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## Remedial Cost Estimates as a Critical Component of Securing CMBS Loans

**Underwriting a commercial real estate loan is fundamentally a process of quantifying the risks associated with the loan. How much revenue does the property generate? How much does the property cost to operate? Is the sponsor experienced, and is the geographic area improving or getting worse? These questions and many additional metrics are used to create a model and ultimately each data point becomes a line item in that model. Physical building risk is quantified through Property Condition Assessments (PCAs), which provide an itemized breakdown of the remaining useful life of physical components of the asset and what the cost to replace that component will be at a specific time. The appraisal quantifies valuation risk in the same way by attributing a specific value to what someone will be willing to pay for the asset. Both lend themselves nicely to the underwriting model by assigning specific values to their respective underlying risks. Environmental risk is quantified through Phase I Environmental Site Assessments (ESAs). Most properties have little to no environmental risk. But when environmental issues are identified in a Phase I ESA report, they create consternation because they are usually identified late in the underwriting process, they are unexpected, and they are not easy to quantify with a specific value.**

What if your consultant could quantify environmental risk by assigning a cost to the risk in the same way that a PCA assigns costs to physical condition risk or an appraisal assigns a value to valuation risk? This would increase the likelihood of a successful transaction for the lender and provide peace of mind to the borrower for down the line mitigation strategies depending on various scenarios. The due diligence product that is used to achieve this is a Remedial Cost Estimate.

A Remedial Cost Estimate is the process by which all the necessary steps that might be required to bring regulatory closure to an environmental issue are projected forward and each step is assigned a value. While there are many uses for Remedial Cost Estimates in commercial real estate, over 80% of the

Remedial Cost Estimates we have done in the last two years have been for the commercial mortgage-backed securities (CMBS) market. In this article we will explain why this product is so important to CMBS and lay out a framework for how a Remedial Cost Estimate should be conducted/completed.

### Environmental Due Diligence for CMBS Loans

Environmental due diligence requirements for loans that will be securitized into CMBS do not differ much from those required by most other types of lenders. However, the large number of stakeholders in the CMBS structure require that all steps of the loan process be formalized into a mutually agreed upon framework. The representations and warranties (reps and warranties) made by the loan originator are an integral part of this framework and they outline how asset level environmental risk must be assessed. Minimal requirements consist of a Phase I ESA that meets the requirements of the American Society for Testing and Materials ("ASTM 1527-13") as well as the United States Environmental Protection Agency "All Appropriate Inquiries" guidelines, and that it is conducted by a reputable environmental consultant. In most cases, the report must be conducted within 12 months of loan securitization.

The Phase I ESA assessment for CMBS underwriting is the same as that required by almost all commercial real estate lenders. The difference is that CMBS prescribes what must be done if any of the following are identified: material noncompliance with environmental laws, the existence of a recognized environmental condition (REC) or the need for further environmental investigation. In CMBS underwriting, this is usually addressed by performing a Phase II Subsurface Investigation, which can identify and clarify if a release has occurred at the property and what next steps, if any, are needed.

There are approximately a half dozen prescriptions in the reps and warranties that can be used to remedy the identified environmental issue. These include: a hold back by the lender of 125% to 150% of the funds estimated by a reputable environmental consultant sufficient to cover the cost to cure the environmental issue; the implementation of an Operations and Maintenance Plan if the only environmental condition relates to the presence of asbestos; remediation of the environmental condition identified in the Phase I and issuance of a no further action or closure status by the relevant regulatory agency; an environmental policy or a lender's pollution legal liability insurance policy that covers the liability for the identified circumstance or condition was obtained; a party not related to the mortgagor was identified as the responsible party for such condition or circumstance and the loan seller has reasonably estimated that the responsible party has financial resources adequate to address the situation; or a party related to the mortgagor having financial resources reasonably estimated to be adequate to address the situation is required to take action.

Historically, if a REC was identified during a Phase I ESA, the next step was almost always to conduct a Phase II Subsurface Investigation for more risk clarity. If no contamination was identified, then the REC would be removed from the Phase I report and none of the above options would be needed. However, in the past two to three years there has been a significant increase in the number of deals where lenders and borrowers are forgoing a Phase II Subsurface Investigation altogether and opting for either a 125% - 150% hold back of the cost to cure or obtaining environmental insurance. The benefits of these options are that they are faster than conducting a Phase II Subsurface Investigation and they provide certainty of loan closure without having to do any additional investigation.

Rating agencies have noticed this increase in the use of these options, as well. A need for the Remedial Cost Estimate in the above instances is driven by one question that the rating agencies need the answer to ensure confidence in their valuation: Is the insurance policy or hold back enough to cover the risk and how did you get to that number? For example, if a Phase I ESA identifies a REC at a site because of historical dry-cleaning operations and the issuer obtains a \$1,000,000 environmental insurance policy to cover the risks, how do they know that \$1,000,000 is enough? The Remedial Cost Estimate provides a science-based process that outlines how the cost to remedy the environmental issue was derived.

### **Rating Agencies and Environmental Risk Uncertainty**

When considering a valuation, rating agencies generally look at the worst possible hypothetical outcomes over the course of a 10-year loan. The rating agency is looking for a stressed version of what may happen in the event of default of these loans that would result in a bond loss. In other words, the higher the agency rating, the lower the assumed stress value of the asset. Therefore, to rate a security AAA, the agency has to be able to say with a high degree of confidence that there will be no likely loss.

This process gets more complicated when it comes to the possibility of environmental contamination on a site. How can a rating agency provide accurate and confident ratings when the borrower uses environmental insurance and/or a Remedial Cost Estimate in lieu of a more concrete Phase II Subsurface Investigation and/or mitigation? The amount of experience and level of qualification of the environmental consultant has a huge impact on the outcome of the Remedial Cost Estimate. Those differences as well as differences in the level of detail put into the estimate create variance between estimates – exactly the type of thing the rating agencies don't want. Since the rating agencies are not directly requesting the Remedial Cost Estimate, navigating these scenarios is outside of their direct purview. That is why a standardization of this product would help the entire CMBS process by giving the rating agencies piece of mind.

"We have seen a growing shift toward Remedial Cost Estimates and insurance policies as environmental risk mitigants," says a senior analyst at Moody's. "At this point, we review these situations on a case-by-case basis since the industry hasn't produced a consistent standard of depth and scope of RCEs and the underlying assumptions. We of course have a high degree of sensitivity around the very low risk tolerance of high investment grade bonds."

### **Remedial Cost Estimates for CMBS Deals**

A consistent Remedial Cost Estimate standard would streamline the securitization process by creating a framework that reduces subjectivity around how to value environmental risk. Currently, there is no standard industry framework for Remedial Cost Estimate deliverables. Typically, it includes an itemized summary of all the data and documents reviewed and outlines the work that will be required to complete the remediation on a step-by-step basis. Each of these steps will have a cost range associated with it. If a large amount of information is available for review, then the cost range may be small but often there is very little previous data, perhaps just a Phase I ESA report. In this case the cost range

can be large, but it still is science-based and provides the end user with a useful estimate to plug into their underwriting model.

In our experience, Remedial Cost Estimates should be informed by a wide range of potential contamination issues and sites that are used in estimating percentage confidence for Remedial Cost Estimate line items. ASTM E2137-17 is an industry standard for estimating monetary costs and liabilities for environmental matters, and it provides the general framework for a more detailed Remedial Cost Estimate approach. The ASTM framework is too broad to be used in its entirety, but it provides the following essential principles:

- **Uncertainty is not eliminated** – Inherent uncertainty in estimates should not prevent an estimate from being made.
- **Not Exhaustive** – Estimation of costs and liabilities for environmental matters does not necessarily require an exhaustive evaluation of all possible outcomes. A point exists at which the cost of obtaining information or the time required to gather it outweighs improvement in the quality of the estimate.
- **Assessment of Risk** – The actual or potential risk to human health and the environment should be considered in assessing environmental matters.
- **Estimator Selection** – An appropriate estimator or group of estimators will consist of those individuals or groups who possess sufficient knowledge, training, and experience to develop appropriate estimates for the costs and liabilities being estimated.

Beyond these principles, the above ASTM standard puts forth several options for how the Remedial Cost Estimate is quantified. We propose that the Range of Values Approach, providing at least two values, is the most appropriate and useful for transactional real estate Remedial Cost Estimates. These two values represent a Probable Estimate (most likely or expected estimate) and the Probable High Estimate (or likely maximum estimate). Ultimately, it is the latter value that really matters and provides stakeholders with a single cost that quantifies the potential risk.

### **Where Do We Go from Here?**

Currently there is a wide observable range of Remedial Cost Estimate deliverables, depending on the experience and/or depth of analysis of the consultant and the need of the client. For example, in situations where a high-level estimate is sufficient, a simple, likely worst-case cost estimate can be provided in an email or memo. This type of "back of the envelope" estimate can be useful if a potential buyer is in the very early stages of preparing a bid and they want to get an idea of their risk exposure. Another example pertinent to CMBS is where there is an environmental insurance policy that has a very high coverage figure. If there is a \$3MM policy and the consultant is confident that no likely scenario could produce a cost of more than \$1MM, then this type of estimate may be enough.

Ultimately, a quality Remedial Cost Estimate provides a tangible likely worst-case cost scenario that allows stakeholders to confidently quantify environmental risk in their real estate transaction. Environmental insurance and environmental holdbacks in CMBS loans are becoming more and more prevalent and therefore the need to quantify a dollar amount in a more transparent and standardized way is needed. A consistent approach for the Remedial Cost Estimate process would streamline the securitization process by creating a framework that reduces subjectivity around how to value environmental risk. This will allow the rating agencies and other stakeholders in the deal to have the type of confidence level surrounding this issue that is needed for them to accurately assess the environmental risk – much like they assess any other type of risk in the underwriting process.