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ENVIRONMENTAL DUE DILIGENCE ASSOCIATED WITH PROPERTY TRANSACTIONS

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(This presentation includes forward-looking statements. Actual future conditions (including economic conditions, energy demand, and energy supply) could differ materially due to changes in technology, the development of new supply sources, political events, demographic changes, and other factors discussed herein.")

1.0 Environmental Due Diligence

Environmental due diligence is a generally accepted business practice associated with property transactions that has developed over the last 20 years to define and manage potential adverse environmental impacts associated with the historical use of a property.

The goal of environmental due diligence is to, 1) define the extent of environmental impacts, and 2) quantify the cost to remediate (if necessary) these impacts. With this information business managers can better understand the financial and environmental risk associated with property transactions.

Environmental impacts in this context are considered impacts from historical operations on soil and/or groundwater that might adversely impact people using the site and/or the environment around the site. These impacts are best quantified using risk based cleanup standards and reduced by remediation.

Once environmental impacts are identified they can be managed through:

- Remediating the contamination to the appropriate standards (risk based in-country or generally accepted international standards).
- Engineering controls (i.e., vapor barriers and ventilation systems) to contain contamination associated with environmental impacts.
- Institutional controls (i.e., land use restrictions, zoning) to control the future use of the property.

Guidelines covering environmental due diligence are typically developed by governmental agencies working with professional and business organizations to meet regulatory, financial funding and company control requirements.

2.0 Defining Environmental Impacts

Environmental impacts are defined using the following generally accepted processes:

1, Phase I: Phase I investigations are generally preliminary studies and include site visits, sensitive receptor surveys (i.e., play grounds, drinking water supply wells, homes etc), reviewing site history and defining potential sources of contamination (i.e., past spills, underground storage tanks, landfills etc.).

Phase I investigations in the USA are generally performed in accordance with ASTM E1527-00 guidelines developed by ASTM International (a voluntary standards development organization).

2, Phase II: Phase II investigations are generally field studies that include drilling monitoring wells, collecting soil and groundwater samples, performing chemical analysis for chemicals of concern (i.e., benzene, lead), defining migration pathways (i.e., groundwater) to receptors (i.e., people, animals) and preparing a report that defines the nature and extent of contamination.

Phase II investigations in the USA are generally performed in accordance with guidelines in ASTM E1903-97 developed by ASTM International.

3, Phase III: Phase III investigations typically include defining potential remediation options, performing site specific risk assessments, pilot studies and groundwater modeling. Phase III investigations are driven by the nature and extent of contamination and applicable cleanup standards.

3.0 Quantifying Environmental Impacts

Environmental impacts are quantified by comparing the soil and groundwater sampling results to cleanup standards. Standards should be developed using a risk based process that defines contaminants of concern (i.e., benzene, lead), environmental pathways (i.e., groundwater, vapors) and receptors that could be exposed (i.e., people, fish, animals). The types of standards typically used are, 1) in-country, 2) generally accepted international and/or, 3) site specific.

In-country standards are those promulgated by local governmental agencies. Generally accepted international standards (i.e., Dutch standards) are used when there are no in-country standards or for chemicals not covered by in-country standards.

Site specific remediation standards are developed based on a site specific risk assessment (using generally acceptable risk assessment methods), that uses site specific environmental data (contaminants of concern from the site), 2) actual site receptors (i.e. people, animals, rivers), 4) potential migration pathways (i.e., soil air into buildings,

direct contact with contaminated soil, drinking groundwater), and 5) exposure scenarios based on potential actual/future use of the site (i.e., oil field, commercial, industrial).

Risk assessments in the USA are generally performed in accordance with guidelines in ASTM E1903-97 developed by ASTM International or the Risk Assessment Guidelines developed by the USA Environmental Protection Agency.

4.0 Reducing Environmental Impact

The impact of soil and groundwater contamination to future land users and the environment can be reduced by remediating the contamination to protective standards, using engineering controls in buildings and defining institutional (governmental) controls on the property.

Commonly used forms of remediation include, 1) excavation, 2) bioremediation (in-situ including oxygen and nutrient injection, and ex-situ including engineered biopiles and landfarms), 3) air based technologies including air sparging, soil vapor extraction and high vacuum extraction.

The next level of protection includes engineering controls. Engineering controls are installed during the redevelopment of the site and can be required by the contract of sale or by local building codes. Engineering controls are an added protection and are intended to prevent exposures above the remediation standards. Typical engineering controls include vapor or liquid barriers (high density polyethylene plastic sheeting), vapor ventilation systems for below grade living, working, and/or storage space, and slurry walls/sheet piling to prevent contaminant migration. Engineering controls are typically installed in buildings, car parks, underground utilities, and beneath paving.

Governmental authorities use institutional controls to restrict the future use of property. Use restrictions are typically placed on the property deed, or could include changing neighborhood zoning to restrict use. The purpose of restricting the future use of the property is to prevent higher uses that may result in exposures that may be above the remediation standards (i.e., properties remediated to commercial standards should not be used for residential development.) Industrial property is typically restricted against residential uses as an added precaution. The goal of institutional controls is to limit the future use of the property to uses that would be considered safe under the remediation standards used.

5.0 Summary

In summary, environmental due diligence is an important tool to identify and quantify environmental impacts that exceed protective standards. Environmental impacts can be remediated to protective standards and engineering and use restrictions placed on the property as added protections.

Biographical Statement

Mark Gallagher is the Area Manager of the Acquisitions/Trades/Sales group within ExxonMobil's Global Remediation group. Mr. Gallagher's primary responsibility is to identify, quantify, and remediate environmental impacts at properties associated with transactions to standards protective of people using the site and the surrounding environment. Mr. Gallagher has a BS and MA in Geology from Edinboro University of Pennsylvania and Temple University respectively. Mr. Gallagher has over 25 years experience in the environmental remediation field and has extensive experience in identifying and quantifying environmental impacts associated with property transactions.