# **Environmental Risk Overview**



## **Food Processing Facilities**

Food processing facilities manufacture, package, label or store food for human consumption, and provide food for sale or distribution. These facilities face numerous environmental risks. Fuels for boilers and other equipment or for fleet vehicles can be stored in aboveground or underground storage tanks. Spills or releases of these petroleum products can impact onsite or offsite soil or groundwater and lead to environmental liability. Different types of oils (vegetable, soybean, corn, etc.) and bulk food products may be stored onsite. A release of these materials into surface water bodies could harm natural resources, including aquatic systems. Refrigeration systems can involve the use of chemicals such as anhydrous ammonia, which

can produce a vapor cloud if released and result in third-party bodily injury claims. Chemicals used and wastes generated by onsite processes create environmental liabilities related to their storage, handling, transportation, and disposal.

#### **Environmental Exposures May Include**

- Gasoline, diesel fuel, or heating oils may be stored at food processing facilities. Gasoline or diesel may be used to fuel delivery trucks or other fleet vehicles, and diesel or fuel oil may be used for building heating, steam production, or backup generation at food processing facilities. These petroleum products could be stored in aboveground storage tanks or underground storage tanks. Releases can occur from storage tanks, their piping systems, or during loading and unloading. These releases can impact soil or groundwater, migrate to surface water bodies or drinking water sources, or could impact indoor air through vapor intrusion. The use of diesel generators or boilers and the idling of diesel trucks can also generate diesel particulates, which are an airborne carcinogen, and can pose health hazards to third-parties.
- Illicit abandonment is illegal dumping of pollutants on a property by a third-party. This can occur if a facility does not have adequate security. It can become the burden of the facility owner for cleanup and third-party bodily injury or property damage if law enforcement cannot find the originator of the waste.
- 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.
- Storm water may come in contact with fueling areas, storage tanks, cleaning chemicals, bulk food storage, or solid wastes and become impacted by petroleum hydrocarbons, pollutants, or particulates. 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.
- Chemicals may be used and stored onsite for food additives, disinfection, equipment degreasing, or for pest or rodent control.
   Spills or leaks from chemical storage areas could cause environmental risks, such as impacts to soil or groundwater or migration of contaminants in stormwater to surface water, causing damage to aquatic life or degradation of water quality.
- Many food products, such as oils, milks, citrus products, etc., can cause fish kills and impact water quality if released to surface water bodies. Cleanup and natural resource damage claims can result from impacts to surface water bodies.

- Mold can 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. Additionally, mold can develop within HVAC systems or from improper building ventilation or humidity management of climate-controlled areas within the building. These mold conditions can lead to cleanup costs.
- Refrigeration systems for foods processed or stored may use anhydrous ammonia, which if released, can form a vapor cloud. Anhydrous ammonia, even in small concentrations in the air, can be extremely irritating to the eyes, throat, and breathing passages. Also, because ammonia boils at a temperature of -28 degrees F, the expanding gas has the potential to freeze human flesh. Therefore, a release could result in third-party bodily injury and property damage claims. Other chemicals used for refrigeration are often ozone depleting substances. Releases of these can result in civil violations if not properly addressed.
- Air emissions can emanate from boilers, vehicles and powered equipment, such as forklifts, trucks and cranes, which may be used at the manufacturing facility. Boilers and internal combustion vehicles are often powered by the use of diesel or propane, both of which can emit carbon monoxide gas, leading to permit violations or third-party injury claims.
- Accidental releases during transportation of fuels, chemicals, or food products to or from a food processing facility due to improper cargo securement, a loose valve or vehicle upsets or overturns can result in claims for cleanup of the roadway and for soil, groundwater, or surface waters impacted by a release. Also, third-party claims could result for bodily injury or property damage from a release. Trucks loading and unloading at these facilities can also have leaks of fuel or automotive fluids that could migrate or collect in stormwater.
- Food processing plants may be located in industrial areas. Contaminants from neighboring facilities could migrate to the food processor's property. If the neighboring business owner is not properly insured or goes bankrupt, the cost of cleanup onsite could fall on the food processing facility. Additionally, the food processing facility could be drawn into third-party bodily injury and property damage claims related to contamination migrating beneath their site and impacting third-parties.



### Environmental Pollution Liability Can Provide Coverage For

- On/Off-site cleanup of new and preexisting pollution conditions
- Illicit abandonment
- Third-party claims for bodily injury and property damage
- Third party claims for cleanup costs
- 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
- Business interruption resulting from pollution conditions
- Aboveground and underground storage tanks
- Non-owned disposal sites
- Crisis/reputation management
- Civil fines and penalties
- Mold, legionella and more

### Claims Scenarios & Examples

- The refrigeration system for a food processing and refrigeration warehouse used aqueous ammonia. A valve on the ammonia storage tank was damaged, resulting in a release of aqueous ammonia. The release caused an evacuation within a one-mile radius of the facility. There were inhalation related injuries to seventy-five people and damage to food products loaded on trains for delivery. Five people were sent to intensive care for complications related to lung damage. The property damage costs and bodily injury and defense costs exceeded \$1M.
- A poultry processing facility had a pipe failure that resulted in the release of over 200,000 gallons of insufficiently-treated wastewater to a nearby river. The spill resulted in a fish kill, impacts to the ecosystem, and degradation of the water quality. The state sued the company to recover damages for the loss of species, natural resources, and public use of the resources. One person filed a third-party bodily injury suit related to the spill. She was hospitalized with sepsis allegedly caused by E. Coli bacteria that she ingested from drinking water drawn from the river after the spill. Also, forty property owners along the river sued the company for third-party property damages.
- A food processing facility generated grease as part of their operations. The grease was collected by a third-party disposal company, which illegally dumped the grease into the municipal sewer system. The grease clogged the sewer piping system causing odor complaints and sewer backups. The disposal company went bankrupt, and the food processing facility, along with other generators, became liable for the resulting third-party claims.
- The US Environmental Protection Agency (EPA) brought a lawsuit against a food and beverage products supplier for leaking an excessive amount of ozone-depleting chlorofluorocarbons from their refrigeration equipment. The company's equipment had developed a leak, but it failed to fix it for an extended period of time. A settlement was reached for \$170,000 between the EPA and the company.

- A seafood processor in Alaska was found to have violated the Clean Water Act. The company had discharged fish entrails, blood, oil, and other byproducts at levels in excess of permit limits, resulting in a seafood waste pile at its discharge pipe that was more than double the one-acre limit in their permit. The company was required to install new treatment technology to decrease the volume of seafood waste discharged, to monitor the seafood pile, and to perform an extensive assessment of environmental impacts caused by the pile. The company paid a \$82,500 civil penalty, in addition to the costs to implement the EPA's requirements.
- A former food processing facility was being sold. Environmental due diligence by the potential buyer discovered past use of chlorinated solvents onsite. An environmental site investigation discovered trichloroethylene contamination in soil and groundwater. The former owner was liable for cleanup of the onsite contamination.
- An unknown party illegally placed a container of hazardous liquid
  waste into a dumpster at a small food processing 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.
- Aboveground 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 ground-water. Cleanup and attorney costs totaled \$3.4 million.
- A milk pasteurizing facility was transporting its product by tanker truck to another food manufacturing facility. On route, the truck had a rollover accident that resulted in the release of mild to the roadway and to storm water drains that discharged the milk into a nearby stream. The milk caused a fish kill in the stream. The pasteurizing facility was responsible for paying cleanup costs and natural resource damage claims.

#### **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.

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