



Laundry and Dry Cleaning

Medium Risk Sector



Cleaning of textiles using soap and water as well as a wide range of chemicals.

Related Sectors:

- Textiles and Apparel



Production Processes

Commercial **laundry** services include the washing, bleaching, drying and pressing of textiles. They are generally restricted to washing with machines that use water as the main cleaning solution. After the washing process, bleaching may follow. Bleaching is the process of whitening textiles. After washing, the textiles are put in dryers where the moisture is removed before the textiles are pressed in a final step.

Dry cleaning is very similar to washing except that textiles are washed in liquid cleaning solvent instead of water, as some fabrics are harmed when washed with water. The term "dry cleaning" refers to the fact that no water is used in the washing process. Before transferring the laundry from the washer to the dryer, the residual detergent/solvent is extracted. Finally, garments are dried with warm air to vaporize remaining solvents, a similar process as in a tumble-dryer. The dry cleaning process mainly uses chlorinated solvents, although petroleum solvents, which are less pollutant, are also applied.

Sustainability Issues

L	Energy
M	Water Use
H	Emissions to Water
M	Waste
M	Emissions to Air
L	Ecosystems
M	Workplace Health & Safety
L	Disaster Risk
H	Site Contamination

Sector Rating

- H High risk issue
- M Medium risk issue
- L Low risk issue

Risks & Opportunities

- **Cleaning agents and liquid effluents from washing and dry cleaning may contaminate water.**
Wastewater should be treated before being released into the environment. Liquid, usually chlorinated solvents used in dry cleaning can cause cancer in the long run and should not be disposed of into the environment.
- **Solvents used in dry cleaning can contaminate the site, and present severe health and safety risks.**
Dry cleaning usually uses chlorinated solvents as detergents, the main one being PCE (perchloroethylene). These chemicals are volatile and entail high risks of site contamination (of the building, the soil and/or the groundwater). Furthermore, PCE presents risks for health and safety as it is a common cause of skin diseases and can also cause other severe illnesses. PCE is also thought to cause cancer. Emissions to air can present risks to neighbours. Waste and residues from the dry cleaning process are hazardous and have to be treated appropriately.
- **Volatile substances may be emitted to air.**
PCE and other highly volatile solvents may be a nuisance and a health risk to neighbors in built-up areas. These emissions may also contribute to summer smog.