

**WasteCap of Lincoln
Waste Assessment Report
For:
XYZ Lincoln Hotel
Assessment Performed May 1, 2001**

OBSERVATIONS:

XYZ Lincoln Hotel - has 252 guest rooms, a bar, restaurant, several banquet areas, and a pool and recreation area. To run all of these services, there are administrative offices, housekeeping, food preparation areas and employee staging areas. Each of these areas generates different types of waste streams with some areas generating several types of waste streams. It was noted that the hotel is generally at 60-70% occupancy and that each occupied room receives a copy of USA Today each day. Also, it was noted that ABC Refuse provides trash hauling services and empties the compactors once per week with an average of 5 tons per week. The cost for trash service, including the compactor lease averages \$600 per month. Each area of the hotel will be addressed separately as to the potential recycling, waste reduction and pollution prevention activities in the area.

BASIC SUGGESTIONS:

Implementing a waste reduction or recycling program requires the participation of all employees and management. It is important to develop a team of employees that will be responsible for developing, implementing, and monitoring the program. Buy-in from employees will ensure the greatest success in your effort. I suggest finding a leader in each of the areas (not necessarily management) and having regularly scheduled meetings to evaluate the program. These meetings can be held as often or as infrequently as needed to meet your needs. The steps listed below should be used in developing your program.

1. Get a Commitment

Encourage management and employees to support the program and become involved. The involvement can include: gathering waste information, recommending strategies to management, developing an employee education program, implementing the program, monitoring the program and evaluating the program overall. This step will include developing a recycling team and appointing a coordinator.

2. Assessing the Potential

This waste assessment is the first step in assessing the potential. Asking employees in each area what types of waste are generated and how effective a recycling program would be was a great approach. It allowed employees to know that you are considering their opinion in their area and that they are welcome to provide input. Also, who better to provide the information than the people working in that area each day. Continue to include employees from all areas as they may have potential solutions to recycling needs.

3. Set Goals and Monitor Progress

Goals should motivate employees to participate. They should also be time-based, measurable and very specific (i.e. recycle 50% of cardboard by 10/01/01 or reduce waste volume by 20% by 10/01/01). A cost/benefit analysis should also be included to track the cost-savings achieved by the program. This should include up-front container costs, avoided disposal fees and employee time for training and implementation.

4. Program Design and Implementation

Once recommendations have been developed and accepted, WasteCap can assist you designing the program. We can look at container placement, materials recycled for each area and materials movement. This will also require a great deal of support from housekeeping

staff and area-specific employees. WasteCap can also assist in negotiating agreements with recyclers and waste haulers, determining collection frequency needs and developing cost-savings and reporting procedures.

This step will also include an employee awareness and educational campaign. There are several ways that you can advertise your program to staff and the community. WasteCap can assist by developing training materials and employee training sessions as well as developing publicity plans if you so desire. I am aware that outside publicity may not be viable unless first approved by your corporate management.

5. Program Evaluation and Improvement

It is important for the recycling team to keep a close eye on the program and to work with employees, recyclers and garbage haulers to track the program. Items to track should include total volume recycled by material, changes in garbage hauling frequencies, cost savings from the landfill and participation by area. This information should be presented at regularly scheduled meetings and successes should be shared with all employees to keep a positive momentum. You may also want to consider starting certain types of recycling programs in stages, such as starting with cardboard and later adding newspaper, office paper, plastics, glass and tin. It may be more successful to start the program in stages.

However you decide to implement your program, WasteCap of Lincoln can assist you in making the decisions that will best meet your recycling needs. Based on the waste assessment performed by WasteCap Staff, we have noted the following observations and suggestions.

RESTAURANT/BAR AREA:

In the bar area, several types of alcohol, including bottled and tap beer is served. According to the bartender, more tap beer is served than bottled beer and there is a small amount of canned beer reserved for room service. The bartender estimated that one to two liquor bottles are emptied per day and that on the weekends that volume might be as high as 15 bottles per day. The number of beer bottles per day was unknown. In addition to glass, there is also a small volume of plastic containers for grenadine, lime and sweet and sour mixes. One comment from the bartender was that it would be very difficult to sort the glass during busy shifts.

My suggestion for this area is to implement brown and clear glass recycling. There is a small amount of room for containers under the sinks and near the trashcans. Clear and brown glass can be combined into one recycling container, eliminating the need to sort the glass by color (with the exception of keeping other colored glass out of the recycling container). If at a later date, there is an interest in collecting other glass, it can be implemented in a second container. It is necessary to ensure that all containers are emptied of liquid contents before being placed in the recycling bins. Glass recycling containers should be emptied at the end of each shift or as needed based on volume.

I noticed that there was a great deal of newspapers in the trash in the bar area. It may be beneficial to find an area for a small newspaper recycling bin in the bar area. Also, the beverage stations for the bar generate juice bottles and beer bottles. In this area, there is plenty of room for containers and the employees seemed enthused about the prospect of implementing a recycling program. One suggestion would be to have larger containers in this area that the bar could transfer their glass recycling into and once the large containers are full, they can be transferred to the building-wide containers.

FOOD PREPARATION AREAS:

There are several different areas to address in food prep. There is cold storage, dry storage, prep and a pantry. In the pantry and the chef prep areas, the only wastes are cardboard and food wastes. We did not look at the cold storage areas, but my assumption is that most of the waste coming from cold storage will be cardboard and possibly plastic film. The dry storage area generates several different types of wastes that will be used by food prep staff.

In the dry storage area, there were three types of plastic containers: #1, #2, and #3. #1 (PET) and #2 (HDPE) plastics are readily recyclable in our area. My suggestion is to have one recycling container for plastic recycling. It is important to educate employees to look for the number on the plastic to avoid contamination. #1 and #2 Plastics can be sorted by the recycler. In addition to plastics, there were glass tea beverage containers, #10 tin cans, and table serving sized condiments. For tin cans, they must be rinsed and separated from other recyclables into a separate container. My suggestion on table serving sized condiments is to leave them out of the recycling loop for now as it will be difficult to rinse and sort those containers. These areas should have a total of three recycling containers: one for cardboard, one for plastic and one for tin.

HOUSEKEEPING:

In the Housekeeping area the main waste is going to be cardboard, however there is a considerable volume of plastics as well. The plastic consists of #2 plastic containers for cleaning supplies and laundry detergents and some plastic film from the stretch wrapped pallets. One suggestion in this area is to reduce the number of plastic containers by purchasing the products in larger bulk containers. This will save money for the company and will make it easier to ensure that all of the chemicals have been removed from the containers.

One item of note was that most of the housekeeping staff does not speak English. In this area, training will be very important and signs with pictures for recycling will help as well. I have looked for multi-lingual recycling signs and to date, have not been very successful in finding them. This area should definitely have a separate container for cardboard, one for plastic and possibly later, we can look into adding stretch wrap. Although stretch wrap weighs barely anything, it does create a lot of volume in the trash compactor and does remain compacted in the container. Removing it from your waste stream can significantly reduce your trash volume.

BANQUETS AREA:

As mentioned earlier, the banquet areas consist of 14 total rooms (including the Ballroom) and a staging area for employees. The wastes generated in these areas include paper, aluminum, plastic, glass and a small amount of cardboard. I noticed that there is plenty of room for recycling containers in each of the Banquet rooms. I would suggest using a couple of containers in each room for recycling beverage containers. Most likely, aluminum and plastic would be the best to target up front and if it is successful, add glass at a later date.

ADMINISTRATIVE OFFICES:

In addition to the manager areas in each department of the hotel, there are several administrative office areas. Most of the employees suggested that they generate a great deal of office paper. Each desk space has its own trashcan and I noticed that all of the trashcans did have plastic liners. My suggestion is to remove the liners from the trashcans for use as recycling bins and provide a central location for trash. It has been shown that this method does increase recycling participation by recycling more easily accessible than trash.

Guest rooms:

We did spend some time looking at the suites to determine if in-room recycling could be an option. There is plenty of space in each of the rooms to incorporate recycling separation containers, however, the housekeeping carts are not set up for recycling collection. In addition, this would add extra up-front costs for purchasing the containers. If this is something that the hotel is interested in, I suggest trying it as a pilot program on one floor and later adding other floors if it is successful. In the meantime, I would suggest placing container and newspaper recycling bins in each of the ice/vending stations and a newspaper recycling bin near each elevator. This should capture a large majority of the waste that will be generated.

DOCK AREA:

In the dock area, there are risers stored, which do take up most of the space. In looking at the compactor, I did notice a large volume of cardboard. This area would be ideal for storing recycling containers. Your needs will be one dumpster for cardboard and 6 totes for office paper, newspaper, glass, tin, aluminum and plastic. There is one dock door that is currently not being used. This space may be able to be utilized to store risers so that recyclables can sit outside on the dock or vice versa.

CONCLUSION:

Each business decides very differently how they want they want to implement their recycling program to best meet their needs. I have helped over twenty businesses implement very successful recycling programs and am willing to work with you to design a program that will make recycling at XYZ Lincoln Hotel a success. Depending on the materials that you target, there is probably only one recycling service provider in Lincoln that would best meet your needs. I have discussed pricing with him and service frequency and we feel that there will be a need for 3X/week cardboard service and 2X/week container service. This service would cost \$50 per month. By removing the volume from the trash compactor and reducing compactor pulls, you should save approximately \$300 per month on solid waste. This would give an overall monthly cost avoidance of \$250 and an annual avoidance of \$3000.