EMERGING ISSUES IN ENVIRONMENTAL DUE DILIGENCE
2016 Environmental Permitting Summer School

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Why Conduct Environmental Due Diligence?

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Environmental due diligence can reveal information that affects:

- Value of the property
- Cost to address the environmental issue and who will pay for:
  - Assessment
  - Removal/remediation
  - Potential liability to others
  - Permitting Requirements
- Delays introduced into development
  - Timing of regulatory process
- Ability to develop as planned
- Ability to finance/re-finance
Emerging Issues in Environmental Due Diligence

Phase I Environmental Site Assessments (ESAs)

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ASTM E1527-13

- Defines a Standard Practice for performing Phase I Environmental Site Assessments

- The goal of the processes established by this practice is to identify **Recognized Environmental Conditions**
3.2.78 Definition of REC

- A Recognized Environmental Condition (REC) is…

“…the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.”
3.2.55 Definition of Material Threat

“...A physically observable or obvious threat which is reasonably likely to lead to a release that, in the opinion of the EP, is threatening and might result in impact to human health or the environment.”
3.2.22 De Minimis Condition

- A condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

- Conditions determined to be *de minimis conditions* are *not recognized environmental conditions*
Findings

“No known or suspect RECs were discovered during the course of this ESA except for the following:

Gasoline storage tanks were identified at the Property in historical Sanborn Fire Insurance maps dated 1915, 1919, 1924, 1930, 1948 and 1953. No documentation of proper removal of such tanks was identified in the public records. As such, the potential presence of gasoline storage tanks and/or associated petroleum contamination at the Property is considered a REC.”
Conclusions

“Groundwater flow in proximity of the Property is to the east toward the Indian River. Depth to groundwater is presumed to be less than 10 feet based on the topographical elevation of the Property. Filling stations were historically present west of the Property and any groundwater contamination from petroleum release(s) at those sites would be expected to migrate east toward the Property.”
3.2.42 Historical REC (HREC)

- A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria without subjecting the property to any required controls.

- If the EP considers an HREC to be a REC, the HREC must be discussed in the Conclusion section (12.8)

Example: Change to regulatory criteria
3.2.18 Controlled REC (CREC)

- A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

- CRECs must be discussed in the Conclusion section (12.8).
Non-Scope Considerations
Non-Scope Considerations
Environmental Due Diligence in Land Transactions

Beyond the Phase I ESA

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Topics

- Reasons for a Phase II ESA
- Phase II ESA process
- Discovery of contamination during due diligence
- Regulatory structure and no further action (SRCO)
- Emerging topics
Phase II ESA Process

- Why do a Phase II ESA?
  - Evaluate RECs identified in the Phase I ESA
  - Evaluate other business environmental risks (deal driven)
- Confirm or deny absence or presence of contamination
- Facilitate real estate transactions on contaminated properties
  - Quantify
Pre-Phase II Planning

- Scope of work or client contract
- Practical considerations:
  - Quantity, distribution, cost
- Understand liabilities and impacts to development:
  - Same or new land use
  - Demolition and construction
Phase II Pitfalls

- Access to locations
- Appropriate sampling methods
- Point source or non-uniform distribution of source
- Not enough samples collected; high dilution factors, cross-contamination
- Analyzing for parameters not associated with identified REC
- Composite sampling and archived aliquot samples
- Abandoned investigation-derived waste
- **Expanded Phase II ESA Process**
  - Contamination discovered
  - Reporting requirements
  - Deal considerations:
    - Escrow account for cleanup
    - Property value discount
    - Extend contract period
- **Expanded Phase II ESA Process**
  - Estimate cleanup costs
  - Dewatering or development issues
  - Client’s goals (land use, exposure scenarios)
  - Minimize unknowns
  - Deal proceeds or dies
Florida Regulatory Structure

- Chapter 62-780 encompasses all prior regulations:
  - No further action
  - No further action with conditions:
    - Engineering controls
    - Institutional controls

Local Programs

- Chapter 24-44 Miami-Dade County Code
- Broward County Chapter 27
Remediation

- Process of cleaning up contamination
- Typically lengthy process
- Can be very costly
- Can be a deal killer
- Making the deal happen:
  - Evaluate all options based on client’s goals (land use)
  - Use regulatory tools to your advantage (background studies, de minimis rule, voluntary cleanup program)
  - Determine realistic costs and schedule milestones
- **Cleanup Solutions**
  - ✔️ UCL statistical evaluation; site-specific CTLs
  - ✔️ De Minimis Rule cleanup
  - ✔️ Conventional removal
  - ✔️ Air stripping, air sparging
  - ✔️ Chemical or biological remediation
Looking Forward

- Anthropogenic background studies (April 2014 Miami-Dade County)
- Contaminated media forum (July 2016 workshop)
  - Chapter 62-780 revisions
- Vapor migration and encroachment
Environmental Due Diligence in Land Transactions

Vapor Encroachment & Intrusion Issues

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Vapor Encroachment & Intrusion

Amendments to the ASTM E1527 Standard Practice, as published in the Federal Register on December 30, 2013, codified the requirement to address vapor migration in performance of Phase I ESAs.
Vapor Encroachment
Vapors beneath a property from soil or groundwater contamination from on-site activities, or vapors migrating beneath a property from a nearby site.
Vapor Encroachment Assessment

Tier 1 Vapor Encroachment Screening (VES)
Looking for facilities within the “Area of Concern”.
Do any represent a Vapor Encroachment Condition (VEC)?
WHAT IF A VEC IS IDENTIFIED?

The Client May Choose To

- Do nothing.
- Authorize further assessment (Tier 2 VES).
- Alter development plans.
TIER 2 EVALUATION

Non-invasive
File review, interviews, publications

Plume extents
- Current regulatory status
- Ongoing remediation
- Soil lithology
Review Utility Plans / Public Infrastructure Records

- Preferential pathways
- Underground utilities
- Vaults
- Other subgrade structures
Invasive Subsurface Evaluation

- Lithological assessment
- Soil and groundwater quality
- Soil vapor assessment
Vapor Intrusion Assessment

Outside scope of E2600

EPA OWSER Technical Guide for Assessing Vapor Intrusion
Vapor Intrusion Mitigation

Easiest and less expensive to mitigate pre-construction.

Multi-layered application of poly sheeting and spray – applied liquid.
Vapor Intrusion Mitigation

Active venting system reduces sub-slab vapor accumulation.

Pumps and monitoring often required.
Vapor Intrusion Mitigation

Directional drilling is often required to install sub-slab venting.

Concerns with utilities/drain lines.
Vapor Intrusion Mitigation

Application of vapor barrier coatings in interior areas is an alternative.

HVAC/interior venting system upgrades.
Ecological Due Diligence

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Background Statewide Environmental Resource Permit (SWERP) Rules

- SWERP rules in Ch. 62-330, F.A.C., went into effect statewide in October 2013.

- These rules are based on the then existing rules of DEP and the five water management districts (WMDs) which were streamlined and reconciled for consistency.

- Environmental provisions remained substantially unchanged.

- Each WMD adopted its only Applicants’ Handbook Volume II which sets forth the individual WMD’s water quality and water quantity criteria. These criteria remain substantively the same as prior to October 2013.
Major Components of the ERP Rules

- Environmental protection;
- Water quality issues; and
- Water quantity/flooding issues.
Wetland Issues to Consider Prior to a Purchase

- Federal Wetland Issues:
  - Is the project connected to WOTUS;
  - Jurisdictional differences; and
  - Mitigation differences.

- Local Regulations

- Availability of Mitigation:
  - Mitigation banks; and
  - On-site/off-site private projects.
State Wetland Issues

- It is wise to do an assessment of wetlands prior to purchase so that the cost to offset those impacts can be factored into the purchase decision.
- The assessment should be done using Rule 62-345, F.A.C., the Uniform Mitigation Assessment Method.
- This is the sole method to be utilized by DEP, WMDs, and local governments to determine the amount of mitigation needed to offset impacts to wetlands and other surface waters. [373.414(18), F.S.]
Elimination and reduction of impacts is the first step in environmental review

Consider Design Modifications

- If the proposed system will result in adverse impacts to the functions provided by wetlands or other surface waters, then practicable design modifications must be considered to reduce or eliminate impacts.
Proposed Highway Project

Road

Wetland
Public Safety
Not a Feasible Alternative

Wetland
On the other hand:

- A modification does not have to provide for the highest and best use of the property to be practicable.
Practicable Alternative

12-story condo building

Wetland

12-story condo building
Alternatives Analysis

- Districts and DEP do not have authority to require consideration of alternative sites – however, we do consider alternative alignments for linear projects.
- By contrast, ACOE can require an alternative sites analysis.
- Mitigation will be approved only after the applicant has worked to reduce and eliminate impacts.
Captiva Civic Association, Inc. and
Sanibel Captiva Conservation Foundation
vs.
South Florida Water Management District and
Plantation Development, Ltd.,
DOAH Case No. 06-0805
Harbour Pointe at South Seas Resort Impact Map
Original Harbour Pointe Plan

- 7.4 acres
- 4.8 acres impacts to mangroves
- 9,500 square building feet
- Units 3,600 to 3,800 feet in size
- Pool, spa, tennis court
- Access road and SWM System
- Preservation
- 71 acres
Elimination and Reduction

- Tennis court eliminated
- Development concentrated further from edge of mangroves
- 5.24 acres (reduced from 7.4 acres)
- Mangrove impacts reduced to 2.98 acres (from 4.8 acres)
- Preservation 73.31 acres (up from 71)

Buildings

- Reduced to 6,400 (from 9,500)
- Unit size reduced to 2,400 to 2,600 (from 3,600 to 3,800)
- 4 buildings with 6 units instead of 6 buildings with 4 units
Available Mitigation Banks

- Prior to purchase, consider the cost and availability of credits.
- Bank must have the specific type of credits needed to offset the proposed impact.
- If a bank is not available, you will need to consider on-site or off-site options.

http://www.dep.state.fl.us/Water/wetlands/mitigation/mitigation_banking.htm
Advance Information on Existing Water Quality is Critical

- DEP sets water quality standards, but the WMDs have Applicants Handbooks with technical criteria to protect water quality;

- Quality issues - It is very important to determine in advance where the project will discharge. Requirements are higher for OFWs, Class I, II, & impaired waters.

- Net improvement is required if applicant cannot meet state water quality standards because ambient water quality does not meet standards. [373.414(1)(b)3., Fla. Stat., 62-330.301(2), F.A.C.]
Additional Treatment for OFW, Class I, II and Impaired Waters You Should Consider

Consider the cost of additional reasonable assurances to demonstrate protection of these water bodies which may include:

- Additional 50% treatment;
- Additional best management practices;
- Additional maintenance commitments;
- Local water quality considerations.
Flooding
Stormwater Quantity

Reasonable assurances must be provided that:

- Activities will not cause flooding and
- May not cause adverse water quantity impacts to receiving waters and adjacent lands
Water Quantity Requirements to Consider Before Purchase

- Off-site discharge rates are limited to those that won’t cause adverse impacts to existing off-site properties.

- Consider:
  - Historic discharge rates
  - Rates determined in previous permits or
  - Rates specified in WMD criteria (including special basins).

- Use design storm event of a 3-day duration and 25-year return frequency to compute off-site rates and set building floors above 100-year flood elevations.

- Local water flood control requirements should be considered.
Permit Transfer Requirements

- Permittees shall notify DEP or the water management district within 30 days of change in ownership of the property.
- However, permits in the conceptual or construction phase require additional documentation.
- Existing permittees shall be jointly and severally liable with the new owner for permit compliance and corrective actions until the permit is transferred [62-330.340(5), F.A.C.].

ERP Applicants Handbook Vol. I, Section 12
Permit Transfer Requirements

✓ Purchasers should examine any existing ERPs and CUPs prior to purchase to determine permit requirements and authorizations.

✓ If the permit is not transferred or a new permit obtained, the purchaser will be liable for operating a system without a permit or using water without a permit and jointly and severally liable with the permittee for permit compliance and corrective actions [62-330.340(5), F.A.C.].