

Enviro INSIGHT

A Publication of Environmental Risk Innovations, LLC
Volume 3, No. 1

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Simplifying Environmental Risk.

New Survey of Environmental Risk Management Departments

Benchmarking ERM Departments

A recent survey of environmental risk management departments provides a number of benchmarks within the environmental banking industry. The survey respondents included eighteen lending institutions (ranging in asset size from less than \$1 billion to over \$1 trillion) and two outsourced environmental risk firms. The environmental risk departments at the lending institutions varied in size, with 73 percent having between one and five analysts on staff. 70 percent of respondent institutions reviewed between 500 and 3,000 properties annually.

Staff productivity and review times varied among the respondents. Over half (53 percent) of the respondents reported that the average number of annual reviews conducted per reviewer was below 500, with 12 percent below 250 annual reviews per reviewer. While the median number of annual reviews per reviewer was between 250 and 500, 29 percent of respondents reported an average of 750 annual reviews per reviewer. Besides the differences in efficiency and thoroughness, the variation in annual review numbers may also be influenced by different definitions of a "review." Some departments count the review of a Phase I and Phase II of the same property as two reviews, while others count it as one.

Review times for individual Phase I Environmental Site Assessments (ESAs) also varied. The median review time for Phase I ESAs (not including complex brownfield assessments) was 60 minutes. The median turnaround time for most Phase I reports (presumably the time it takes the department to issue a review after receiving a request) was 48 to 72 hours.

The amount of review time reported for each Phase II report is similar to the Phase I reports, while Brownfield reports receive much longer review times. The median reported review time for Phase II reports was 45 minutes, but 29 percent of respondents reported Phase II review times to be at or above 75 minutes each.

Almost 80 percent of respondents report that their review times for Brownfield Phase I/II reports receive at least 2 to 2.5 hours of review time.

Internal environmental risk managers also tend to order environmental assessments directly from consultants. A full 90 percent of respondents directly engage consultant prepared reports on more than 10 percent of transactions.

The survey was administered by an environmental risk manager at a national lending institution. Although the survey data was provided to ERI for inclusion in this EnviroInsight, the bank wished to remain anonymous.

A majority (56 percent) of respondent banks uses an outsourced peer review staff to supplement their department's workload capacity, and another 11 percent of respondent banks are considering using outsourced staff. Of the banks that outsource, 42 percent outsource more than 10 percent of their volume, with 25 percent indicating that they outsource more than 40 percent of their volume.

Over half of all bank respondents collect environmental review fees. Collection of environmental review fees is often a key component of a successful outsourcing program. If environmental review fees can be added to the closing statements, the outsourced review fees become pass-through expenses that do not impact the expense budget of the internal environmental department. As a result, it seems likely that there would be significant overlap between the banks that collect review fees and the banks that outsource.

For information regarding Environmental Risk Innovations LLC and its service offerings, please contact us at 866.913.9738. ■

New Standards for Dry-Cleaning Solvent?

The U.S. Environmental Protection Agency (EPA) formally added its final health assessment for tetrachloroethylene (also known as perchloroethylene or “perc”) to the agency’s Integrated Risk Information System (IRIS) database. Perc, a solvent widely used for dry-cleaning and in industrial operations, is often a source of soil and groundwater contamination. The new assessment may pave the way for more stringent cleanup standards for properties contaminated with perc.

Consistent with a significant body of research, the final IRIS assessment characterizes perc as a “likely human carcinogen.” The assessment also concluded that relatively low-level exposure to perc increases other health risks associated with kidney, neurological and immune functions. As a result, the EPA lowered its estimate of a “safe” average daily dose of perc exposure from the previous dose set in 1988.

The agency’s long awaited decision to classify perc as a likely human carcinogen is consistent with its finding in 2008, when it released a draft assessment of perc. The perc IRIS assessment follows other delayed assessments of common chemicals, including the recently released trichloroethylene (TCE) IRIS assessment.

The EPA is likely to use the new perc IRIS assessment in many regulatory programs. Most likely, the new assessment will lower the Maximum Contaminant Level of perc in drinking water. The assessment is also likely to be used in updating air emission standards as well as remediation standards for superfund sites.

For brownfield remediation, the impact of the new IRIS assessment will depend largely on the individual state. Many states based their cleanup standards on the same studies used in the IRIS assessment and were therefore more conservative than the EPA’s 1988 assessment. However, other states may see more stringent cleanup standards in the future.

The perc IRIS assessment may prove particularly helpful to remediation projects that involve vapor intrusion of perc into homes near contaminated groundwater. Due to a lack of vapor intrusion standards, many remediation managers were using vapor intrusion standards set by California’s EPA. The new IRIS assessment suggests less stringent vapor intrusion standards than the California standards, suggesting that some states may relax their cleanup requirements for vapor intrusion.

EPA’s Integrated Risk Information System (IRIS) is a human health assessment program that evaluates risk information on effects that may result from exposure to environmental contaminants. The IRIS database contains information for more than 550 chemical substances containing information on human health effects that may result from exposure to various substances in the environment. Further information can be found at <http://www.epa.gov/IRIS>. ■

ASTM Standard for Large Sites

Lenders and environmental risk managers have started to see reports prepared to the ASTM (American Society for Testing and Materials) standard E 2247-08 “Phase I Environmental Site



Assessment Process for Forestland or Rural Property.” The standard was tailored to Phase I Environmental Site Assessments (ESAs) on forestland or rural properties measuring 120 acres or more, although applicable properties may contain isolated non-forest and non-rural areas. The standard is designed to constitute “all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice” as defined in environmental statute (42 U.S.C. §9601(35)(B)).

As with a Phase I ESA conducted to ASTM Standard E 1527-05, ASTM Standard E 2247-08 consists of four components: a records review, a site reconnaissance, interviews and a report. However, the 2247 standard allows for the use of aerial and satellite photographs to assist with the inspection of the property when necessary. The environmental consultant may utilize the photographs to identify structures and areas of concern before physically inspecting those areas. In addition, if the property cannot be accessed, there are provisions for other inspection methods such as viewing the property from adjacent public thorough-fares.

The ASTM E 2247-08 requirements for regulatory records and historical information are also modified from the E1527-05 standard. Instead of requiring a radius search associated with the regulatory database report, ASTM E 2247-08 uses an Approximate Minimum Search Distance that effectively incorporates the individual database radii into a property boundary buffer. Historic information sources can include newspaper archives and miscellaneous maps such as those created for mining and forestry management.

The requirements for report content and detail in the E2247-08 standard are similar to those in the E 1527 standard; however, ASTM E 2247 offers the consultant conducting the assessment more flexibility. This flexibility appears to be a major advantage of ASTM E 2247. For borrowers, lenders and environmental risk managers, this flexibility may add another layer of complexity to the review and property evaluation of environmental assessments.

For more information or questions on Phase I Environmental Site Assessments and the ASTM Standard, please contact us at 866.913.9738. ■

Fire Insurance Maps: A Brief History

Fire insurance maps, one of the primary historical sources in environmental assessments, are unique, informative resources for a variety of historical research fields. Originally produced to meet the specific needs of the fire insurance industry, they maintain a reputation for accuracy and detail in their descriptions of residential, commercial and industrial structures. Today, they are widely used by historians, archeologists, geographers, demographers, genealogists, city planners, environmental professionals and other specialists. Because of their accurate, reliable and detailed information, they are a familiar component of environmental assessment reports. When available, the information they provide is invaluable when assessing whether or not a property represents a real or potential historical environmental risk.

Fire insurance maps were originally developed in London in the late 18th century to provide fire insurance companies and their underwriters with current, detailed and accurate information on the structures they were insuring, thus limiting the need for on-site inspections. The first fire

insurance map was published in the United States in 1852. In 1867, the Massachusetts surveyor D. A. Sanborn founded the D. A. Sanborn National Insurance Diagram Bureau in New York City. By 1920, after several acquisitions of competitors, the Sanborn Map Company, at their peak, employed more than 300 cartographers in the field and more than 400 office and production staff in Pelham, N.Y. Although a handful of competing companies still produced fire insurance maps, the name Sanborn is nearly synonymous with historic fire insurance maps.

Sanborn's success was due in large part to a focus on uniform accuracy and standards. In 1905, as a training tool, Sanborn produced the *Surveyors' Manual for the Exclusive Use and Guidance of Employees* which included precise instructions, sample maps and a comprehensive symbol key. As a result, researchers today have an extensive library of reliable historical information recording urban growth in the United States for more than a century, including descriptions of every structure on every street in more than 13,000 cities.

Over one million fire insurance maps are maintained by the Library of Congress and over 1.2 million maps are available from private collections.

Environmental risk management professionals rely on three primary resources to develop the environmental history of a property: fire insurance maps, historic aerial photographs and City Directories. City Directories are usually available, but fire insurance maps and historic aerials are generally available for only one in three properties. While the information provided by historic aerials and City Directories usually provides essential indicators of the environmental history, these indicators are limited to visible structures and names of businesses. Fire insurance maps can sometimes be used to identify the types, quantities and locations of hazardous materials. That level of detail can be critical to reliably identifying historical environmental risks.

For more information regarding fire insurance maps, please contact us at 866.913.9738. ■

EPA Study Finds Phase I's Deficient

A recent report from the USEPA Office of Inspector General highlights the problem of environmental assessment quality. The report summarizes the review of 35 environmental site assessments that were submitted to the USEPA's Office of Brownfields and Land Revitalization to receive federal grants. Of the 35 reports, which were to adhere to federal "All Appropriate Inquiry" (AAI) standards for environmental site assessments, none met the AAI standards. The AAI standards form the basis for the ASTM E-1527-05 standard for Phase I Environmental Site assessments

For those who review Phase I ESAs for lenders, these results are not surprising; Phase I ESAs often contain technical deviations from the ASTM standard. Still, the pervasive extent of the deficiencies presents three potential consequences for lenders. First, the results of the study confirm the importance of utilizing environmental consultants that have the experience to

accurately comply with the ASTM Phase I requirements. This is especially important for foreclosure sites and other situations where the bank may seek to qualify for environmental liability protections through the performance of AAI.

Second, banks that require strict adherence to ASTM standards as part of their credit policy could create unrealistic expectations and additional costs for pre-lending due diligence. Besides the potential increase in assessment costs, strict adherence to the standard could significantly increase the demands on the review staff without necessarily providing a corresponding enhancement to risk identification.

Third, the report notes that if conditions merit, the EPA can take back funds, withhold future payments or disallow certain cost activities for noncompliant grantees. As a result, Phase I ESAs that do not meet AAI standards could add additional risk to projects that assume government grants.

The Office of Inspector General concluded that the deficient assessments increase the risk that environmental conditions were not adequately assessed and threats to human health and the environment went unrecognized. While this is a reasonable conclusion, the degree to which the deficiencies in the reports resulted in missed environmental liabilities was not addressed. Indeed, many of the noted deficiencies are technical in nature and may not fundamentally change the conclusions of the assessments.

While concerns over compliance with ASTM standards do not necessarily mean that Phase I ESAs are missing significant environmental liabilities, lenders are well advised to evaluate how these deficiencies may impact their environmental risk profile.

For more information or questions on Phase I Environmental Site Assessments, please contact us at 866.913.9738. ■



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ABOUT US

Environmental Risk Innovations, LLC (ERI) is the nation's premier environmental risk management consulting firm specializing in risk management services for commercial lenders. ERI's environmental risk professionals all have extensive experience in the area of commercial lending. Our expertise in the evaluation of environmental risk uniquely qualifies us to assist lenders in the development of environmental policies that are custom tailored to the risk tolerances of our client banks. ERI understands that due diligence and risk mitigation is just one small, but important element of real estate transactions. ERI is familiar with the critical deadlines that loan officers face and our professionals are experienced in supplying high quality, rapid response due diligence to meet these deadlines. ERI prides itself on customer service and flexibility to match each customer's specific needs. Outsourcing environmental risk management services to ERI allows our clients to focus on their core competencies and primary business objectives surrounding the successful execution of commercial loans.

ERI Announces New Hires

Environmental Risk Innovations, LLC (ERI) has experienced substantial growth in the past year, including a volume increase from existing clients as well as the addition of three new professionals to the team. Gordon Little joined the company in March of 2011, bringing with him over 20 years of experience in the environmental consulting industry as well as a degree in Engineering. Bill McGuinness, brought on board in October of 2011, has over 25 years

of experience in the environmental industry, holds a Master's Degree in Geology and is a Licensed Geologist. ERI's most recent addition, Emily Henke, joined the company in November of 2011 after receiving her Master's Degree in Geology.

Greg Lathan, President of ERI, commented, "I am very excited about the depth, experience and skill set each new member brings to the ERI team."

For more information on the services ERI has to offer, please contact us at 866.913.9738. ■



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