

Environmental Risk Overview



Education Facilities

Educational facilities span from small day cares to large colleges and universities. The pollution exposures are diverse, and all facilities have some degree of environmental liability exposure. A number of classroom activities involve the storage and use of hazardous materials, as do many of the facility support services such as maintenance, operations and grounds. Environmental exposures can cause contamination of the facility grounds, contamination of adjacent grounds, bodily injury to students, visitors and adjacent occupancies, and property damage to nearby facilities. Bodily injuries can be acute due to a sudden exposure to a toxic chemical or chronic due to repeated exposures to materials such as asbestos or lead.

Environmental Exposures May Include

- Older buildings may contain asbestos, lead and PCBs. Asbestos-containing material (ACM) can be found in areas such as ceiling and floor tiles, insulation, around wiring and in fireproofing on structural steel. PCBs can be found in areas such as window caulk and light ballasts, and lead could be present in paint or pipes. Leading claims may result from inadvertent disturbance or alleged exposure during renovation, construction or interior remodeling.
- Mold growth can result from water and wastewater releases into building materials and subsurfaces due to leaks, overflows, poorly installed building materials and blocked drains or pipes. Mold may also develop in water systems, such as refrigeration or HVAC, and in indoor pools, showers and water features due to improper maintenance, dehumidification or ventilation. Mold growth can result in cleanup liability and pose health hazards to third-parties.
- Legionella is a bacterium that causes a form of potentially fatal pneumonia. Legionella can thrive in water-containing systems like air conditioning, water heating and cooling systems, plumbing systems and water features. It can accumulate in warm, stagnant, pooled or infrequently drained water. Poorly maintained systems and inadequate corrosion control or sanitization can result in Legionella growth and dispersal through mist and airborne droplets and cause diseases such as Legionnaire's and Pontiac Fever.
- Food services may include the use of refrigeration systems that use chemicals, such as ammonia, hydrofluorocarbons (HFCs) or chlorofluorocarbons (CFCs). Leaks or a release of these chemicals can cause serious health hazards to third parties, including respiratory illness and even death. Food preparation and storage areas can also involve the use, storage and disposal of hazards including bleach, disinfectants, grease waste and pesticides/rodenticides.
- Pesticides, herbicides and fertilizers can be used, stored and disposed of for grounds maintenance, landscaping activities and athletic fields. Overuse, misapplication, spills or containment leaks can contaminate soil, surface or groundwater and collect in storm water runoff.
- Hazardous chemicals may be used, stored and disposed of for building maintenance, including paints, stains, solvents, degreasers, lubricants, adhesives and corrosives, and in educational and classroom settings including arts and crafts rooms for painting, ceramics, jewelry making and photography; industrial arts facilities for wood, metal, automotive and electronic shops; science labs for chemistry, biology and life sciences; and agriculture facilities. Spills, leaks or improper mixing of incompatible materials can result in environmental cleanup and third-party liability.
- "Sick Building Syndrome" can occur where occupants suffer health problems while in a building. Along with lead, mold and bacteria, other exposures include chemicals that are stored onsite or found in building materials, combustion products such as carbon monoxide, or volatile organic compounds which emit from various sources including routine cleaning and building maintenance.
- Vehicles used to transport students and faculty or used for grounds maintenance may require the storage, use and disposal of oil, antifreeze, solvents, degreasers and lead-acid batteries. Facilities may also have underground or aboveground storage tanks for fuel. Cleanup and tort liability can result from containment breaches, spills or contaminated storm water runoff from parking and vehicle storage or maintenance areas.
- Sport and recreation facilities, including swimming pools, locker rooms and stadiums, can include the storage and use of hazardous chemicals including chlorine (liquid and gas form), muriatic acid and water treatment chemicals. Boilers used to heat water may also require the use of storage tanks for fuel.
- Collected waste can contain hazardous materials or materials that require special disposal procedures. Improperly segregated and disposed of wastes can result in regulatory fines and lead to cleanup and environmental tort liability. This includes fluorescent light fixture ballasts, fluorescent light tubes and bulbs, paints, chemicals, laboratory waste, used oil and antifreeze, pesticides, grease waste and construction debris containing asbestos, lead or PCBs.

Environmental Pollution Liability Can Provide Coverage For

- On-site cleanup of new and preexisting pollution conditions
- Off-site cleanup of new and preexisting pollution conditions
- Third-party claims for bodily injury and property damage
- Third-party claims for cleanup
- Both sudden and gradual pollution conditions
- Aboveground and underground storage tanks
- Non-owned disposal sites
- Natural resource damage
- Mold, bacteria, viruses, legionella and more
- Emergency response costs
- First and third-party transportation pollution liability
- Civil fines and penalties
- Loading and unloading
- Defense of third-party claims
- Illicit abandonment
- Crisis management

Claims Scenarios & Examples

- Toxic mold was discovered in various areas of an elementary school after several weeks of heavy rainfall, heat and humidity. The school was closed for two months to clean the premises. The cost to remediate the mold was approximately \$700,000.
- PCBs from the caulking in the windows of a school contaminated the soil next to the building. The cost to clean up the contaminated soil reached approximately \$100,000.
- An oil pipe burst inside of a school's boiler room. Around 1,800 gallons of heating oil seeped into the floor drain, which ran into an outside storm basin. After a heavy rainfall, the spill flowed downhill into a hospital parking lot and playground center. The estimated cost to clean up the oil exceeded \$1,000,000.
- During remodeling of an older building on campus, workers ripped out more than 5,000 square feet of asbestos-containing material without taking precautions. Tests confirmed that asbestos swirled into the basement air and exposed members of the university community. Workers also carted contaminated tile through the food court and upstairs to open-air dumpsters, leaving a toxic mist throughout the university's busiest building. That hazard cost the university \$44,000 in fines from the county, plus \$52,000 to sponsor a series of seminars on asbestos handling.
- Lead dust was discovered at a college campus by employees while doing tests in preparation for the renovation of a nearly 60-year-old building. The high levels of lead were initially found on the floor of a machine shop used by employees in the building that housed engineering and computer science classes. Further tests found elevated levels of lead in five student labs. The high levels of lead likely resulted from soldering and welding which used lead, as well as the casting of lead hammers in the workshops. The university estimated it spent \$350,000 on the cleanup.
- A large university disposed of its science lab wastes in a 53-year-old, 20,000-gallon underground storage tank. The underground tank ruptured and contaminated the soil, including private wells and the groundwater that flowed into a nearby reservoir. Several third parties sued the university, with claims totaling \$450,000. In addition, costs to clean up the reservoir amounted to \$1.1 million.
- A university was discharging liquid lab waste to the campus wastewater treatment plant, when the plant failed, toxic liquids were released which contaminated the publicly-owned treatment works (POTW), forcing its temporary closure. The university was charged with \$650,000 in environmental cleanup and contingent business loss that resulted from the contamination of the POTW.
- A college received several complaints from faculty and students about musty odors coming from the basement of a classroom building. Upon investigating and interviewing staff members, it was determined that a downward sloped walkway into the basement caused rainwater to leak into a service entrance. While the rainwater intrusion was reported to the maintenance department from time to time, no action was taken. Results of the investigation also showed that ventilation in the basement of the building was poor. The combination of rainwater intrusion and poor ventilation over the years caused extensive mold contamination which needed to be remediated.
- The concrete secondary containment of a 10,000-gallon diesel aboveground storage tank was cracked. A release from the tank spilled 8,000 gallons into the containment. The diesel seeped into the underlying soils. Total cost for investigation, removal and disposal exceeded \$320,000.
- A liberal arts college faced claims that oil from its power plant contaminated neighboring land and waters costing at least \$7 million, a federal judge ruled. Two 20,000-gallon storage tanks were installed by the college over 50 years ago under its power plant, about 200 feet from the property line, and about 500 feet from a nearby ravine, which flowed into a creek. The plaintiff alleged that heating oil leaked through campus soil onto their neighboring property. More than 33,000 gallons of oil-tainted liquid was removed from the college campus, and oil continued to pollute nearby waterways, according to the complaint.
- A large high school decided to construct a new building on the site of a former parking lot. During excavation, petroleum hydrocarbon contamination was discovered. The school was unaware of the historical use of the site. Cleanup costs were in excess of \$300,000.
- In the chemistry lab of a high school, experiments were being conducted under an old hood. The hood filters failed and released toxic fumes into the community. Several residents had to be evacuated and others rushed to the hospital. The school was sued for several third-party claims, along with a \$215,000 property damage claim for contingent business loss.
- While constructing a new sports stadium at a university, a contractor ruptured two abandoned 10,000-gallon underground storage tanks full of gasoline and diesel fuels. Since a private company donated the land to the university and the contractor did not have pollution insurance, the university was charged \$200,000 for the environmental cleanup.

Final Consideration

Your facility 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.

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