



WASTE MANAGEMENT OF HOTELS: HUMAN AND NON HUMAN RESOURCE CONSERVATION

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Abstract:

Tourism in India is growing by leap and bounds. In order to cater to the growing demands of accommodation, large numbers of hotels have come up and in future too this trend will grow further. Hotel industry on one hand is helping to generate revenue and at the same time it contributes heavily towards waste generation. The article presents a clear picture of the energy resources used by the hotels. It explores the various resources used to generate different types of waste and the way they are reused. The hotel has different department and they generate different type of waste which needs to be put in use in various ways. The present article focuses on the type of waste generated in hotels and the prevailing practices that are followed by the hotels to minimize waste. It also takes an indept view of reuse of waste generated in the hotels. It further looks into the ways to minimize the waste. This research article also suggests practical remedies for better waste management to reap the benefits associated with it.

Keywords: *hotels, food waste, waste management*

Background of the Study:

Indian hospitality and tourism sector is the third largest foreign exchange earner, worth US 15 billion, after gems and jewellery and readymade garments states (Mukherjee, 2012). Its contribution in Indian GDP is 6.4%, with an annual increment of 7.8% per annum. Whereas, in world's GDP, it is 9.1%, and rising with a rate of 4.3% per annum (World Travel and Tourism Council (WTTC), 2012). Its significance also increases in the context that this industry is the world's largest employer, generating 254,941,000 jobs which mean that nearly one out of every 12 jobs is from this sector (WTTC, 2012). In India, every million invested in tourism creates 47.5 jobs directly and 85-90 jobs indirectly which higher than employment opportunities generated by agriculture (44.6) and manufacturing (12.6) sector (Mukherjee, 2012). This clearly indicates the economic importance of





the sector, and maximum of the country's tourism potential is still untapped.

Hotels are massive consumer of resources and produce more waste. But, existing guidelines do not ask for efficient use and management of these resources and waste. However, in the long run managing use of these will not only have a major effect in increasing the profit of the hotel industry, but also will contribute to the long-term sustainability of this sector (Alamoudi, 2009). Hence it becomes necessary to focus on the hotel waste management. It must be managed from production to till disposal. This strategy should consist of engineering solution, education, and compliance by everyone who deals with the hotel waste (Sridang, Chevagidagarn, Sawatasuk, Vana pruk, Kongnakhon and Danteravanich, 2005).

Benefits Of Waste Management:

Hotels reduce their operating costs when they manage their waste stream well. Waste management programs cut costs by making some purchases unnecessary, saving staffing time and cutting trash disposal bills. However, disposal costs vary markedly by region, so some hotels reap greater savings than others. Also, recycling saves the most money when the economy is strong and commodity prices are high. Waste management programs can increase hotel revenue, too. A growing number of conference planners and corporate purchasers now favor facilities that recycle. Some hotels consider their in-room recycling bins to be part of their internal marketing program that helps attract guests back to the hotel by demonstrating the organization's environmental commitment.

Waste Reduction Practices In Hotel Operations:

Step 1 - Secure Support.

A successful waste reduction program requires both a philosophical and financial commitment from facility managers. Without this commitment, employees may be reluctant to fully embrace the program. Designate a "Green Team" comprised of representatives from each facility operation (e.g., housekeeping, kitchen, grounds keeping, purchasing) to provide support and input for the waste reduction activities.





Step 2 - Conduct A Waste Characterization Study (Waste Assessment Or Audit).

This study will help determine waste stream composition by identifying waste volumes, existing waste management practices (e.g., reuse, recycling, disposal), and the associated costs. It will help identify which portions of the waste stream could be recycled, reduced, or eliminated altogether. A waste audit also will help to identify disposal costs. Using a full cost analysis approach, taking into account complete lifecycle costs such as procurement, use, and final disposal, can further clarify the true costs of different materials and practices.

Step 3 - Develop A Waste Reduction Plan.

Based on the waste assessment findings, set waste reduction priorities and goals for the facility. Goals should identify the extent to which each waste stream is to be reduced, reused, or recycled (e.g., recycle 20 percent of corrugated packaging).

Step 4 - Implement The Program.

Once waste reduction goals have been set, educate employees on the waste reduction activities that will become a part of their jobs or responsibilities. Continually monitor, evaluate, and fine-tune waste reduction efforts by identifying more effective and efficient methods of reducing waste, increasing reuse and recycling, and identifying additional opportunities to remove or eliminate materials from the waste stream.

Reduce, Reuse, Recycle: Best Management Practices:

Prepare And Follow A Written Waste Reduction Plan.

A written waste reduction plan is an integral part of any waste reduction effort. The plan should include the scope of the project or efforts, overall goals and specific waste reduction target measures. Also, the plan should be structured so that the elimination of waste at the source, or source reduction, is the first goal followed by the reuse of material and finally recycling.

Conduct A Facility-Wide Waste Audit.

In order to clearly find out which wastes are being generated, it is important to conduct a facility-wide audit of all generated wastes. The audit





can be broken down in specific high waste generation areas, such as the Food and Beverage Departments and then compiled with data from other areas to get an accurate description of the waste generation issues.

Track Waste Generation On A Regular Basis.

Tracking waste generation is not a difficult process. It can be accomplished by simply tracking the amount of waste that is picked up for disposal. Waste tracking will allow the facility to obtain measurements and data to assist in the waste reduction efforts by highlighting outstanding generation issues.

Properly Identify, Track, Store And Dispose Of Hazardous Waste: Materials According To Appropriate Environmental Regulations.

Proper management of hazardous materials reduces the likelihood of exposure of guest, staff and the environment as a whole. Common examples of possible hazardous materials are large volumes of paints, oils, chemicals, pool supplies and spent fluorescent bulbs. All of these materials must be stored and disposed of according to the correct environmental regulations. In particular, fluorescent bulbs cannot be disposed of in normal trash receptacles. These bulbs must be properly stored and labeled in a padded container and disposed of through a hazardous waste collection service.

Source Waste Reduction BMPs:

Institute Environmentally-Preferable Purchasing (EPP) Policies.

EPP is a procurement system that leads to direct waste reductions at the source. Common types of EPP are purchasing supplies in bulk, buying products that have minimal packaging and participating in supplier or manufacturer take-back programs for items such as pallets and large containers.

Provide Newspapers To Guests Only By Request.

Newspapers are a substantial contributor to the waste generation problem in the lodging industry. One of the ways to combat this problem is by providing guests with newspapers by request only. If this is not an option, all newspapers should be recycled by the hotel staff.





Use Refillable Containers Instead Of Single-Use Packets And Containers.

Instead of providing single-use toiletries and condiments, use items that are refillable on a continual basis. An example is using refillable shampoo/conditioner containers in the showers of guest rooms.

Eliminate The Use Of Polystyrene (Styrofoam) And Plastic Food Service Containers.

Plastic and polystyrene food service containers take up valuable space in landfills and are not biodegradable. By substituting these products with biodegradable and compostable materials, less waste will be generated.

Reduce The Purchasing Of Excess Or Inventory Materials.

Buy only what is needed in the short term to reduce excess materials and waste.

Remove Or Eliminate The Storage And Use Of Hazardous Chemicals.

Although hazardous chemicals may be needed for certain applications, try to move away from them where possible. Examples include switching from traditional cleaning chemicals to green cleaners. Green cleaners often have less stringent storage requirements than traditional cleaners and can lead to reduced exposure to harmful substances.

Reuse Waste Reduction BMPs:

Use Old Or Discarded Office Paper For Notepads Or Packing Materials.

Used office paper can easily be cut into squares and reused as office notepads. This is especially true if the paper is only printed on one side. If duplex printing is used, shred paper for reuse as packaging material for shipping and in gifts shops.

Donate Any Excess Items, Such As Food, Toiletry Items, Furniture, Electronics And Linens To Local Charities Or Other Social Service Organizations.

Donate any items that can still be used to local charities or other social service organizations. This will extend the life cycle of these usable products instead of sending them to the landfill. If items cannot be donated to local charities, arrange for a system to sell the items to employees.





Construction and demolition supplies and wastes can also be reused in this manner.

Compost Of Excess Food And Landscape Trimmings.

In areas where excess prepared food items cannot be donated to local charities, compost these materials. As with excess food, landscape trimmings should not be sent to the landfill. These materials can be shredded or chipped and reapplied as soil amendments. Such services can be arranged through local agricultural and landscaping resources.

Supply Reusable Goods In Place Of Disposable Goods.

Common examples of reusable goods include cloth table linens, glass or hard plastic drinking containers, refillable soap, cleaning supplies and toiletry containers, plates and cutlery items. These goods can be supplied not only to guest areas of the facility but to back of house areas as well.

Recycling Waste Reduction Bmps

Locate Recycling Containers And Bins Next To Trash Receptacles.

The most successful recycling programs make it easy to participate. Locating recycling containers next to the trash receptacles will lead to an increased success rate for the recycling program. Also, provide easy instructions and directions where these bins are located to both guests and staff.

Clearly Communicate What Can Be Recycled.

Materials that are accepted for recycling should be clearly communicated to both the guests and facility staff. One common way is to clearly define acceptable materials on the recycling containers themselves. Often a large print sticker can be used.

Purchase Recycled Content Supplies.

Participate in environmentally-preferable purchasing by procuring materials that are made with recycled content instead of first-generation content. If possible, purchase supplies that contain the at least 30 percent post-consumer recycled content. Common examples of items containing at least 30 percent post-consumer content are toilet tissue, paper towels, facial tissue, envelopes, office paper, and kitchen napkins.





Print Advertising, Educational And Promotional Materials On Recycled Paper Or Materials.

Printing on recycled content paper will lead to less pollution and energy consumption during the paper production process compared to that of virgin paper.

Recycle Materials Used In Convention And Meeting Rooms.

Materials used in conference and meeting proceedings are often left behind after the event and end up being thrown away. Develop a plan or policy for collecting these reusable materials, storing them and using them during the next event. Also, try not to provide these materials at all or provide them by request only.

Conclusion:

In the present environmental situation government rules and ecological awareness amongst the customer it is important the hospitality industry focus on better waste management. Hospitality industry being a complex organization where different type of operation takes places it takes time and efforts to develop a practical feasible and effective waste management practices, however it is beneficial in the long term for the greener image it creates amongst its public and its contribution to the healthier environment.

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