



Agricultural Businesses Face Unrecognized Environmental Risks

Craig Richardson and Philip Twietmeyer

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Of all economic sectors, agriculture is the most closely tied to the environment. Yet modern agriculture depends on products such as fertilizers and fuel that may cause environmental damage that is both difficult and expensive to address. This is especially true for the co-ops and companies that provide seed and fertilizers to farmers, buy the crops after harvest, store and ship grain, process raw products from grain to fruits, and service and maintain farm equipment.

Agricultural businesses may not recognize their environmental exposures - from the collapse of a grain elevator or a spill from a fuel or chemical tank, or runoff into waterways - but those risks can lead to costly liabilities that are not covered by a traditional commercial general liability policy. That may leave a business or co-op to deal with the expense of a clean up or legal action. To address these potential gaps in coverage, agricultural businesses should consider premises pollution liability policies that provide coverage for gradual releases as well as sudden and accidental incidents linked to pesticides, chemicals, fertilizers and other materials.

Fewer Farms, Growing Production

The growing international demand for Agriculture has long been a mainstay of the American economy and continues to play a major role in local economies. Agriculture and related industries accounted for \$789 billion, or 4.7 percent, of U.S. gross domestic product in 2013, while farms alone contributed \$167 billion,¹ according to the U.S. Department of Agriculture.

In recent years, U.S. agricultural exports have outpaced imports, rising 8 percent annually from 2000 to 2014, compared

with 7.8 percent for imports.² The number of U.S. farms has stabilized at around 2.2 million - most of them family farms - down from a peak of 6.8 million in 1935. Less than 10 percent of all farms, however, account for nearly two-thirds of sales of agricultural products.³ An aging workforce in the agricultural sector may lead to greater consolidation going forward. While the number of farms has decreased, total U.S. agricultural output has more than doubled since 1948 as farmers make greater use of chemicals, energy and machinery to substitute for human labor.⁴ Technological advances continue today with equipment such as GPS-guided tractors, and advanced robotics for tasks such as milking cows.

Fuel, Fertilizer and Chemicals Create Pollution Risks

With their reliance on fertilizers, chemicals and machinery, farms and the co-ops and businesses that serve them, run a number of environmental exposures. These risks are typically related to above- and below-ground petroleum and diesel fuel tanks, bulk chemical tanks, and fertilizer storage. In addition, the transportation of chemicals, pesticides, fuels and fertilizers can present significant risks.

Pollution incidents may be caused by human error, equipment failure or natural events such as tornados or floods. Storm water runoff or effluent related to operations can lead to exposures. For example, rain that washes an uncovered concrete apron may send a trail of pollution across a property.

The risks include leaks and spills from fuel tanks as well as waste oil runoff. Bulk chemical tanks can suffer sudden and accidental spills. Fuel and chemical tanks

may be sources of gradual contamination that continues over a period of months or even years. Runoff from a rotting grain pile and barge spills may pose pollution concerns.

Exposures may be linked to any type of regulated chemical or waste that is stored on site. In transport, tankers and other trucks may be involved in accidents, such as a vehicle turnover, that leads to a chemical spill.

While commercial general liability policies may provide some limited coverage for sudden and accidental incidents, they won't respond to gradual releases that lead to pollution conditions or first party remediation cleanup costs. For instance, a slow leak from a storage tank may go unremarked until well after the reporting period required by the policy at the time. Such incidents could result in a very large costs for clean up and remediation that could overwhelm a company.

Agriculture Faces Changing Regulations

Like other industries, agriculture has to deal with increasingly strict environmental regulations on the state and federal levels. While at a minimum, states have to meet standards set by the federal Environmental Protection Agency, they may enact stricter regulations that reflect local concerns and priorities. For instance, companies may face increased scrutiny following a highly publicized environmental incident or in areas where new housing is being built bordering existing farmlands.

Suburban development plays a role. The EPA estimates that about 3,000 acres of productive farmland are lost to development each



day across the country. The number of acres in farms decreased by about 73 million acres, or roughly 8 percent, from 1990 to 2012.⁵ Fumes or vapors emanating from a site may not have caused concerns when the neighboring properties were farms or undeveloped fields and forest, but may generate complaints as single or multi-family homes are built nearby.

Two areas that may be of particular concern to agriculture companies include an increased focus by regulators on storm water runoff and underground storage tanks. While agricultural storm water runoff has been exempt from Clean Water Act permitting requirements,⁶ the EPA has adopted stricter rules for construction sites where more than an acre of land will be disturbed. Those rules cover erosion, sediment controls, pollution prevention and discharges such as motor fuel.⁷ The EPA also has revised its rules for underground storage tanks - the first major revision since 1988 - to add requirements for secondary containment requirements, operator training, maintenance and for tanks holding some biofuel blends.⁸

Recognizing the Risks

Because agricultural co-ops and businesses provide the fertilizer, chemicals, fuel and mechanical services that farmers need, they have a potentially wide range of pollution exposures. Storage operations may lead to pollution incidents. For instance, if a co-op that stores pelletized fertilizer is hit by a flood or heavy rain, fertilizer could be carried away by storm water run off into a nearby waterway, harming fish. Leaks from storage tanks can impact surface or ground water, and damage water quality.

Older above- and below-ground storage tanks can pose a particular hazard as a tank may have been leaking slowly over time, contaminating not only its site but adjacent properties. Local and wide-scale flooding can carry chemicals, fertilizers and wastes off site, and may float storage tanks away. Tornadoes can damage or destroy storage tanks, leading to pollution incidents. Leaks from tanks containing anhydrous ammonia, commonly used as fertilizer, can cause severe bodily injury. Leaks at cold storage facilities that use ammonia as a refrigerant can lead to release of ammonia vapor clouds.

Addressing Pollution Exposures

To reduce their environmental risks, co-ops and companies should assess their operations to identify the activities that might result in pollution incidents. These may include chemical tank use; fertilizer blending and sales; motor vehicle and mobile equipment storage and maintenance; transportation of fertilizers and chemicals; as well as the rinsing and cleaning of equipment and buildings that contain fertilizers, chemicals, residue or other materials that could wash downstream. Any activities that are not essential, but have the potential to pollute, should be eliminated.

Good housekeeping practices, both inside and outside, of a building are important preventive measures. Of particular importance is end-of-day or end-of-process cleanup of spilled materials or fertilizer that has fallen off a blender or load-out conveyor. Even when operations are busy, cleanups should never be skipped.

Problems may be indicated by a “trail” of pollutants, such as discoloration, lack of grass or vegetation, or visible runoff that includes potential pollutants. Places where fertilizer or other materials are stored on the ground instead of on concrete can lead to pollution.

It’s also important to assess the adequacy of concrete slabs, dikes and other structures or tools that make recovery of spilled materials easier. Roof overhangs should cover the slabs in front of fertilizer warehouses to prevent chemically tainted runoff. Shops where trucks or mobile equipment are serviced should be inspected. The drains that collect spilled oil or other fluids, and where they lead, are key concerns.

Overall site drainage should be assessed to determine where any runoff that might include pollution could flow. That includes nearby catch basins, or ditches that run away from the property into streams and rivers and any nearby streams. Where runoff presents an issue,

activities should be moved to a better location on the property. To prevent rain from falling on spilled fertilizer, sheds should be extended. Any product that is stored on the ground should be moved to concrete pads, which allow for much easier clean up. Where runoff “trails” persist, consider the use of bales of straw to collect runoff. Properly dispose of the bales and replace them with new ones on a regular basis.

When it comes to transporting chemicals and other products, the proper vehicles should be used along with the correct loading and unloading procedures to avoid spills. Drivers should have the required hazardous materials training, and vehicles should display the correct placards to alert emergency personnel of potential hazards.

Making Sure the Coverage Fits the Risks

Typical agricultural policies provide only limited coverage in specific circumstances for pollution incidents. That can leave agricultural co-ops and companies that work with pesticides, chemicals, fertilizers and other hazardous materials with potentially significant gaps in coverage. As companies grow, or acquire other companies, their exposures are also likely to grow as they increase the size of their storage facilities - the risks rise along with the number and size of storage tanks.

As they review their pollution risk control strategy, co-ops and agricultural businesses should reassess their insurance program to make sure it provides coverage for pollution-related incidents, and particularly for the associated clean up and remediation. Some key coverages include first- and



third-party bodily injury and property damage for new pollution conditions on a gradual basis as well as costs for remediation, damages and costs associated with government actions; and emergency response costs.

Because a timely and appropriate response can help to avoid injuries, limit pollution damages and control costs, companies should look for coverage that provides assistance in reporting incidents to the appropriate authorities as well as referrals to experienced contractors and coordination of the response.

When it comes to an insurer, companies should look for a carrier that is highly rated for financial strength and that offers loss control services targeted to the agricultural industry. Amid heightened scrutiny and intensified regulations, pollution incidents pose a greater risk for vital agricultural businesses. A strong risk management strategy and a pollution insurance program that addresses these potentially expensive incidents can provide the backstop they need.

About the Authors

Craig Richardson is Senior Vice President, Chubb Environmental Risk. Based in Atlanta, GA, Mr. Richardson has responsibility for the development, underwriting, and delivery of environmental risk solutions for brokers and their clients, from small or midsize to large multinationals. With more than 20 years of underwriting and claim experience in the environmental insurance arena, Mr. Richardson joined legacy ACE in 2008.

Philip Twietmeyer is Senior Vice President, Chubb Agriculture. Based in Wilkes Barre PA, Mr. Twietmeyer has responsibility for the marketing and distribution of Chubb specialty products for the Agribusiness brokers and agents across the U.S. Mr. Twietmeyer joined legacy ACE in 2000 and has held various management roles in underwriting and marketing. He has over 30 years of experience in the insurance industry.

Endnotes:

1. Ag and food sectors and the economy, U.S. Department of Agriculture. May 14, 2015. See: <http://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/ag-and-food-sectors-and-the-economy.aspx>
2. Agricultural trade, USDA, April 6, 2015. See: <http://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/agricultural-trade.aspx>
3. Ag 101, U.S. Environmental Protection Agency, April 15, 2013. See: <http://www.epa.gov/oecaagct/ag101/demographics.html>
4. Agricultural productivity growth in the United States: measurement, trends, and drivers, USDA, July 2015. See: http://www.ers.usda.gov/media/1875384/err189_summary.pdf
5. Land use overview, U.S. Environmental Protection Agency, April 9, 2013. See: <http://www.epa.gov/oecaagct/ag101/landuse.html>
6. Agriculture, U.S. EPA, Dec. 5. 2014. See: <http://water.epa.gov/polwaste/npdes/Agriculture.cfm>
7. Construction and Development, U.S. EPA, Final Rule 2014, Nov. 14, 2014. See: <http://water.epa.gov/scitech/wastetech/guide/construction/>

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Contact Us

Chubb
436 Walnut Street
Philadelphia, PA 19106
USA
www.chubb.com

Philip Twietmeyer
O 570.200.1340
E philip.twietmeyer@chubb.com

Craig Richardson
O 678.795.4388
E craig.richardson@chubb.com

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