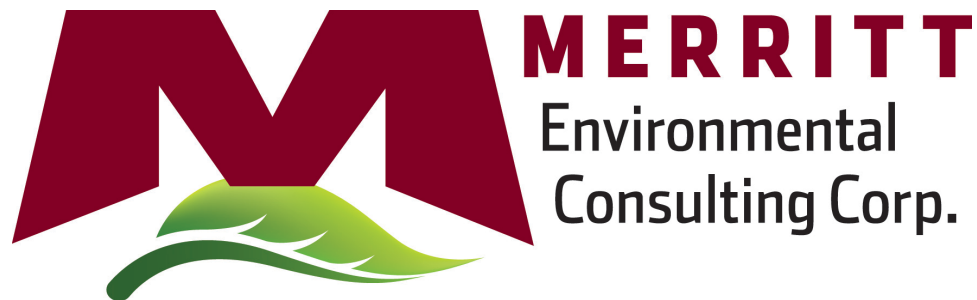


# Changes in the Environmental Industry

New ASTM E-1527-13 Standards

Presented by Chuck Merritt, President/LEED, AP



# American Society of Testing Materials (ASTM) E1527-13 Environmental Standard

- 2014 is the 20<sup>th</sup> anniversary of the first ASTM environmental standard (1527-94).
- The new standard was released by ASTM in November of 2013 (approved by EPA 12/30/13).
- New standard is a clarification of the prior standards which were revised in 97, 2000, 2005, 2013.
- Federal EPA recognizes both ASTM E1527-05 and E1527-13

## 3 Key Sections in New Standard

- Controlled Recognized Environmental Condition (CREC)
  - When engineering controls are in place at a site to address or monitor past environmental impact.  
*Easier to finance a property with a known issue*
- Freedom of Information Act (FOIA) clarification
  - Consultants should review regulatory documents when available for subject site and adjoining properties
- Vapor Encroachment (VE) must be discussed

# What is Vapor Encroachment

- When contamination in soil/groundwater breaks down and volatilizes into a gaseous state.
- Vapors can then move freely depending on soil composition, cracks into buildings
- Enough vapors in occupied building spaces can lead to indoor air quality (IAQ) issues.



# How Do You Determine If a Site May Have a Vapor Issue?

- Current or historic dry-cleaners and gas stations at the subject site are the main causes of vapor releases
- Adjacent properties (Dry Cleaner/Gas Station)
  - Distance from subject site
  - Up-gradient/down-gradient
  - What underground conduits (subways, gas lines, etc.) are present as they help re-direct vapors away from structures

*These conduits are good in urban and metropolitan settings to help dismiss a VE concern*

# Site Has a Potential Vapor Encroachment Condition (PVEC) *Now What...*

## Test

- Soil/Groundwater
  - No impact (contamination) = No source for vapors to be present
- Air in building by using Summa test kits similar to radon
- Some situations may require all three of these medias to be tested to have a conclusive answer.

# How to Cure A Site with Elevated Vapors

## Sub-Slab Depressurization System (SSDS)

Similar to radon mitigation system

- Collect vapors in PVC piping at low point of structure
  - Re-direct vapors to manifold
  - Vent out of building
- 
- Should be done at all new construction sites
    - Will make building more marketable/financeable
    - Insurance to protect building occupants
    - May be part of building code in the future

# **MECC has been incorporating the new ASTM changes since the first quarter of 2013**

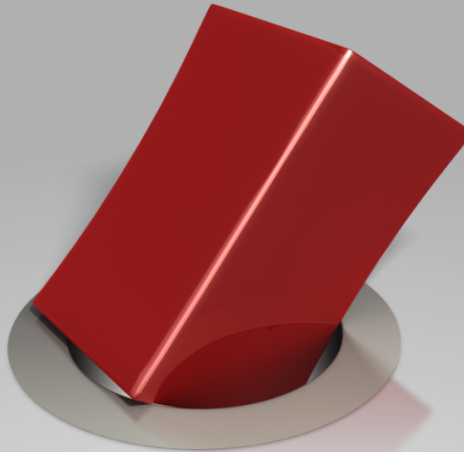
So how did the ASTM group  
get involved in the first place?

Where is the industry heading now?



The ASTM standards are designed for a purchaser of Commercial Real Estate  
*but most lenders (if not all) use it as well.*  
*(Square peg-round hole)*

- Risk is different for lenders then buyers as lenders have secured creditor exemption
- Owners have strict liability in NY. You own the contamination



# So Why are Lenders Doing an Environmental Analysis?

- CERCLIS protection?-original concept of the due diligence (not bank responsibility)
- Innocent land owner defense protection? (only in foreclosure)
- Bank Policy requires it--????
- Value (\$\$\$) of property if contamination exists (BINGO)

# Is this the time to visit bank policy for environmental risk management?

- What are the current bank requirements?
- Who manages that process?
- Are all approved firms preparing the same report?
- Are all approved firms carrying the required insurances

## Environmental Products Available

- Database – computer check – record search only identifies things reported Used by lenders on small loans
- Transaction screen – computer check with site inspection – originally designed for lender to decide if phase one was required after visiting property—Has morphed into a stand alone report
- Full Phase One ESA – “Kick the Tires” approach gives consultant all the tools available.
  - Database
  - Historical maps
  - Local regulatory inquiries
  - Conduct a site reconnaissance at the property and adjoining sites
  - Interview the key site personnel
- Phase II – Sampling at site (soil, groundwater and now air)

- NOTE:

- If your consultant provides a scope of work for phase II and borrower wants to use their own firm---make sure they follow the scope. It was written to protect you as the lender.
- A \$7,000 proposal is not the same scope of work as a \$2,300 report the borrower paid to "his guys"
- This puts your consultant in a tough spot and more time and money will be required to do it correctly

- Database and transaction screens are cheaper but tell you less. This can potentially lead to dead ends.
- If last due diligence report was less than a full ESA, do not assume all is well.
  - Former gas station – now an apartment building  
*How did it go from A – Z? Any documentation?*

Old database report that did not indicate any spills on file is not sufficient due diligence



# All Bank Clients Have the Same Question, “What is Our Competition Doing?”

- National database company in November hosted a seminar on Long Island with over 100 consultants in the room. Message was “educate your clients on new changes”.
- A broad vague standard is now being streamlined so all consultants prepare same type of report.
  - E1527-13 is a clarification of the prior E1527-05 standard



- Largest National banks can afford to have in house environmental risk officers who are paid to assist in analyzing the risk.
- Smaller banks use their approved outside vendors for that guidance.





- Environmental reports are a tool used by lenders like an appraisal or title insurance to provide information for client to make a better business decision.

- **The GOOD NEWS**

75-80% of sites end up ok after proper due diligence is conducted

- **The Not so GOOD NEWS**

Make require more time and cost to get there.

- To comply with the new ASTM changes, there is more cost associated. MECC working to keep that at a minimum. The industry has forecast fees to rise \$300-\$500 per report. We raised our prices to lenders \$100 at the beginning of 2014
- “Every phase one report is good until somebody obtains samples of the soil or groundwater and now air”.
- The site is excavated for a new development.



# MECC Has 20 Years experience advising clients

- Been in environmental consulting industry since first ASTM standard
- All inspectors will have tablets for their field reports to be uploaded to office in minutes
- All inspectors have 10 years plus doing environmental inspections
- New website enhancements-----order reports on-line
- Portal for electronic delivery of reports
- 75% of MECC client base are lenders
- MECC can handle remediation projects
  - We now carry more comprehensive insurance
  - Work with best construction firms in industry
  - Approved consultant with NYC OER

# Key Personnel at MECC

## **Lauri Hofer**

Director of Operations  
12 years with Chuck Merritt

## **Maryann Wegh**

Director of Production  
9 years with Chuck Merritt

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**QUESTIONS??**