

Environmental Risk Overview



Paper Recyclers

Paper recyclers can face a number of environmental exposures from the materials brought on site, treatment processes conducted and wastes that are generated. There is a large variety in the types of paper recycled, but nearly all contain chemicals and materials added during the manufacturing process that may be hazardous. Treatments to remove these materials and reprocess the waste paper for reuse, such as cleaning, deinking and bleaching, utilize chemicals and solvents and generate wastewaters and sludge that can be contaminated. Improper handling, containment and disposal of these wastes can expose the recycler to cleanup and third-party liability. Additional environmental exposures can result during storage of paper prior to treatment, storage of chemicals and solvents onsite and a release of fluids and fuels from equipment.

Environmental Exposures May Include

- Treatment processes such as cleaning, washing and deinking involve the use of various chemicals, solvents and detergents to remove inks, clays, plastics, adhesives and other materials. This generates wastewater which is contaminated with the treatment chemicals as well as the material removed from the paper which may be hazardous, such as heavy metals in the printing inks like copper, lead, zinc and chromium. Containment breaches or improper disposal of wastewater can release these contaminants into soil and groundwater or discharge through drains into other water sources.
- Sludge generated as a by-product from the recycling process, particularly from deinking and flotation operations, is a solid waste that can contain various hazardous materials such as heavy metals, dioxin, coatings, adhesives, dyes and fillers such as calcium carbonate and clay. Disposal of the sludge, or sludge ash created from incinerating the waste, can create liability at the landfill or other non-owned disposal site. Sludge may also be disposed of by landspreading, as it can contain some trace nutrients, but contaminants such as heavy metals can pollute the receiving soils and groundwater.
- Bleaching recycled pulp uses hazardous chemicals, often the same as those used to bleach virgin pulp, including hydrogen peroxide and sodium hydrosulfite. Chlorine and chlorine dioxide could also be used, which can create highly toxic chlorinated byproducts, such as dioxins and furans. A release of the bleaching agents can result in environmental cleanup and third-party liability. Exposure to even a low level of chlorine could be fatal. Bleaching processes also generate effluent containing these chemicals and improper handling or disposal could result in environmental liability.
- During storage and handling of chemicals and solvents, a containment breach, leak or spill can lead to environmental liability. Failure to segregate or the mixing of incompatible materials can create hazards. Spent chemicals and wastewaters may be considered hazardous waste and require special disposal procedures.
- Shredding equipment, sorters, bailers, forklifts, conveyors, compactors, and trucks may be among the equipment used for conducting business. Petroleum-based fluids may leak from equipment and vehicles used onsite, at pickup sites, in transit between pickup and drop-off points, or docked on the yard. If maintenance and fueling is also conducted, these products may also be spilled or leaked from stock supplies. This includes diesel fuels, hydraulic fluids, cleaners and coolants. Releases can contaminate soil, may be carried offsite in storm water runoff, or contribute to fire hazards. Idling diesel tractor trailers may also produce significant localized toxic exhaust emissions.
- Manufactured paper products have chemicals that leach from paper when exposed to moisture. Recyclers use their working yard, outdoor storage and other storage containers that are directly exposed to storm water, transient flooding, leaks and fire sprinkler deployment or firewater. Paper leachate can discharge pollutants into storm drainage systems and cause severe impacts to water quality at outfalls to surface water and damage natural resources. Potential pollutants in the leachate can include inks, adhesives, varnishes, dyes, polypropylene, barium, dioxin, PAHs, sulphate/sulfides and silicates.
- Fires involving various types of paper release emissions of small particles. Some can be grouped in the classes of priority pollutants for the National Ambient Air Quality Standards for PM10 and PM2.5. Some will be present as ultrafine particles which have been shown to cause serious health impacts. Chemicals may include PAHs, 1,3-butadiene, phenols and benzene. Some of these chemicals are carcinogens.
- Odors can be a nuisance and irritant to neighboring properties and result in claims for third-party bodily injury or diminution of property value. The use of chemicals like chlorine and gases produced during processes, such as hydrogen sulfide, can cause eye, nose and throat irritation, headaches, nausea, coughing and could aggravate existing medical conditions such as asthma.

Environmental Pollution Liability Can Provide Coverage For

- Integrated GL/Site Pollution, options to include XS, Auto and WC may be available
- Monoline Site Pollution Liability
- Third-party claims for bodily injury, property damage
- First-party and third-party cleanup
- Defense of third-party claims
- Emergency response costs
- Natural resource damage
- First and third-party transportation pollution liability
- Loading and unloading
- Products pollution liability
- Crisis/reputation management
- Civil fines and penalties
- Off-site services pollution liability
- Business interruption expenses
- Non-owned disposal sites

Claims Scenarios & Examples

- A plant which uses recycled paper and cardboard to make paper towels and toilet paper was sued by a couple who were nearby residents. The suit claimed that the company's operations, sludge fields and other waste disposal facilities at the plant released toxic chemicals into the atmosphere, spreading to the plaintiff's property. The couple said their property was damaged and lost value because of the company's actions. The lawsuit sought damages and attorney's fees. A class-action lawsuit was also filed against the plant, including owners of 116 neighboring properties which claimed that sludge dumped in disposal cells at the plant released hydrogen sulfide, a gas that causes egg-like smells and is corrosive to metal. The property owners claim the gas caused loss of property values and physical damage to homes. Much of the reported damage has been from corrosion to air-conditioning systems. The company appealed the class-action status to the state Court of Appeals and lost.
- A fire at a recycling center broke out after hours causing the release of a large plume of toxic, black smoke into the air. This release caused a health advisory to be issued, eventually leading to the evacuation of several residents. Residents of the neighboring community sued for bodily injury, property damage and relocation expenses.
- A spill of bleach occurred at a paper processing facility as a result of a fitting on a bleach tote failing. The spill released solution to a concrete pad and soil in the vicinity of wastewater processing equipment at the facility. The facility did not report the spill initially, but a contaminant potentially related to the unreported spill was detected in a groundwater monitoring well at the property. Notification to the state's Department of Environmental Protection was provided shortly thereafter. The company was fined, completed cleanup of the release and took proactive steps to improve its chemical handling area.
- Vandals set fire to an unknown amount of cardboard that was located at a paper recycling facility. The resulting fire burned for several days, sending clouds of smoke and toxic substances into the surrounding neighborhood. Nearby residents filed suit asserting claims for strict liability and negligence and alleged that they were exposed to the hazardous and toxic substances. The complaint noted that "cardboard commonly utilized and obtained for recycling contains additives, adhesives, bonding material, and/or other fixatives as well as vinyl chloride, urea, melamine, phenol formaldehyde, urethanes, and acrylics and other substances." The plaintiffs alleged that when the cardboard containing these materials was ignited, the resulting smoke released the fixatives and substances into the air and caused highly toxic and hazardous pollution. They sought damages for medical diagnosis, testing and monitoring to determine the impact of the toxic substances that they were exposed to as a result of the release. The paper recycling company's GL carrier denied coverage per their policy's total pollution exclusion which barred coverage for bodily injury claims because the facility was engaged in the handling, storage, disposal, processing or treatment of waste. The trial court upheld that the total pollution exclusion barred coverage.
- A citizen's group settled with a paper recycling facility to legally prevent contaminated rainwater from running off its site and into a nearby bay. The runoff from the recycling facility had been contaminated with high levels of pollutants that are harmful to underwater life. Rainwater running off the facility flowed to a storm drain that emptied into a river, which flowed into the bay. The pollutants included high levels of total suspended solids, silt and industrial waste, heavy metals and chemical oxygen demand, which were killing aquatic life. The company's legally-binding agreement with the citizens group required the facility to cover inbound shredded paper, make specific improvements to its runoff filtration system and keep the site cleaner.

Final Consideration

Your business can be faced with the cost to defend itself against allegations or legal action from pollution related events, regardless if you are at fault or not. Having the proper insurance coverage in place will help fund the expenses incurred to investigate or defend against a claim or suit and provide you with environmental claims handling expertise.

This environmental risk overview has been developed by Environmental Risk Professionals on behalf of J. Loos & Associates. It is intended to provide the reader with a broad range of potential risks they may encounter and may not reflect all risks associated with their business. To verify available insurance coverage, please consult your insurance representative.

© 2020 Environmental Risk Professionals



J. LOOS & ASSOCIATES
Daniel Loos
919-256-6860
daniel.loos@jloosins.com
www.jloosins.com