simply must perform regular audits of the following materials; neglect to audit them at your own peril:

Hazardous Waste

This one should be a no brainer. Sure, there are Federal and State regulations for disposal of hazardous waste –we all know that. But do you audit your disposal companies? Don't blindly trust your manifests. Always remember that manifest or no manifest it's still your waste. Have you actually seen what happens after your waste leaves your loading dock? Didn't think so. While you're at it, do you audit your internal waste collection processes to ensure they are being followed properly? If you are the one signing the manifest it behooves you to know if your information is accurate both in generation and disposal.

Document Destruction

With the advent of HIPPA, there was a rapid growth in document destruction. Initially, the main focuses were security of information and a guarantee that no documents were mishandled. Some facilities choose to shred their paper internally, but if your shredding is handled by an outside vendor, whether on-site or off-site, review your vendor at least annually to see if they are still meeting your needs. Are they still following contract specifications or have they changed processes without notifying you? Do you receive regular reports and data?

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E-waste

It wasn't that long ago that none of us had ever heard of e-waste. Now it's a big business. E-waste can be every bit as high-risk as hazardous waste. Fortunately, this industry has matured very rapidly and most of your potential vendors will be quick to offer you the opportunity to audit their processes. If you have responsibility for this waste stream you should definitely take them up on it, if for no other reason, to see how very thoroughly most vendors manage this waste stream for you. Remember this is a HIPAA regulated waste stream and mishandling it could have some very negative repercussions.

Recyclables

Have you ever audited your recycling vendor? Has your vendor ever done a waste audit of your materials for you? Do you know what percentage of your waste is disposed of due to contamination? Especially in this era of commingled recycling, you need to know what becomes of your recyclables. Investigate. Find out what happens to the recyclables you ship out. Are they processed locally or shipped out of this country? Are they recycled back into another product, stockpiled somewhere or burned in a waste to energy facility? Remember, the only wrong answer to these questions is no answer at all.

C&D Waste

Your C&D waste has the greatest potential to mislead you. When it comes to C&D, it's not hard to lose track of where your waste is going. For example, a large project such as a new building or major remodel can have many different contractors. They may or may not be on the same page as far as your recycling goals. Even if they are on the same page, if your waste hauler isn't providing any relevant details then it hardly matters. Remember that just because materials are placed in a C&D box doesn't necessarily mean they are going to be recycled. Some haulers will provide a detailed report of tonnage and the amount actually recycled, while others will simply tell you it was all recycled. What is important here is to do the homework to really understand how your waste is processed.

Regulated Medical Waste

With all the changes in the marketplace the last few years, this is definitely an area for scrutiny. When dealing with regulated medical waste, make sure the weights provided to you are accurate. Go to see the treatment facility. See where your treated waste goes. Make sure the trace chemo waste and pharmaceutical waste is being processed properly. If your waste is treated on-site, make sure it's treated properly and, just as importantly, that you can verify that it's treated properly.

Trash

Last but not least, let's talk trash. If you haven't ever taken a look at your trash, you should work with your hauler to do a waste audit. It's a valuable tool to show you what you are missing. For example, it's common to discover that a significant amount of paper is not being recycled.

Conclusion

Auditing your non-infectious (mixed) waste is a daunting task, but it doesn't have to be overwhelming. The workload can be shared, broken into tasks or even outsourced to a consultant. One thing is certain; auditing your waste streams will teach you a great deal about the efficiency and effectiveness of your sustainability program.

Tom Badrick is President of Badrick Consulting specializing in healthcare sustainability program design and implementation. The Badrick Consulting website can be found at www.badricksustainability.com and Tom can be reached via email at tbadrick@aol.com.

REGULATORY COMPLIANCE An Ongoing Challenge

BY STEVE MCKENNA

As hospital Environmental Service Departments assume an increasingly prominent role in achieving greater customer satisfaction results, department leaders are also compelled to stay current with a tangled web of regulations surrounding environmental law.

EVS Directors at this point are well-versed in HCAHPS, the federal measurement system for satisfaction—better results will reduce risk to reimbursement. But any hospital without a similar focus on hazardous waste, and the RCRA law driving regulations, is advised to get busy, get help as needed …. and get going with training.

RCRA (the *Resource Conservation and Recovery Act* of 1976) and its offspring define hazardous waste; authorize the EPA to serve as an enforcement arm; and mandate civil and criminal penalties for non-compliance. In 1984, Congress refined the law with its *Hazardous and Solid Waste Amendments*, HSWA; the EPA in 1991 dramatically upped the ante for fines and penalties. For years, federal and state inspectors focused on industrial sites, but in recent years healthcare has become a broad (and lucrative) target. Operators accustomed to dividing the "waste world" into traditional categories such as municipal trash and regulated medical ("red bag") waste have had to learn a whole new language.

And that language can be at times maddeningly broad, and at times extremely precise. Waste, for example, is "any discarded material not otherwise excluded". A generator of waste is "any site or person whose processes and actions create hazardous waste". Not surprisingly, the number of sites deemed to be generating hazardous waste in the country has passed the half-million mark—from hospitals to auto body shops, from manufacturing sites to photo labs to colleges.

Getting a handle on hazardous waste requires multiple measurement and documentation tools. Certain substances may be clearly listed, under section CFR section 40, with the designations of U, P, K or F. Epinephrine, for example, is a common P-listed substance. Some chemotherapy drugs are listed, although others, not listed, are more environmentally troublesome. Other substances are defined by characteristic: ignitable (having a flash point above 140 degrees); corrosive (pH outside the 2-12 range); reactive (unstable or explosive); or toxic. Universal waste may include batteries, pesticides and old light bulbs.

Now let's turn to volume. If you are a generator of hazardous waste, you may be deemed large, small or conditionally exempt based on monthly weights (hazardous and acutely hazardous), emphasis on monthly: volume is obviously likely to fluctuate, and designations change accordingly. In general, the higher the volume, the more stringent the required reporting, and the more frequent the required haul-away…by a licensed transporter, to a TDSF, or treatment, storage and disposal facility. Remember too that law is expressly designed to be cradle-to-grave. Inside your building, it's yours. Once it leaves, it's still yours, making it essential for generators large and small to maintain manifests at every step of the process. Unless you are so small as to be conditionally exempt, you will be required to maintain an EPA identification number.

Regulated Medical Waste and Hazardous Waste are not remotely synonymous terms. RMW handlers, for example, may be able to process trace amounts of chemotherapy substances, such as may be found in tubing, syringes, and vials. They cannot do more, and must document any incorrectly disposed materials. (Autoclaving and incinerating may not be effective on hazardous substances).

The risks involved in failing to prioritize the handling of hazardous waste are staggering. The Joint Commission recognizes the subject in its Environment of Care section. Beyond that lies the financial vulnerability. A New Jersey Medical/Dental facility in 2003 agreed to a penalty of $166,000 for RCRA violations surrounding training, classification of substances, and the handling of solvents and dental amalgam. Another facility in 2009 parted with $83,000 as a result of not conducting weekly inspections of storage areas, maintaining improperly marked containers, and failure to address handling of batteries and solvent-saturated rags. A hospital in the northeast fined $372,000, another on the west coast $32,000, a university fined $1.8M for chemicals improperly buried, the list is endless. If that in itself is not sufficiently alarming, consider that the EPA last year, according to its own public reporting, undertook 289 criminal investigations, with an 88% success rate, in addition to its levying $41M in fines and restitution.

So what to do, if you are not confident that you have a robust program in place? Here are some basic tips which address the most common areas cited by inspectors:

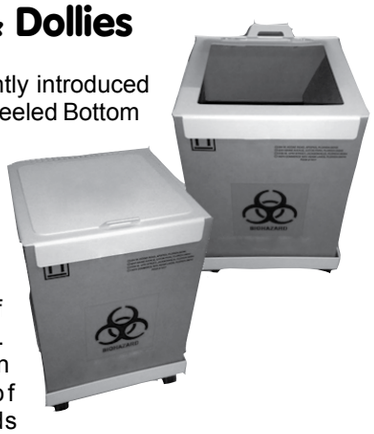
1. Have a checklist, documenting that team members inspect the waste accumulation areas on a weekly basis, both the primary storage area and remote or satellite accumulation areas.
2. Be sure that your manifest records are complete.
3. Demonstrate that staff members handling waste are properly trained, and receive routine in-services and annual refreshers.
4. Be sure that containers are marked properly, and are sealed, not only to leaks but to evaporation. Be cognizant of maximum storage times based on the volume generated.
5. Keep a copy of your waste company's license available to show inspectors.
6. These responsibilities are truly inter-disciplinary; other departments including Nursing and Pharmacy.
7. Be involved in a facility-wide emergency plan, and ensure that staff members know what to do in the event of spills; who the emergency leaders are; and how to communicate.
8. In general, be prepared to show your organization, and any inspecting agency, that you have an ongoing plan to comply with these extensive but crucial legal requirements.

Careful and educated management of waste streams, therefore, is more important than ever. Small discrepancies can have major consequences, and the critical first step is demonstrating to your organization, and to any and all licensing bodies, that you are taking it seriously and making every effort to keep involved and engaged in the process.

Steve McKenna is an Executive Success Coach with DM&A, Inc. in Chula Vista, California. DM&A is a highly experienced team of consultants offering coaching for healthcare EVS departments. Their client list includes numerous prominent hospitals, extended-care facilities and universities throughout the U.S. and Canada. DM&A also offers a full menu of consulting services to the institutional food service industry. For more information contact Steve McKenna at 619-656-2100, steve@chefdon.com or visit www.chefdon.com.

Product/Equipment Profiles

PCM Medical Introduces Red Bag Box Lid Tops & Dollies



PCM Medical recently introduced its Lid Top and Wheeled Bottom Dollies for use with 15 and 30 gallon red bag (cardboard) boxes. Made from recycled material, both lid tops and bottom dollies are waterproof and nearly indestructible. The patented design allows for ease of operation, and the lids are easily opened and assembled with a hinge-free design. The bottoms are enclosed to control spills, and the wheels allow for good ground clearance and the ability to move the box around with ease.

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For more information contact PDM Medical at 727-547-6277 or visit www.pcmmedicalwasterecycling.com.

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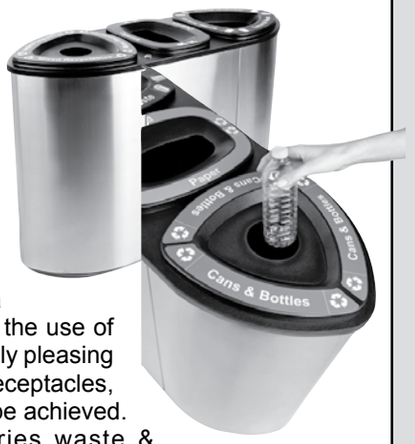

The business card of any medical facility is a tidy and well-kept environment. It increases the appearance of cleanliness and helps define your location. Through the implementation of a recycling program and the use of high quality, aesthetically pleasing waste and recycling receptacles, this environment may be achieved.

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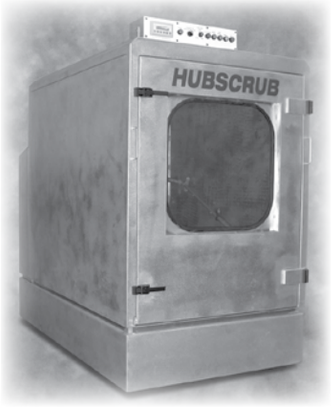
For more information contact Busch Systems at 800-565-9931, busch@buschsystems.com or visit www.buschsystems.com.

HUBSCRUB Releases Model 20/70 Version 4



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The Hard Case *for* Blue Wrap Recycling

Continued from page 3

These conversions typically compute the acquisition costs of blue wrap (about $2.48 per pound in one example) and then estimate how much of the blue-wrapped materials could be effectively handled by hard cases. Multiplying the amount of blue wrap that would not be consumed by the current cost for the material yields the biggest part of the cost justification.

"The cost that seldom appears in the hard-case justification is the storage of the cases – including any necessary racking or shelving and the space allocation within the facility."

Other factors can come into play, such as costs of rehandling and sterilizing a percentage of the previously blue-wrapped instruments where the sterile barrier had been broken (arguably, not an issue with the hard cases). But on the other side, a certain percentage of the items will still be more efficient or cost effective to handle in blue wrap, so add the price of blue wrap for those. The cost that seldom appears in the hard-case justification is the storage of the cases – including any necessary racking or shelving and the space allocation within the facility.

Starting a Pilot

One of the first steps in a blue wrap recycling initiative is to determine what you can generate. A "waste sort" that segregates the blue wrap for a sufficient time period will allow you to project some volumes. But even before that, some basic staff education is in order. Explain the need to segregate the blue wrap and provide adequately labeled bins and signage for the designated collection. It is a good idea to police the collection bin for the first two weeks of a 30-day trial, and educate staff about any discrepancies to improve compliance.

At the same time, locate other programs in the area. This is important for a number of reasons. One is that it will help you determine how much volume is already being recycled in the region. Another is to ramp up your learning curve on implementation by using their experience and internal education materials to guide your own effort.

If there are other blue wrap programs in your area, the market has already been defined. If not, you will need to find someone to take your recyclable blue wrap. It's important to understand that the recycling industry is both a commodity marketplace and a process manufacturer. As Kate Worley, program director for Minnesota Waste Wise, points out, the distinctions aren't always clear from directory listings under the "recycling" heading.

Talking to a commodity broker, even one who lists plastics as one of its commodities, may not get a positive response. That could be because the broker has not had a request from a processor for the type and grade of recyclable you are offering. Or, the broker may not have had a reliable supply of the commodity in sufficient volume to warrant searching out a processor willing to buy it.

Jen Ogden, RN, BSN, CNOR, said the biggest issue her group faced in making its blue wrap recycling program successful was finding someone to take the material. The OR Educator for Shawnee Mission Medical Center said, "We ended up finding a local company that melted it down and sold the recycled material regionally."

Another hurdle Ogden acknowledges is the perception from the recycling industry that the materials are hazardous wastes. "We invited them to come to our OR to see exactly how blue wrap was handled, and to show them that it is not contaminated. We offer tours to anyone willing to make the trip to show exactly how clean this waste is."

Most blue wrap is collected in the prep room before the instruments go into the operating room, adds Worley. That doesn't change with recycling efforts in place, it just may involve a simple change in procedure. The same applies to the concern Worley heard from brokers about the lead-based indicator strip. Ogden says her group was first told they would not need to remove the indicator strip, but then they were told it had to be removed before depositing the blue wrap in the recycling bin. Worley relates similar experiences and says good communication from the broker helped head off a potential problem – though it added an education step for the hospitals.

Getting To Market

Armed with volumes and a prospective end market for the blue wrap, there are still a number of steps in the cycle that must be accounted for. How much manpower and what internal resources are needed, and at what cost?

EPA reports Dominican Hospital (Catholic Healthcare West), Santa Cruz, CA, needed only 24 labor hours to set up its program. Management support was four hours per month. Custodial labor was seven hours per month – time that was already required to dispose of the waste through previous channels.

Segregating the blue wrap in the prep room and removing it with other waste may be minimally disruptive, but accumulating volumes of blue wrap between pick ups by the recycler can put strains on the dock area of the facility. Part of the pilot must include looking at how wastes are currently handled and disposed of and then determining what additional needs the blue wrap effort might place on that infrastructure.

Transportation is a key component in a successful program. Recyclable commodities have a very low value, especially before they are processed. They don't sustain significant transportation costs. That's one reason why these efforts are regional. And even getting out of the urban area can present major issues. As Waste Wise's Worley points out, there are a number of programs in the major urban areas, and that density makes collection easier and more cost effective. Her group also arranges for other commodities to be recycled, and it can schedule pick ups for other plastics from the same location and from other facilities near the medical center that have commodities going to the same sortation operation.

Processors want volume, so additional sortation and accumulation steps come into play between many suppliers and the one processor. Otherwise, your one facility may need a large storage space to accumulate volumes that are attractive enough for the recycler to pick up. In some cases, there may still be charges for pick up, but they will likely be lower than the per-ton and per-pull cost of waste removal.

Worley, whose program is a non-profit set up to promote and support sustainability, works with groups that hire disabled adults. Many of the other successful programs have similar affiliations. In some cases the labor cost is subsidized under other programs. In other instances, the revenue from the sale of the recyclables helps support the effort.

Bottom Line

Successful blue wrap recycling programs need top management support to succeed. They also require a commitment and understanding of the people who will be responsible for segregating and handling the materials. Blue wrap waste is generated in a limited number of places in a medical center, which helps keep the effort required reasonable and the education process manageable. But can it be justified on a cost-avoidance or revenue-generating basis?

That's the hard case. It's easy to justify removing the volumes of blue wrap from the current waste stream and recycling them. Providing employment for disabled adults adds a social argument. In the end, says Worley, many of the hospitals are just donating the materials. She points out these commodities have value and, collected properly, they have more value. It's important to show there is money being made and where, she continues.

Typical results of blue wrap recycling programs are impressive for the volumes of waste that are recovered for recycling, but they usually won't excite the chief financial officer. That may be why they tend to originate as a grass roots effort at the source – with the surgical team that watches the bags of blue wrap going to the landfill.

Institute of Medicine Study Encourages Safety in E-records by Formation of Safety Board

Washington, DC—According to a report by the Institute of Medicine, badly designed, hard-to-use computerized health records threaten patient safety. The Department of Health and Human Services asked for the study as a way of looking at technology-induced medical errors. To solve the problem, says the report, an independent agency should be set up to investigate injuries and deaths linked to health information technology modeled upon the National Transportation Safety Board, which examines airline safety and accidents. The study would ask the board to track the safety performance of existing electronic health records.

Dr. Ashish K. Jha, an associate professor at the Harvard School of Public Health and a member of the panel, said, "There are real safety issues, but we believe that on average, health information technology improves patient safety. Dr. Ross Koppel, a professor of sociology and member of the medical school faculty at the University of Pennsylvania, said the report puts safety into the national discussion of electronic health records rather than assuming e-records are better than paper. Dr. Koppel said the report does not deal with the issue of having the Food and Drug Administration be responsible for the safety of electronic health records.

Currently, the government is incentivizing physicians and health care systems to adopt electronic health records, and changing from paper to computerized patient records is hoped to improve patient care while reducing health care costs. Current practices have been studied, with mixed results as to any effects on patient safety.

One recommendation was that electronic health record suppliers omit clauses about "holding harmless" from sales contracts as this constrains the freedom of doctors and hospitals to explore problems caused by software errors or defects.

To download the study, go to http://books.nap.edu/catalog.php?record_id=13269.

Canadian Scientist Finds Possible New VRE-Like Bacterium Strain

Brantford, Ontario—A discovery by a microbiology technical specialist at the Brant Community Healthcare System laboratory may prove to be a new strain of VRE-like (vancomycin resistant enterococci) bacterium, the potentially deadly superbug and has captured the attention of world-renowned scientists.

"A different process in VRE detection by our laboratory staff found a VRE-like bacterium which is compelling because laboratories around the world may not be using the same methods and as a result this VRE- like bacterium may be going completely unnoticed," Dr. Tom Szakacs, Infectious Disease Specialist, Brant Community Healthcare System said. "Initial findings indicate the presence of this VRE-like strain in 15% of the cases we test."

Hospital officials say much more scientific study will be required to determine the relevance of the finding and have approached expert scientists at Public Health Ontario who are now researching the discovery.

Research to date has shown that the VRE-like organism possesses unique characteristics. According to Dr. Szakacs, "Unlike normal VRE, our laboratory studies show that this organism is killed by vancomycin, yet it grows on plates specially designed to detect VRE. Further research is required to explain the clinical significance of this organism."

Information about the new strain, dubbed 'The McConnell Strain' after Michael McConnell who made the discovery at the Brantford General Hospital laboratory, was presented at the Interscience Conference on Antimicrobial Agents and Chemotherapy, where, through invited sessions, workshops, and abstracts, leading scientists across the world presented their latest research on infectious diseases and antimicrobial agents.

Earlier this year, Canada's first multi-discipline, fully automated hospital laboratory opened at the Brant Community Healthcare System. Built at a cost of $2-million the laboratory minimizes handling and reduces the risk associated with testing patient samples, automatically retests all abnormal results and provides results to physicians as much as 40% faster.

Illinois Does Not Investigate Many Complaints About Health Facilities

Springfield, IL—State officials at the Illinois Department of Public Health refused to look into 85% of 560 hospital complaints received last year, even in the face of serious violations.

Allegations of serious harm or death are required by federal law to be investigated within 48 hours. They say they don't have the funding to investigate all of these, and many blame the hospital industry for quashing complaints. When it finds violations, the state can force hospitals to correct the systemic errors.

"These are serious complaints," said Lisa McGiffert, director of the national Consumers Union Safe Patient Project. "If the regulatory system is collecting these complaints and not responding, that is a massive failure of oversight."

The IDPH spent $498,000 on hospital oversight in 2010, with half of this coming from the federal government and half in state matching funds. The federal officials will investigate if the state requests it, though it is unusual for the feds to do so on their own. "We are working with the state agency to improve the complaint triage process going forward," said Elizabeth Surgener, spokeswoman for the Centers for Medicare and Medicaid Services at the U.S. Department of Health and Human Services.

The state can also refer complaints to accrediting organizations such as the Joint Commission, but such private groups are not required to investigate complaints or to report their findings.

Harbor-UCLA Medical Center Cited for Safety Violations

Federal reports say the hospital failed to maintain a sanitary environment for surgeries. Its new chief executive says problems are being addressed.

Los Angeles, CA—Federal inspectors have found that County-run Harbor-UCLA Medical Center did not maintain its operating rooms in a clean and safe manner in order to safeguard patients from possible infection, said the federal inspector Centers for Medicare & Medicaid Services.

Rooms had ceiling holes or were unclean, operating suites had incorrect humidity levels that could spread germs, and staff weren't washing their hands in the 50-year-old building, which is affiliated with the UCLA Medical School and has 538 beds. The hospital failed to maintain a sanitary environment for the provision of surgical services," the reports said. "This could lead to contaminated surfaces in the operating room and the spread of infection."

The problem was so severe that the federal government said it could revoke Medicare funding. The county submitted a correction plan, and the agency has yet to follow up. The hospital has addressed all the concerns and made changes including weekly audits of infection-control risks and more staff education on hand washing.

Los Angeles County plans to spend $323 million to build by 2013 a 190,000-sf building to replace the surgical facilities and the emergency room. The new building will meet all the standards.

Ottawa Clinic does Not Follow Infection Control Procedures, Puts Patients at Risk for HIV, Hepatitis

Ottawa, Ontario—Approximately 6,800 patients of an Ottawa gastroenterologist are being warned that they may have been exposed to hepatitis or HIV during endoscopies at his clinic, and they are being urged to get testing for the conditions. Upon investigating the clinic, run by Dr. Christiane Farazli, a gastroenterologist, the Ontario College of Physicians and Surgeons found that some infection controls and cleaning protocols were not always followed. The procedures were carried out between April 2002 and June 2011.

The Ottawa Public Health service said the risk that any patients have been exposed to Hepatitis B or C or HIV during the tests is very low, under one in one million for Hepatitis B, under one in 50 million for Hepatitis C, and under one in three billion for HIV.

The province's chief medical health officer has notified local physicians about the issue so they can assist and guide any patients who come to them, and the Ottawa public health service offers a dedicated information line for those who have questions about the matter. Meanwhile, the Canadian Patient Safety Institute says clinicians must take "due diligence" to assure no harm takes place, including proper sterilization of equipment.

Endoscopies are no longer being performed at the facility, but it does remain in operation.

Annapolis Medical Facility Honored for Environment-Friendly Construction

Annapolis, MD—Anne Arundel Medical Center has been named the first in the state to earn a gold LEED rating from the U.S. Green Building Council for its energy efficient design, hard to do with medical facilities because of their round-the-clock operation and high electricity use.

Green features include a green roof with 24,000 plants, plumbing product that use less water, low-energy bulbs in the operating rooms, low-VOC carpet and furniture, pervious pavement, recycling programs, parking spots for hybrids vehicles, the use of recycled steel in construction and a 10-day flush out before occupancy. Points are also added through educational efforts, such as a wall on the first floor of the south tower that describes the gold certification features. The building uses 33% less water and 20% less energy than a traditional hospital.

The $424 million addition has an emergency room and eight operating rooms, and it is estimated that the building's green features added a cost of $1.2 million while saving millions in energy costs.

The building's design, material and practices needed to meet criteria established for commercial buildings, as there are no specific health-care LEED standards at present.

Hospital Infection Rates Go Down, Thanks to 2009 Action Plan

Washington, DC—The Division of Healthcare Quality Promotion at the Centers for Disease Control and Prevention has found that there was a 33% reduction in central-line infections in 2010, while infections caused by catheters used to collect urine from bed-bound patients fell by 7% percent in that year, surgical-site infections fell 10%; and dangerous methicillin-resistant Staphylococcus aureus, or MRSA, infections were down by 18%.

The CDC, the Health and Human Services Department, and nonprofit groups such as the Association for Professionals in Infection Control and Epidemiology have been working hard to reduce infections in hospitals.

The CDC has estimated that one in 20 patients will get some sort of nosocomial infection while in the hospital, with almost 100,000 people dying of them annually. Under the 2010 health care law, the Centers for Medicare and Medicaid Services will eventually cease paying for treating patients who are infected in the hospital.

HHS's official "Action Plan to Prevent Healthcare-Associated Infections" (www.hhs.gov/ash/initiatives/hai/actionplan) was launched in 2009, and CDC believes that this contributed to the drop in infections.

One of the main goals: keeping enough data so health care facilities can track problems and see what interventions are working. The Consumers Union has also championed better collection of data and on policy measures to force health care facilities to act, while America's Health Insurance Plans reported in August on success stories in which hospitals were paid for meeting infection-control goals.

TreatMed Progressing in Opening Spartanburg Location

Greenville, SC—The SC Department of Health and Environmental Control is considering allowing TreatMed to open an environmentally friendly medical waste treatment facility that would store and treat infectious medical waste that has been shredded and sterilized with pressurized steam using machines produced by ECODAS, an allied firm. DHEC says the process, an alternative to incineration, uses no chemicals or burning, and the water used is sterilized before disposal. It would then be disposed of in a landfill in Union County.

In the works for more than a year, TreatMed bought 38,000-sf on 6 acres that are close to a controversial former polyester fiber manufacturing plant linked in many people's minds to several cases of cancer. The firm would invest about $4 million in the plant within three years. If plans are successful, TreatMed would be headquartered in Spartanburg and ECODAS, run by the brother of TreatMed's president, could open a manufacturing facility for its equipment.

TreatMed wants to have the facility operational by the first quarter of 2012. Fairburn, GA had been considered for the plant, but the city said the project did not meet the city's zoning requirements or solid waste management plan. The city felt the facility would give it the image of being a dumping ground.

California Hospitals Cited for Medical Waste Violations

Scripps Health and Sharp Memorial Hospital, both based in San Diego County, California, recently settled separate civil lawsuits with the County District Attorney's Office for improperly disposing of medical and hazardous wastes, including blood and human tissue, in the Miramar Landfill in San Diego, California, reports **www.signonsandiego.com.**

The lawsuits were filed by the District Attorney after Scripps and Sharp hospitals received multiple citations, over a two year period, for improperly handling, transporting and storing medical wastes both at the hospital and the landfills. Scripps Health, which operates five hospitals in San Diego County, agreed to pay $272,870 in civil penalties and court costs, according to the report. The report also stated that Scripps agreed to pay $16,000 to purchase equipment for city landfill inspectors.

According to Thomas Papageorge, head of the Consumer Protection Unit of the District Attorney's Office, Scripps Memorial and Scripps Green hospitals, both in La Jolla, California, were cited dozens of times between 2008 and 2010 for improperly handling human blood and tissues, needles and potentially hazardous chemicals both on and off-site.

Sharp Memorial Hospital in Serra Mesa was cited several times from 2007 to 2009 for the same types of medical and hazardous wastes, he said. The report went on to say that Sharp agreed to pay $102,939 in penalties and court costs, and to participate in three environmental programs: to help organize a five-year electronic waste disposal campaign and a five-year composting program, and to sponsor two environmental education programs.

Since the citations were issued, both Scripps and Sharp have taken substantial steps to improve their systems for separating out, storing and properly disposing of medical wastes, according to Papageorge.

Does Wearing Gloves Reduce Chances of Effective Hand Washing?

Chicago, IL—According to a study published in the December issue of Infection Control and Hospital Epidemiology, published by the University of Chicago Press, hand hygiene is a victim of the practice of wearing gloves in health care settings, and this could assist in spreading infection. This is because some microbes can get through latex gloves or can contaminate hands as the gloves are being removed.

The researchers in the study explored how health care providers interacted with more than 7,000 senior ICU patients and found that correct hand hygiene compliance was 47.7%. This went even lower when gloves were worn, to 41%. The study authors said efforts to educate health care workers and improve their hand hygiene when using gloves may be a critical step in preventing the spread of infection.

This was the largest study to look at glove use in hospitals and their effect on hand hygiene, with 56 wards in 15 UK hospitals involved.

"The chances of hands being cleaned before or after patient contact appear to be substantially lower if gloves were being worn," said the study's principal investigator, Dr. Sheldon Stone, of the Royal Free Hospital NHS Trust in London, in a journal news release. "We call this the phenomenon of the 'Dirty Hand in the Latex Glove.'" Go to /www.jstor.org/stable/10.1086/662619 for more.

Hospital X-rays Mined for Silver by Thieves

Philadelphia, PA—Two Pennsylvania hospitals, Thomas Jefferson University Hospital and Lankenau Medical Center, have reported the theft of 525 pounds of X-ray film scrap, most likely to get the silver on them. The thieves said that they were employees of the hospitals' X-ray recycling vendor. The hospitals are most concerned because of the privacy issues involved, as the stolen films may have included patients' names and birth dates, although not Social Security numbers, addresses, or financial information. Other states reporting such thefts are Arkansas, Massachusetts, and Ohio.

Accurate Recovery Systems, the company that is the actual recycling vendor for the two hospitals and 50 or so others in a three-state region, said there have been three or four similar cases in recent months. Accurate Recovery has sent letters to all area hospitals to make sure recyclers show company identification and provide receipts. Generally, silver refiners are only willing to process trailer loads of film.

Because most hospitals have switched to digital radiology, they usually only recycle outdated X-rays that no longer need to be archived. The stolen material included films no longer needed for patient care, defective and blank films, and films used for teaching.

Brazil Upset with US for Exporting Medical Waste as Textiles

Pernambuco, Brazil—Brazil has called out the United States for exporting and selling medical waste in the form of a textile product. The shipping papers say that the cargo consisted of cotton textiles with manufacturing defects, but the bedware, towels, robes, pajamas and baby clothes were found to be bloodstained, with identification from American hospitals. In addition, there were also syringes, hospital gloves, catheters, gauze and bandages interspersed in the bundles. Brazil has found two containers with 45 tons of hospital waste imported so far and expects 14 more shipping containers to be on the way from South Carolina.

The Brazilian textile company Império do Forro de Bolso acquired the medical waste from American health facilities and had it shipped to Suape, Permanbuco, but the owner says he was the victim of the American company from which he bought the material, and he plans to sue.

The Federal Police and Social Defense Dept. is asking the US Customs to look into the trade in illegal medical waste, as is the state government of Pernambuco, which has formed a crisis management committee to contain the public health impact of the import. The Brazilian Disease Control Agency warns that people in direct contact with the material can contract diseases such as hepatitis A and B.

Infection Specialists Work to Fight MRSAs in Pittsburgh

Pittsburgh, PA—The Three Rivers Association for Professionals in Infection Control and Epidemiology is working with hospitals to identify and monitor which bacteria are prevalent in their facilities so physicians can use the right antibiotic for a particular job. One step was to hold a day-long educational program for health care professionals, "The Power of Prevention." It is part of a Centers for Disease Control and Prevention public health campaign, "Get Smart."

Most of Southwest Pennsylvania's hospitals have programs to monitor the bacteria present in health care facilities several times a year. If staph bacteria are prevalent, physicians are alerted to prescribe drugs known to be effective against it. In other cases, patients can be put on "antibiotic time-outs," to assess whether it is their medication that is being effective in their recovery or another factor. This will help determine if the use of a drug should be discontinued, if it is not directly responsible for a patient's recovery.

The rise in cases of the intestinal bacterial Clostridium Difficile or C. Diff, is being blamed on the overuse of drugs, and pinpointing the use of the right drug for the right patient at the right dosage is a key part of fighting such infections.

Research Finds that MDR-AB Germs Found in 48% of Patient Rooms

New York, NY—A new study by the University of Maryland School of Medicine published in the November issue of the American Journal of Infection Control, the official publication of the Association for Professionals in Infection Control and Epidemiology, shows that multidrug-resistant acinetobacter baumannii (MDR-AB) was found in 48% of rooms of patients who were infected or colonized with the germ. Resistant to the majority of antibiotics, MDR-AB has caused outbreaks of infection in hospitals in the last decade.

Researchers from the University of Maryland's School of Medicine sampled 50 rooms inhabited by patients with a history of MDR-AB infections. Ten surface samples were collected from each room from such locations as door knobs, nurse call buttons and other locations.

The findings revealed that 9.8% of the samples (representing 48% of the rooms tested) indicated environmental growth of MDR-AB. It also found that patients with a recent history of MDR-AB colonization of infection and those with a remote history of MDR-AB (more than 2 months) were just about as likely to contaminate their environment.

The surprisingly high frequency of MDR-AB demonstrates the importance of sanitation and disinfection procedures used at healthcare facilities. Acinteobacter is a group of bacteria commonly found in soil and water. There are a number of species that cause illness in humans, but Acinetobacter baumannii accounts for close to 80% of all reported infections related to this bacteria.

"Outbreaks of Acinetobacter infections typically occur in intensive care units and healthcare settings housing very ill patients. Acinetobacter infections rarely occur outside of healthcare settings," reported Richard Hayes, President of UltraViolet Devices, Inc. (UVDI).

Since that study, new techniques to reduce transmission of the germ have resulted in a large reduction in infections. The researchers conclude: "For patients with MDR-AB, the surrounding environment is frequently contaminated, even among patients with a remote history of MDR-AB." For more, go to American Journal of Infection Control, www.ajicjournal.org/article/S0196-6553(06)00706-1/abstract.

Medical Companies Fined for Improper Handling of Hazardous Waste

Tucson, AZ, and Coventry, RI—MRI Manufacturing and Research has been fined $30,000 by the U.S. Environmental Protection Agency for improper management of hazardous waste, in this case the industrial solvents that it uses to make medical supplies such as tubing for catheters at the Tucson plant. The agency found that the manufacturer had mislabeled or unlabeled containers, failed to provide proof of employee training and did not keep adequate records of its production.

At the same time, Rhodes Technologies Inc., a pharmaceutical chemical manufacturer, was accused by the U.S. EPA for violating hazardous waste laws with its eight hazardous waste storage tanks because it did not get its tanks inspected or provide a backup containment system for seven of the tanks. It also did not label pipes and other equipment and perform required inspections. The fine for Rhodes Technologies would be $250,000. Legal counsel for the company said the audit was performed in fall of 2009 and the company has only been informed now of the action.

Under the EPA's Resource Conservation and Recovery Act program, hazardous substances must be stored, handled and disposed of using measures that safeguard public health and the environment.

Federal Panel, Congress Looks for Safety in Digitization of Health Records

Washington, DC—An independent agency should be set up to investigate injuries and deaths linked to health information technology, according to a federal study by the Institute of Medicine. The agency would be modeled after the National Transportation Safety Board, and it would track the safety performance of electronic health records in use. Currently, it is said, there are mixed results from digitized health records. The report hoped to balance the interests of all sides by discussing safety risks and addressing accountability, while at the same time championing innovation trying not to hinder the use of electronic health records.

The Department of Health and Human Services requested the study as a response to the concerns of physicians and public health officials who fear that digital records might introduce technology-driven medical errors.

Ross Koppel, a professor of sociology at the University of Pennsylvania and a member of the faculty of its medical school, reviewed the unpublished study and suggested that the Food and Drug Administration be responsible for the safety of electronic health records.

The advisory group noted that electronic health record suppliers drop "hold harmless" clauses from their sales contracts as this limits the freedom of doctors and hospitals to raise questions about software errors or defects.

Meanwhile, Congress addressed the issue of encryption, so a data breach would not be the result of casual laptop theft or similar actions. Regulations require healthcare providers to report data breaches unless the data lost had been encrypted, and the healthcare industry has not been seen to encrypt data. Senator and physician Tom Coburn said he feared the entire idea of electronic records, while Senator Al Franken, chair of the panel, wanted to encourage encryption and extend privacy protection beyond providers to online medical record providers. In a 15-month span, the Department of Health and Human Services said more than 50 laptops were stolen from health care facilities. Franken complained that HHS does not yet have harsher penalties and enforcement allowed under the legislation and that few cases have been prosecuted. It has been hard to get health companies to be serious about electronic records, and Franken is encouraging the Office for Civil Rights at HHS to finalize the rules.

Canada's Piecemeal Approach to Medwaste Disposal Good, But More Can Be Done

Ottawa, Ontario—United Nations Special Rapporteur Calin Georgescu has determined that "only a limited number of countries has developed, or is in the process of developing, a national regulatory framework" to handle the medical waste now being produced by the world's health facilities."

Canada is working to address this issue, as medical waste disposal does not fall under its national regulatory framework due to a myriad of provincial regulations governing the disposal of medical waste. But most say the various jurisdictions are fairly good about disposal matters, even without a regulatory approach toward hazardous medical waste that is less stringent that that of United States. Most of the provinces put this matter under the legislation governing all waste material, and only Quebec has biowaste specialty regulation. However, some provinces do have guidelines for the management of biomedical waste. A general requirement is that hazardous medical waste be sterilized prior to landfill disposal, and the dominion's healthcare centers are establishing centralized provincial facilities for waste sterilization as part of a national approach to take incineration tasks away from hospitals.

Most provinces work to achieve minimum national standards for handling biomedical waste developed by the Canadian Council of Ministers of the Environment in 1992. Go to www.ccme.ca/assets/pdf/pn_1060_e.pdf for more on this.

Some want the dominion to move toward a national approach and more strict regulation. It is part of a UN desire for all countries to develop comprehensive waste-management strategies, definitions of what constitutes waste, clearly defined duties and responsibilities and the naming of a "national authority responsible for overseeing the implementation of the law and its enforcement."

HPRC Has New Guidelines on Hospital Product Recyclability

Cleveland, OH—The Healthcare Plastics Recycling Council now offers a set of guidelines that identifies product and packaging design features that inhibit post-use recycling potential and makes design recommendations that could enhance product recyclability, according to a council press release.

The complete Design Guidelines for Optimal Hospital Plastics Recycling document is available on HPRC's website. Understanding that product recyclability fits into a broader context of product functionality requirements, hospital operations and economic viability, these guidelines identify and articulate desirable design practices and less desirable design practices. Examples of desirable design practices include eliminating multiple material types used within one discrete product, avoiding paper tapes or labels attached directly to products, allowing for post-use identification and removal of product residue and minimizing the use of pigments in products.

HPRC intends to begin implementation of the guidelines within its member companies this year, as eight of its 11 current members have healthcare product design and manufacturing operations. The guidelines were developed based on findings from a pilot study jointly conducted by the Cleveland Clinic, Engineered Plastics and Waste Management. The study evaluated the recyclability and best practices of pre-patient operating room plastic waste.

The resulting guidelines have a very specific application and are intended to supplement existing plastics packaging and sustainability efforts in healthcare. The complete "Design Guidelines for Optimal Hospital Plastics Recycling" document is available for download at www.hprc.org.

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