
The four main things that you can do to reduce your environmental impacts from hazardous substances are:

- Reducing the amount used
- Storing substances safely
- Using substances safely
- Disposing of substances safely

There are many things you can do that will ensure progress in all four of these areas. Here are some ideas to get you started:

QUICK FIXES

These are all either low cost, no cost or low effort.

Reducing use

- Conduct a thorough review of why you are using products containing hazardous substances. Unless there is a legal or hygiene reason you should ask yourself if there is a less harmful alternative and if you are sure that staff are using the minimum amount required.
- Frequently check pools for leaks and keep an eye on the water level. If you are losing water then you will probably be using more chemicals to keep the water clean.
- Reducing the number of towels and linens being washed unnecessarily can have a major impact on your chemical use. Here are some ideas to address that:
 - o You could implement a towel and linen reuse programme and regularly check that housekeeping are following it.
 - o Consider only changing towels and sheets every four days during a guest's stay. If you are concerned about guest complaints you can simply inform them that they can request fresh towels or a linen change whenever they wish.
 - o Consider if you are putting more towels in guest rooms than are needed. If the maximum room occupancy is two, then put only that number of towels out and either let guests know that they can request more or put extra towels in a different place such as a wardrobe, so it is easy for housekeeping to see they are unused and therefore do not need replacing.
 - o Are guests using more towels than necessary in the spa, gym or the pool? If these areas are staffed it might be possible to issue individual towels or to remind guests via signage about the environmental impacts.
- Reduce the unnecessary use of detergents by training your staff to use equipment in the most efficient way possible. Consider things like the optimal load in a washing machine or dishwasher.
- Ensure the bleed valve pipe on an automatic dosing machine for swimming pool chemicals is returning waste chemicals to the container for reuse and not simply draining out chemicals on to the ground or into a drain.
- There should be signage outside rooms and cupboards that informs people that chemicals are stored there.

- Spend some time researching less toxic alternatives to your cleaning products. For example, white-distilled vinegar makes an effective, cheap and environmentally friendly cleaner for glass and mirrors.

Safe storage and use

- Carry out regular checks of any equipment that contains refrigerants. Make sure you do this in accordance with local, national and international regulations along with the most recent advice of the manufacturer that applies to your specific models. Equipment containing ozone-depleting substances should have regular servicing by a qualified technician.
- Ensure that chemicals that react to each other are stored apart.
- Make sure that chemicals are stored in a way that they can be accessed and handled safely by your staff. For example, don't stack them too high or place them on high shelves.
- Implement an incident reporting system for any chemical spills.
- Regularly check the spill trays you use for chemicals for wear and tear, then replace as necessary.
- Dedicate some time to checking that products that claim they are environmentally friendly or biodegradable definitely are. For example, some eco-brands follow sustainable processes in their factories yet the chemicals their products contain are still harmful. Remember that chlorine is a potentially dangerous chemical, even when it is produced by an eco-label. If you have been misled by this, you will need to update your storage, use and disposal procedures accordingly.
- Check that you have proper personal protective equipment available that is appropriate for the chemicals you are using. For example, a dust mask will not offer protection against gases. Protective goggles should be airtight (no vents) if intended to be used in an area with a risk of chlorine gas escape. Integral (combined) filter and mask protection is better as the whole face is protected.
- Don't store masks and goggles within the area that could become contaminated with chlorine, apart from the fact that this makes them difficult to reach in the event of a gas leak, they could also become contaminated before wear making them useless.
- Buy spill kits for all rooms where chemicals are stored and make sure there are clear instructions with them in all the languages your staff understand.
- This also belongs under 'safe disposal' but you should regularly review all laws and regulations that relate to the substances you use. Make sure you are complying and make changes if necessary.

Safe disposal

- Batteries are extremely harmful to the environment if not disposed of properly and often guests will throw them into general waste so that our Members do not realise the extent of the problem, or have an opportunity to fix it. Find out if there is a sustainable disposal method for them in your destination and if possible, encourage guests and staff to hand in used batteries so you can ensure they are disposed of correctly.

- Fluorescent bulbs (both compact and tubes) need to be disposed of carefully so replace them with LED alternatives.
- Treat empty chemical containers with the same care as you would with full containers by storing them safely before disposal and keeping chemicals that react with each other apart.
- Verify that any waste collection suppliers are disposing of hazardous waste in a sustainable manner. If not, you might be able to change to a different supplier or pressure your existing one to improve their performance.

MODERATE COST AND EFFORT

- Consider using a liquid pool cover that not only reduces the loss of heat and water, but can also reduce the depletion of pool cleaning chemicals.
- Invest in automatic chemical dosing systems to control the doses and regularly check that it is calibrated according to the minimum dose required for each product/chemical.
- Make sure that all of the chemicals you store are in spillage trays that can contain the spill of a full container of chemicals and that are made of a material that will not be corroded by the spill.
- Check that you have proper personal protective equipment available that is appropriate for the chemicals you are using. For example, a dust mask will not offer protection against gases.
- Make sure that all hazardous chemicals are stored behind two doors that can be locked. For example, a locked cupboard in a locked room.
- Be sure that there is proper and safe ventilation in chemical storage rooms. For example, when chlorine spills it drops to the ground so ground level extraction is required. Also, be sure that the ventilation does not lead to an area where people can be harmed.
- Install eye bath stations or kits in areas where harmful chemicals such as chlorine are stored and used.

HIGHER INVESTMENT WITH LONG-TERM REWARDS

- When replacing equipment be sure to research for the latest technology that reduces or eliminates chemical use. This applies to large equipment like air-conditioning units and restaurant fridges through to small items like floor cleaners.
- Using salt ionization to keep pool water clean is an excellent solution for smaller pools. If at all possible you should plan to make this switch and use it for any new pools being built.
- Consider moving any chemical, fuel or waste storage structures so they are well away from natural resources in the event of a leak or spill. Even a small amount of a toxic chemical leaked into the ocean or a stream can have a serious and lasting impact on water quality, plants and wildlife, potentially harming humans too. Build any new structures to be robust, to have adequate ventilation, to keep out wildlife and to safely contain leaks and spills according to the latest standards.