Developing an Environmentally Impaired Property

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You May Have to Asked Yourself?

Are Environmental Issues Cause for a Concern?

Yes........well Maybe

Should I Stay Away from Contaminated Sites?

No........well Maybe
Discussion Questions

- How do I know (or find out) my site has environmental impacts?
- What are “typical” environmental issues?
- What does this mean for my proposed development?
- What are my benefits?
Investigation

Due Diligence

Methods and Degree Depend on Project Goals

- Transaction Screen
- Phase I ESA
- Wetlands Delineation
- Phase II ESA
- Hazardous Material Survey
- Phone Call
Investigation

Due Diligence

Several Have Prescribed Procedures

- ASTM, AHERA, HUD

Others Have Regulations and Offer Guidance

- State Agencies, EPA, USACE

Some Others Have Internal Policies

- Lending Institutions
Knowing What Your Financial and/or Development Goals are Will Save Time and Money!

Investigative Procedures Should Be Commensurate

This Is!
Real Life

Large Portfolio of Residential Buildings
34 Communities
3 States
BAD START!

Mixed Use Development
Urban Site
Previous Known Contamination
GOOD START!
What is Out There Waiting for Me?

CHEMICAL COMPOUNDS

- TPH (Total Petroleum Hydrocarbons)
- VOCs (Volatile Organic Compounds)
- SVOCS (Semi-Volatile Organic Compounds)
- PCBs (polychlorinated biphenyl)
- Heavy Metals

BUILDING MATERIALS

- Asbestos
- Lead Based Paint
- Electrical Equipment
- Chemical Compounds
How Did it Get There?

Gasoline/Service Stations
Dry Cleaners
Printing Operations
Rail Yards
Electronic Manufacturers
Agricultural/Golf Courses
Opportunistic Landfilling
Poor “Housekeeping”
Accepted Practice
Naturally
Development Implications

Soil, Ground Water and Vapor Impacts

Building Demolition/Renovation

Natural Occurring Features

IT IS ALL ABOUT THE RISK!

Human Health and the Environment
Development Implications

- **Current Site Disposition**
  - Agricultural Property
  - Rural Vacant Lot
  - Urban Vacant Lot
  - Developed Site

- **Site Development Scenario**
  - Residential
  - Commercial
  - Industrial
Development Implications

- **Extent of Impacts**
  - Soil, Ground Water, Vapor
  - Building Material
  - Natural

- **Exposure Pathways**

- **Remedial Techniques**
  - Active
  - Passive
  - Engineering Controls
  - Institutional Controls
  - Natural
Development Implications

Site Development Can Go a Long Way Toward Reaching Your Remedial Goals

HOWEVER IT ALL COSTS MONEY!

Proper Planning Can Alleviate Some Costs
Development Implications

- **Site Design**
  - Avoidance
  - On Site Mitigation
  - Demo v. Reno

- **Building and Site Feature Lay Out**
  - Removal
  - On Site Material Mgt. Units
  - Vapor Mitigation
  - Encapsulation

- **Sensitive Receptor Awareness**
  - Ground Water
  - Surface Water
  - Residential Development
Remedial Techniques

- Removal
- In Situ
  - Enhanced Biodegradation
- Institutional Controls
  - Use Restrictions
- Engineering Controls
  - Capping/Encapsulation
  - Vapor Mitigation
  - Physical Barriers
Regulatory Interaction

- Regulations and Guidance
- Remediation Programs
  - Mainly Voluntary (Non-RP)
  - Risk Guidance
  - Remedial Guidance
  - Offer Liability Protection (Non-RP)
- Some Funding
  - Mainly UST Investigation/Removal/Clean-Up
  - Some States Have Dry Cleaner Programs
- Regulatory Approval
  - Closure Letters
  - No Further Action Letters
  - Certificates of Satisfactory Completion
Why Take on the Liability?
- With Proper Due Diligence Most Jurisdictions offer Liability Protection
- Environmental Insurance (Be Careful)

Why Not Purchase a “Clean” Site?
- Fewer Available
- Environmental Knowledge Can Lead to Price Reduction
- Tax Incentives Available
- Low Interest Loans Available
- Stewardship