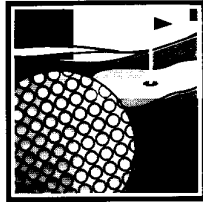


WASTE MINIMIZATION

GOLF COURSES



BACKGROUND

The golf industry is booming in North America, and Alberta is no exception. Alberta now boasts over 225 golf courses, with numerous others being planned or under development. Combined, these courses produce a significant quantity of waste annually, much

of which is currently being landfilled. This sheet is intended to help golf course managers and superintendents minimize waste generated at their golf course, and to help identify practical options for the diversion of waste streams from landfills.

WASTE MINIMIZATION OPPORTUNITIES

Waste can be minimized by using the 3Rs: Reduce, Reuse, and Recycle. Reduce refers to a change in procedures or operations that results in less waste produced, or eliminating waste by avoiding single-use or disposable items. Reuse refers to utilizing materials a second or third time before treating them as a waste. Recycle refers to converting a waste back into a usable material.

This section summarizes various options that can be used to minimize waste produced at golf courses. Because of the increasing costs associated with landfill disposal of waste, many of these options not only provide for ecologically correct management, but also prove cost effective.

REDUCE

- Purchase pesticides, fertilizers and other chemicals in bulk when possible to reduce the number of waste containers and bags.

- Reduce domestic garbage by introducing a purchasing policy that favours reduced packaging.
- Reduce sources of domestic garbage by using fountains for guest drinking water, and utilizing ceramic cups and plates for food and beverages to eliminate the need for plastic or paper plates and cups.
- Replace paper towel dispensers in washrooms with cloth towel dispensers or electric hand dryers.

REUSE

- Use refillable containers for pesticides if they cannot be purchased in bulk.
- Stockpile scrap metal on-site and use for repairing machinery or making equipment modifications.
- Make and use scratch pads or develop draft reports and documents from scrap office paper that is single-side printed (Refer to the Waste Minimization Sheet on Offices & Institutions for further details).
- Clean oily or soiled rags rather than disposing of them. Rags may be used numerous times before disposal is necessary.



- Recycle used motor oil filters. The filters should be drained of oil prior to recycling.
- Purchase reusable items rather than disposable or single-use items.

RECYCLE

- Cut up scrap lumber and large vegetative debris, such as trees, for use as firewood. Large vegetative waste can also be chipped and spread over rough and treed areas.
- Use grass clippings as a natural source of fertilizer. Spread the clippings onto rough areas and around trees. Clippings are capable of decomposing under dry conditions in as little as three weeks. Grass clipping recycling machines, that dry and pelletize clippings to encourage faster decomposition, are available.
- Compost grass clippings and other vegetative wastes such as leaves. A properly maintained compost can produce a nutrient-rich planting medium in only a few months.
- Recycle all aluminum cans and bottles. Establish collection bins specifically for cans and bottles throughout the course to reduce the need for sorting prior to recycling and to ensure all cans and bottles are recycled.
- Take pesticide containers to the nearest collection site. These sites, located at many landfills throughout Alberta, were established to ensure the proper disposal of hazardous residues from the containers. The collected containers are recycled into useful items such as fenceposts.
- Segregate and recycle other plastic wastes including fertilizer bags and containers (rinsed), and PVC pipe. Many plastic items are fully recyclable.
- Stockpile scrap metal not required for maintenance purposes and send to a recycler once sufficient quantities exist.
- Return wooden pallets from sod, fertilizer and other shipments to the supplier whenever possible. Non-returnable pallets can be used on-site for storage, or broken up for firewood.
- Segregate paper and cardboard wastes from offices and send to a recycler. Cardboard, fine paper, magazines and newspaper can all be recycled (refer to Waste Minimization sheet on Offices & Institutions for further details).
- Use existing services to recycle used motor oil. In Alberta, many bulk suppliers of lubricants will accept used oil from their customers. Other services offered include used oil pick-up and transportation to a re-refiner. As used oil from an internal combustion engine is a hazardous waste, care should be taken to ensure compliance with all applicable federal and provincial regulations.
- Take lead-acid batteries to a licensed battery recycler. Batteries contain up to 16 kgs of lead and plastic which are fully recyclable. Batteries are a hazardous waste. Make sure that you are in compliance with all applicable regulations.
- Establish separate refuse collection bins for glass, plastic and paper to enhance recycling.
- Purchase recycled or recyclable items whenever possible.

