

Technical Brief for Commercial Real Estate Lenders

Five Property Types That Raise Environmental Red Flags

Author: Ashley Gowen, Research Analyst

Email: agowen@edrnnet.com

Back in the 1980s and early 1990s, financial institutions commonly based environmental due diligence decisions strictly on loan size. As awareness about environmental risk evolved, a property's current or past use has also become an important determinant of the level of environmental due diligence warranted. Although any site can be contaminated, certain property types should merit closer inspection and more detailed investigations than others. Gas stations, dry cleaners and industrial facilities, for instance, are among the highest-risk property types from an environmental perspective. To help risk managers at community banks better understand property uses that should raise concerns during environmental due diligence, this Technical Brief is based on outreach by EDR Insight to five environmental professionals in the field. Below are their responses to these questions:

What would you tell a new risk manager at a community bank about why this property use raises an environmental red flag? What types of risks are typically associated with this type of operation?



1. Current and former dry cleaners

LaNeicia Stone, Senior Environmental Technical Advisor at EMG

"Properties with on-site dry cleaning operations are of significant concern to real estate lenders and purchasers today due to the release of solvents like perchloroethylene or "perc," a known carcinogen. Considering their chemical nature, dry cleaning solvents are "heavy", can penetrate concrete, and can migrate to subsurface soil/ground water, eventually "sinking" in water. Therefore, this type of contamination is elusive and difficult to remediate. Dry cleaners are also associated with the higher risk of vapor intrusion, caused when contamination in the soil or groundwater migrates into the indoor air of overlying buildings. Vapors will also sink and collect in low lying areas.

Prior to the enactment of the Resource Conservation and Recovery Act (RCRA) in January of 1986, which required the tracking of hazardous materials disposal, there was very little regulation of dry cleaning facilities. While no level of visual observation or research can establish if a property has been impacted, a common sense approach to assessing dry cleaners during the Phase I ESA can help determine the potential for impact and necessity of further intrusive investigation.

Qualified environmental professionals will consider the following factors in assessing the potential risk of dry cleaning operations at a property:

- duration of operations
- number of owners (having multiple operators/owners will increase the risk of environmental impact)
- the type of dry cleaning equipment used (open looped systems are associated with a greater potential for environmental risk)
- housekeeping practices (may be indicative of spills)
- the thoroughness of regulatory permitting/compliance.

If red flags arise during the Phase I ESA, an environmental professional may recommend a Phase II which will typically include both interior and exterior soil or groundwater sampling and/or a vapor intrusion screening.

Indicative of the potential environmental risk that dry cleaning operations represent, the U.S. SBA's latest environmental guidelines (SOP 50 10 5(E)) outline special requirements for properties that housed on-site dry cleaning facilities. Those in operation for more than five years must automatically undergo a Phase II environmental site assessment in addition to a Phase I ESA."



back room drain of dry cleaning business



2. Current and former gas stations

Chris Gregor, M.E.S. REA and Senior Project Manager at Partner Engineering and Science

"Gas stations pose a significant environmental risk from several aspects of the on-site operations including the storage of large volumes of gasoline and diesel fuels in underground storage tanks (USTs), dispensing of fuel, and the potential automotive repair activities. Keeping thousands of gallons of gas and diesel in tanks beneath the ground is convenient from a property layout standpoint, but data has proven that regardless of construction or protection/monitoring systems, nearly all tanks leak, either from corrosion, cracking, and/or being overfilled. Even a tiny leak can result in a significant release to the subsurface over the lifetime of the UST. As well, pumping fuel from USTs to the dispensers, and into vehicles, often results in small chronic releases at the nozzle or along the product piping run. Nowadays, most gas stations have convenience stores; however, historically most facilities were service stations, conducting auto repairs and typically maintaining a waste oil UST in addition to fuel product USTs. Waste USTs may contain heavy metals and/or volatile organic compounds in addition to petroleum hydrocarbons. Any of these contaminants can result in significant impact to soil and/or groundwater at the site,

depending on the specific geology, which can greatly reduce the value of the property and may trigger regulatory action. Recognizing this, the U.S. SBA has categorized gas stations as an “Environmentally Sensitive Industry” and thus requiring, at a minimum, a full Phase I Environmental Site Assessment and verification of current regulatory compliance during the environmental due diligence process as outlined in Appendix 5 in SOP 50 10 5(E). In addition to the Phase I, the SBA requires that the EP must include a determination whether or not the gas station is in compliance with all state requirements pertaining to tank and equipment testing. The SBA used to require Phase II subsurface investigations on all Gas Stations that were 5 years or older, but has since left that determination up to the EP performing the Phase I.



abandoned gas station

In addition to the more traditional concerns of soil and groundwater contamination posed by gas stations, there is also the threat of vapor intrusion caused by the migration of gaseous contamination into the indoor air of overlying buildings. Contaminants such as light-weight petroleum hydrocarbons (such as gasoline) and volatile organic compounds (VOCs) naturally volatilize or “off-gas” and this contamination in vapor form may move into the living/working spaces of overlying buildings, impacting the health of the occupants. Many agencies have begun actively regulating this vapor intrusion potential and we are seeing gas stations which were previously “closed” cases being reopened and reinvestigated, all at the cost of the current property owner. The risk of VI can be assessed as a standard part of the due diligence, taking into account factors like soil type, groundwater flow/depth, and site configuration."

3. Metal plating facilities

Nicholas J. Cuzzone, P.E., President and Senior Project Engineer at EPS Environmental Services

"Metal plating is one of the most chemical intensive industries in which a metal (e.g. tin, nickel, chrome, etc.) is deposited onto a metallic surface to prevent corrosion, add surface hardness, reduce friction and for other uses. The metal plating industry deals with numerous regulatory issues including air emissions, wastewater discharges and the disposal of hazardous wastes. Bulk quantities of various types of hazardous materials are typically used in plating operations including acids, caustics, cyanide, various metals and petroleum- and/or chlorinated-based solvents. Soil and groundwater contamination can arise from illegal discharges, mismanagement of raw materials/waste, cracks/breaches within dip tanks/containment and/or small leaks/releases over a long period of time."



metal plating operation

4. Manufacturing facilities

Bill Tryon, Director of Technical Quality at GRS Group

"Almost every type of manufacturing involves the use of hazardous materials. From production through finishing operations, significant quantities of solvents, petroleum-based materials and heavy metals can be found in even the most benign-seeming operations. Older operations, in particular, are more likely to have resulted in environmental impacts because of the lack of effective regulatory oversight. "



ointment manufacturing plant

5. Vacant land

Ty Hawkins, Project Manager at HRP Associates, Inc.

"Vacant land, particularly in circumstances where the intended future use of the property includes development as a residential subdivision, child daycare, or school, presents an elevated environmental risk. Common environmental risk factors associated with vacant land include: illicit or illegal dumping; the historical application of hazardous agricultural pesticides/herbicides; soil erosion that impacted a state or federal waterway; and the presence of wetland areas that limit the development of the property. Additionally, neighboring releases or contamination may limit the development of the property or require significant litigation before the title is clear for sale."



vacant land for sale

These environmental professionals outlined the potential perils associated with five types of higher risk properties that could raise environmental red flags and may warrant more extensive investigations. Relying on experienced environmental professionals can be a valuable first step toward thoroughly assessing environmental issues prior to originations--and avoiding headaches down the road.

Questions or comments?

Ashley Gowen | Research Analyst

Email: agowen@edrnnet.com

www.edrnnet.com/edrinsight

Unauthorized reproduction, distribution or use of EDR Insight's Strategic Briefs and Technical Briefs is strictly prohibited.

© 2012 Environmental Data Resources Inc. All rights reserved.