Environmental Risk Overview

Manufacturing

Manufacturers are exposed to numerous environmental risks through their operations and from the use and storage of chemicals and raw goods at their facilities. Accidental discharge of pollutants into on-site drains and drywells could enter and contaminate sources of drinking water and natural resources. Manufacturers create products and use equipment that can emit hazardous fumes. They also store materials and manufacture products that if spilled or released could contaminate the environment. Materials that are hazardous can create environmental liability through improper storage or mixing of incompatible materials, releases onsite or during transport and waste disposal. Manufacturers may also have above and underground tanks which can leak and lead to numerous environmental contamination issues.

Environmental Exposures May Include

- Releases of chemicals, petroleum products or wastes from above ground or underground storage tanks, process equipment, containers, wastewater treatment systems, piping systems, drains or other areas of a manufacturing facility could impact soil or groundwater, result in toxic air releases, migrate offsite, harm municipal sanitary sewers, or impact surface waters and result in cleanup claims, third-party suits, natural resource damages and civil fines.

- Storm water runoff could come in contact with chemicals, debris, fueling areas, wastes and other outside storage at manufacturing facilities. Heavy-duty trucks that are loading and unloading at manufacturing facilities can leak automotive fluids on the property. If storm water is not properly controlled, contained or pre-treated prior to discharge into sanitary or storm drainage systems, it can pollute soil and groundwater or discharge directly into surface waters, which can impact human health and aquatic systems.

- Accidental releases during the transportation of products or wastes from a manufacturing facility due to improper cargo securement, a loose valve or vehicle upsets or overturns can result in environmental liability.

- Air emissions can emanate from the manufacturing process, or from release of exhaust or toxic gases from equipment. Vehicles and powered equipment, such as forklifts, trucks and cranes may be used at facilities. These types of internal combustion vehicles are powered by the use of diesel or propane, both of which can emit carbon monoxide gas and diesel particulates. Improper controls or malfunctioning equipment can result in exceedances and regulatory violations. Chemicals may be stored that produce a vapor cloud if accidentally released. Air emissions or a vapor cloud release can pose health hazards to third-parties.

- Manufacturers produce products. Environmental exposure can result from the release, escape or dispersal of pollutants, or contamination of water, soil and air due to product damage or defects. Many General Liability and Product Liability insurance policies deny coverage for cleanup, bodily injury and property damage and defense arising from the discharge of pollutants from a product.

- Mold could develop from moisture intrusion due to storms or flooding from leaking water pipes, sprinklers and HVAC systems. Many manufacturing buildings are flat roofed where pooled water can be absorbed by the roofing material and seep into sub-roof areas. Mold can also develop within HVAC systems or from improper building ventilation or humidity management of climate-controlled areas within the building.

- Incompatible chemicals are prone to react violently or produce toxic byproducts/gases when stored together or mixed. Flammable products may result in a fire that spreads and releases other contained materials, which could emit toxic fumes and smoke from the materials stored at the site or due to a mix of materials that occurs as a result of the fire. Firefighting water or foam could create contaminated runoff that spreads to nearby storm drains or properties and results in environmental cleanup and tort liability.

- Cleaning storage tanks and processing equipment may generate wastewater and/or sludge. Wastewater treatment systems may be present at facilities, or these waste materials may be taken to a non-owned disposal facility or wastewater treatment facility. Releases of insufficiently treated wastewater could occur, or spills could occur during cleaning, transport or transfer from waste storage areas and create environmental risks. Improper waste disposal could lead to environmental liability and/or legal consequences for violating regulatory requirements.

- Manufacturers may generate hazardous wastes or other regulated wastes that require special disposal procedures. Improper waste disposal could lead to environmental liability and/or legal consequences for violating regulatory requirements. A manufacturer can become a Potentially Responsible Party (PRP), liable for cleanup costs, in the environmental cleanup of a non-owned disposal (NOD) facility where they sent wastes.

- Many manufacturing facilities are located in industrial areas. Contaminants from neighboring facilities could migrate to the manufacturer's property. If the neighboring business owner is not properly insured or goes bankrupt, the cost of cleanup could fall on the manufacturer for their own property. Additionally, historic site uses could have impacted the site, and the current operator could be liable for cleanup under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

- Inadequate security at a facility can allow vandalism to occur. Damage to facility equipment, such as aboveground tanks or containers of chemicals, can result in environmental releases.

- Illicit abandonment is the illegal dumping of pollutants on a property by a third-party. It can become the burden of the property owner for cleanup and third-party bodily injury or property damage if law enforcement cannot find the originator of the waste.

Environmental Pollution Liability Can Provide Coverage For

- Integrated GL/site pollution and options to include excess, auto and work comp may be available
- Monoline site pollution liability
- Third-party claims for bodily injury and property damage
- First-party and third-party cleanup
- Both sudden and gradual pollution conditions
- Defense of third-party claims
- Emergency response costs
- Natural resource damage
- First and third-party transportation pollution liability
- Loading and unloading
- Products pollution liability
- Business interruption resulting from pollution conditions
- Aboveground and underground storage tanks
- Non-owned disposal sites
- Civil fines and penalties
- Mold, legionella and more
- Illicit abandonment

Claims Scenarios & Examples

- A fire at a manufacturing facility caused a dike to break and large quantities of toxic chemicals, including xylene and benzene to spill into a nearby waterway. The county's emergency response costs alone mounted to $1.9 million and extensive long-term remediation costs and natural resource damage claims were anticipated.

- Over a weekend, vandals climbed the fence at a manufacturing facility. They broke into the offices of the facility and damaged a valve on a storage tank. The damaged valve leaked until Monday morning, when it was discovered by facility employees. The leaked product remained within the containment area; however, local environmental officials required subsurface testing of soils and groundwater to verify that no impacts had occurred. The total costs for investigation and cleanup of the release was $90,000.

- An unknown party illegally placed a container of hazardous liquid waste into a dumpster at a small manufacturing facility. The container leaked and contaminated the contents of the load, which in turn, contaminated the waste on the tipping floor of the transfer station. Clean-up costs and legal fees exceeded $150,000.

- Above ground storage tanks and associated below ground piping containing fuels were present at a manufacturing facility. A slow leak over time from the underground piping resulted in a release of fuel that contaminated both onsite and offsite soils and groundwater. Cleanup and attorney costs totaled $3.4 million.

- A cement manufacturer was fined for three years of air pollution and reporting violations. The state asserted that their emissions increased overall air pollution and caused a detrimental impact on the health of residents throughout the region.

- A loose flange caused gases to escape at a chemical manufacturer, resulting in a flash fire and the rupture of the feeder pipe. The vapor plume from the gas release spread for several miles and nearly 10,000 residents alleged bodily injury in class action suits.

- Residents and employees at commercial businesses in the area of an industrial facility complained of dizziness and nausea. Several were hospitalized due to fumes. It was discovered that the industrial facility had installed new scrubbers, but the scrubbers had been improperly manufactured. The scrubber manufacturer was sued and forced to pay over $500,000 in damages.

- A small paint manufacturing company completed regular drum washing operations over a severely compromised concrete containment pad. Over time, solvent-laced wash water leaked through cracks in the concrete, seeping into the subsurface soils and groundwater. The plume of solvents then traveled offsite and contaminated a nearby municipal water supply well. The municipality filed suit for cleanup and property damage claims, and the well had to be fitted with costly remedial technology to provide safe drinking water for its customers.

- While a large regional vinyl window manufacturer was unloading windows at a new housing development, a hydraulic hose separated on the truck-mounted loading arm and released hydraulic fluid onto a newly installed paved patio. The driver attempted to wash off the pavers and released contaminated water down a storm water drain. Local environmental regulators said that the storm sewer needed to be capped, flushed and cleaned. The property developer sued the window manufacturer for the discolored paving stones and excavation of the soil beneath the pavers.

- A manufacturer used a machine press to make automotive parts, and a portion of the machine was located beneath the concrete slab floor. For over 20 years, lubricating oil from the machine press was released into the soils under the building. When the soil was tested during a potential buyer's due diligence, petroleum hydrocarbons were found in the soil and determined to be from the leaking machine press. The manufacturer was held responsible for the cleanup of the soil contamination, which also stalled the sale of the property.

Final Consideration

Your property 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.

J Loos & Associates
Insurance and Bonds

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