

ENVIRONMENTAL RISK MANAGEMENT – INSURANCE & LENDING

Case 1: Pre-Foreclosure Environmental Liability Risk Assessment for Commercial Small Business Lender

EXCALIBUR has provided a commercial small business lender with environmental liability risk management services since 2009. The client held over \$2 billion in commercial loans, with 500 to 600 in default and many in the foreclosure process.

The portfolio has a revolving list of loans that have gone bad requiring foreclosure considerations. A large number of the facilities holding the commercial loans are businesses that involve products or processes that can impact the environment. Additionally, many of the properties used as collateral for the loans had previous land uses of potential environmental concern.

Whenever **EXCALIBUR**'s client contemplates possibly taking title to and control of the real property offered as collateral for a loan declared in default, **EXCALIBUR** is engaged to assess environmental liability risk. **EXCALIBUR** translates Phase I / Phase II ESA report findings & conclusions into the "go/no go" risk criteria. **EXCALIBUR** is vigilant in also ensuring that its client applies loan foreclosure decisions consistent with what is dictated by SBA policy and the environmental provisions of the loan securitization agreements. **EXCALIBUR**'s translation of the technical findings and conclusions of the Phase I ESA vendors are designed to focus on the decision-making variables of most relevance and importance to client internal deliberations, including, in some cases, quantifying the potential environmental contamination and/or compliance liability in dollar terms for comparison to the market value of the collateral property. To



date, **EXCALIBUR** has handled over 400 assignments as its client works through its portfolio of loans moving into default.

EXCALIBUR's investment bank client has commended **EXCALIBUR**'s ability "...to define and quantify environmental liabilities on a site-specific and policy basis. This has been an enormous help to our asset managers and management team as we contemplate foreclosure or other loan level decisions... and [has] helped us in our objective to realize maximum asset recovery on our defaulted loans...."

Assessing Risks of Pre-Existing and New Environmental Liabilities for International Environmental Insurance Carrier.

For the past 10 years, **EXCALIBUR** has provided to a major environmental insurance carrier client ongoing regular technical assistance with liability risk assessments of potential insured facilities located in the U.S. or abroad. Frequently, the potential insured is either purchasing environmental insurance for the first time, or is in the process of renewing environmental insurance or is in the process of acquiring facilities. Time is of the essence whenever **EXCALIBUR** completes its liability risk assessments and consistently meets the aggressive client deadlines. To assess liability risks, **EXCALIBUR** reviews available documentation on the facilities and information it gleans from engineering surveys of / or on-site interviews of senior level management within the insured's firm. **EXCALIBUR's** assessment of environmental liability risks is used by its client to set the premium, identify exclusions, define the policy term, choose appropriate endorsements and set other conditions. The extent of **EXCALIBUR's** reviews depends, in part, on the type of policy and coverage sought. **EXCALIBUR** completes reviews to evaluate the potential for new and pre-existing conditions under



Pollution Premises Liability, Contractor's Pollution Liability, Storage Tanks and other insurance policy products.

To develop its liability risk assessments, **EXCALIBUR** reviews and comments on sometimes extensive environmental, operational, historical, and site files for portfolios containing up to hundreds of retail gasoline stations, multiple petroleum refineries, petroleum terminals, pipelines, chemical and other manufacturing plants, truck and rail fuel loading racks, marine fuel terminals, and petroleum tank farm storage facilities in the US and overseas. Underwriter's producing the insurance policies rely on **EXCALIBUR**'s engineering reviews and analyses of documents supplied by the potential insured's risk managers to render opinions on potential latent and future environmental risks based on careful reviews of document packages, knowledge of the environmental conditions and regulations, and technical experience at similar facilities. Technical services include interacting with multiple parties to develop concise assessments, recommendations and costs compiled from hundreds of pages of documentation to formulate qualitative environmental risk forecasts for known and/or unknown pollution conditions in soil, groundwater, vapor, attributable to site operations, or historic property uses, known conditions, and potential third party claims. Assignments under this contract vary from month to month with over 80 assignments per year, usually with short turn-around schedules employing up to half a dozen technical **EXCALIBUR** environmental advisors to summarize and report on the findings in direct support of underwriters determining eligibility and insurance terms and policy quotes lasting from one to five years. Project deliverables include written and/or oral presentations and conclusions accurately describing operations, regulatory compliance issues, disposal practices, environmental management practices, maintenance, record keeping, and agency interactions that reflect the potential insured's internal processes and procedures to manage and minimize risks. Since the contract's inception in 2005, **EXCALIBUR** has completed environmental reviews of thousands of locations spread



across the United States, Mexico, Canada, and Europe. Several sample case studies of the hundreds **EXCALIBUR** has completed are shared below:

Case 2: INSURANCE LIABILITY RISK ASSESSMENT - Worldwide Portfolio of Major Label Maker Facilities

EXCALIBUR assessed environmental liabilities and potential claim risks associated with unknown conditions at over 100 manufacturing, commercial and office locations located in the U.S., Europe, Asia, South America and Oceania.

EXCALIBUR assessed environmental liabilities and potential claim risks associated with unknown conditions at over 100 manufacturing, commercial and office locations located in the U.S., Europe, Asia, South America and Oceania. EXCALIBUR assessed liabilities and claim risk based on historical use of each of the properties, by reviewing supplied Phase I and Phase II documentation (where available). Factored into the claim risk level EXCALIBUR ascribed to each facility were the severity and likely enforcement of applicable country/locality-specific environmental regulations, the operational history, the RECs identified, how well identified RECs were investigated, the type of contamination, the complexity of site hydrogeologic conditions, the proximity to human and ecological receptors and the age and quality of the available environmental information. EXCALIBUR determined which of the insured's facilities fell into higher, lower and more moderate claims risk categories and shared its findings with its client meeting an extremely short deadline.



Case 3: INSURANCE LIABILITY RISK ASSESSMENT - East Coast U.S. Casino and Race Track Facility

EXCALIBUR helped its client better understand claim risks for a large east coast U.S. casino and horse racing track betting facility by reviewing available documentation, interviewing senior casino management and completing a site visit / tour of the facility operations. The facility was seeking PPL coverage for new and pre-existing conditions. During its streamlined review and site visit, **EXCALIBUR** learned that the facility had past surface water discharge permit violations, in large measure due to manure in runoff. **EXCALIBUR** was able to inspect the engineered structures and review the policies and procedures that were put into place to prevent future permit violations. **EXCALIBUR** also learned that the facility had a leaking underground storage tank issue that had not been completely resolved and was able to inspect an older gasoline UST / dispensing system that was not well documented. During the site visit **EXCALIBUR** learned for the first time that horse jockey's were actually living on the premises in and around the horse barns, which **EXCALIBUR**'s client was pleased to learn about as an additional risk factor for consideration. **EXCALIBUR** used the information from the telephone survey, on-site meeting and facility tour to assess future claims potential and to provide its client with its assessment so that the insurance policy terms, including exclusions, could be appropriately set to control **EXCALIBUR**'s client's risks.

Case 4: INSURANCE LIABILITY RISK ASSESSMENT - Major Refinery

EXCALIBUR completed an expedited review of an extensive library of nearly one hundred technical reports and conducted internet research in support of its client's preparation of a quote to provide new and pre-existing PPL coverage for a U.S. refinery with a long history and an associated 24-mile pipeline. **EXCALIBUR**'s client was particularly concerned about the insured's request for retroactive coverage / unknown,



pre-existing conditions and prospects of Natural Resource Damages (NRDs) claims. **EXCALIBUR** learned that the facility had numerous petroleum and acid spills and even a fatality associated with one of the past releases. Unfortunately, EXCALIBUR found that even though the site had 100 groundwater monitoring wells and free product, no plume maps were included in any documents. To assist its client with appropriately quoting the environmental insurance **EXCALIBUR** shared its findings of unknowns and key concerns as follows:

Unknowns:

- Where all historical operations have occurred on-site and whether they have been characterized;
- The impacts to the covered location of documented nearby off-site releases;
- Stream sediment impacts;
- Pipeline environmental issues / impacts; and
- Dredging spoil areas environmental condition.

Key Concerns:

- Discovery of unknown contamination during upgrades to plant and 14-mile pipeline over the next year (or more) while the idled plant is being refurbished / upgraded (any newly discovered contamination not likely to have originated after the sale of the property because the plant has been idled);
- Future discovery of "old" contamination in abandoned areas of the plant that
 had been used in past operations but not by operations of the new owner
 (discovered contamination in areas where the plant is no longer active,
 therefore, could not have originated from a "new" release);
- Chronic health issues claimed by nearby residents (real or not) associated with past excessive plant discharges documented in the public records; and
- River degradation / contamination claims associated with past discharges.



Case 5 - INSURANCE LIABILITY RISK ASSESSMENT - Commercial Re-development of Former Municipal Landfill

To assist its client with environmental insurance policy quotation, **EXCALIBUR** was asked to complete an expedited review of available documents to help assess claim risk. The insured was seeking PPL environmental insurance covering pre-existing and new conditions for a commercial development. The developer seeking the PPL insurance was planning to develop a 20-acre portion of a 1960s era Florida city ~200-acre landfill. The portion of the landfill to be redeveloped had been previously excavated / screened and backfilled in preparation for redevelopment. Some commercial establishments had already been built on part of the reclaimed landfill area and the insured was planning on developing the remaining portions.

EXCALIBUR identified the following data gaps and potential claim triggers for its client's consideration based on its expedited review of the files:

Data gaps:

- No soil sampling from beneath the landfill (in the clay), a potential source of groundwater contamination
- No groundwater data
 - May be key concern of FDEP (e.g., investigation of nearby school groundwater could lead them to investigate other areas)
 - Expect there will eventually be monitoring wells installed / monitored;
- No surface water data (note groundwater appeared to seasonally intersect
 / comingle with nearby pond water)
- No information about 20-foot perimeter and 1:1 slope to top of clay layer that was not originally excavated.
- No information on Non-owned disposal sites;



Potential Triggers:

Case Studies: Risk Management

• Development of Office Park –In the process of digging into the RSM and bringing utilities on site, it would be reasonable to expect encountering pre-existing environmental contamination in perimeter areas and elsewhere. Also, current plans are for a parking structure to be built in the area of the current surface water retention pond. It is not known if a garage dewatering / water treatment system may be required to address groundwater contaminants. It appears that hazardous landfill gas will likely be a significant construction, design, and permitting issue for the office buildings.

FDEP required investigations at the school and beyond. FDEP issued several documents to the developer making it abundantly clear that they intend to make the developer investigate part of the former landfill as a priority. The investigation will commence at the school at the other end of the landfill. It would be reasonable to expect that FDEP will require groundwater monitoring wells and that groundwater contaminants will likely be detected at some level. Delineation of groundwater contaminants can be expected to follow, which could eventually lead to monitoring wells around the 20-acre commercial development.

EXCALIBUR concluded that the future hotel and office building operations would not be expected to produce new environmental conditions. However, pre-existing undefined soil, groundwater and surface water conditions along with FDEP's focus on characterizing part of the former landfill area due to the school construction over the landfill could lead to site characterization and monitoring requirements (or more), which may or may not be financed by the city. Also, future construction or FDEP requirements may force the excavation of part or all of the 20-foot perimeter of remaining unexcavated landfill material. Explosive levels of methane measured in the RSM where



the future office buildings to be constructed presents construction and future office building occupation risks, at a minimum, and could migrate toward the existing restaurants.

Case 6 - INSURANCE LIABILITY RISK ASSESSMENT - East Coast Marine Oil Terminals & Asphalt Refinery

EXCALIBUR completed due diligence site-visits and interviews of senior management at multiple marine oil terminals and an associated asphalt refinery including facilities in Maryland, Virginia and Georgia. An insurance client was preparing to renew PPL policies for these facilities and requested **EXCALIBUR**'s assistance in visiting these facilities to review policies and procedures with the insured, account for engineered structures present at each facility and document the condition of the marine loading / unloading areas, pipelines, storage tank and refining / distillation systems. For each facility, **EXCALIBUR** acquired detailed information needed for claims risk management including: general information about the facility, specific facility improvements including UST and AST size, construction, location and content, unloading and loading areas and surrounding land use. Additionally, **EXCALIBUR** obtained detailed information about the property history, materials handling and storage, air emissions, water management, waste management, soil and groundwater contamination, PCBs, asbestos containing material, land-based and marine / pier-based spill prevention, control and countermeasure plans, site security and related matters. The information was used by **EXCALIBUR**'s customer to set the policy quote and to establish baseline conditions with respect to any future claims.



Case 7: INSURANCE LIABILITY RISK ASSESSMENT – Portfolio of Gasoline Retails Facilities

For a portfolio of over 40 U.S. gasoline retail sites, **EXCALIBUR** reviewed available Phase I and Phase II documents (where available) is provide an expedited assessment claim risk for both new conditions and for unknown pre-existing conditions. Sites were categorized as presenting a higher, lower or more moderate risk based on: (1) the quality and completeness of the Phase I and Phase II information; (2) the age of the Phase I and Phase II reports; (3) documentation of regulatory closures identified issues; (4) plans for UST closures or upgrades; (5) the need for further site investigation; (6) site history; (7) adequacy of recent intrusive studies; (8) the regulatory climate, requirements and cleanup standards where each facility is located; and other factors.

EXCALIBUR completed due diligence site-visits and interviews of senior management at multiple marine oil terminals and an associated asphalt refinery including facilities in Maryland, Virginia and Georgia. An insurance client was preparing to renew PPL policies for these facilities and requested EXCALIBUR's assistance in visiting these facilities to review policies and procedures with the insured, account for engineered structures present at each facility and document the condition of the marine loading / unloading areas, pipelines, storage tank and refining / distillation systems. For each facility, EXCALIBUR acquired detailed information needed for claims risk management including: general information about the facility, specific facility improvements including UST and AST size, construction, location and content, unloading and loading areas and surrounding land use. Additionally, EXCALIBUR obtained detailed information about the property history, materials handling and storage, air emissions, water management, waste management, soil and groundwater contamination, PCBs, asbestos containing



material, land-based and marine / pier-based spill prevention, control and countermeasure plans, site security and related matters.

Case 8: UST Compliance / Risk Management Training, NY Public Schools

EXCALIBUR was hired by a nationwide environmental insurance provider, one of the largest in the world, specializing in insuring storage tank risks. For the environmental insurance industry, EXCALIBUR routinely reviews and comments on extensive environmental, operational, historical, and site files for portfolios containing up to hundreds of retail gasoline stations, multiple petroleum refineries, petroleum terminals, chemical and other manufacturing plants, truck and rail fuel loading racks, marine fuel terminals, and petroleum tank farm storage facilities. Based on this extensive experience, **EXCALIBUR** developed and led technical training seminars for the client's customers based on our research and experience in UST/ AST management regulations pertaining specifically to their customer's environmental risk management needs. A key goal of **EXCALIBUR's** training seminars has been to reduce potential risks and claims by educating insured tank owners/ operators through audio/visual instruction on county, state, and federal requirements for UST and AST management practices. Key areas of instruction have included: compliance monitoring, reporting, and documentation; placarding; inventory reconciliation and reporting; tank integrity testing and mitigation; fueling operations and documentation; tank protection; monitoring methods; release/spill reporting; environmental protection practices; UST/AST permanent and temporary closure requirements; emergency response(s), and **EXCALIBUR** translated our environmental engineering, compliance & training. insurance risk management skills into training audiences in face-to-face and webinar formats which have resulted in follow-up requests and compliments on the highly informative and useful nature of **EXCALIBUR's** sessions.