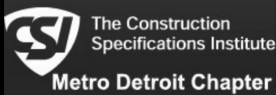


Brownfield Development & Hazardous Materials

Presented to:



Brownfield Redevelopment



Current Financial Incentives in Michigan

Michael T. Kulka, P.E.
Founder & CEO

What is a Potential Brownfield site?

- Contaminated property – Concentrations of regulated chemicals are present in the soil or groundwater above the residential cleanup criteria
- Blighted – Abandoned and declared a public nuisance based on local code or ordinance, dangerous to children, utilities disconnected, etc.
- Functionally Obsolete – Property is unable to adequately perform the function for which it was intended due to substantial loss in value from factors such as overcapacity, changes in technology, deficiencies

Contaminated



Abandoned

Blighted



What are the benefits of purchasing, developing and financing a Brownfield ?

The Brownfield Redevelopment Financing Act of 1996 was amended to Act 381 - Tax Incremental Financing (TIF)

Possible reimbursement for eligible expenses includes:

- Brownfield plan preparation
- Phase I & II
- Baseline Environmental Assessments
- Due Care plan preparation and implementation
- Response activities
- Remediation
- Lead and asbestos abatement, demolition
- Infrastructure improvements



Reimbursement comes from the increased property taxes above existing taxable value based on project

Negotiate with local municipality and state (MEDC & MDNR)

TIF Reimbursement Example

- Borrower incurs \$100,000 in eligible costs including Phase II and BEA, contaminated soil removal, repaving and vapor barrier to prevent exposure to indoor air
- Incremental difference is $\$18,850 - \$5,800 = \$13,050/\text{year}$, $\$100,000/\$13,050 = 7.6$ years to recover costs
- The owner/developer or tenants pay new taxes which are reimbursed to the owner/developer

Community Revitalization Program (CRP)

(Replacement for Brownfield & State Historic Credits)

- Program is administered by Michigan Strategic Fund Board
- Grants and/or loans up to 25% of eligible investment for:
 - Construction rehab
 - Site improvements
 - Demolition
 - Equipment
 - Architecture
 - Engineering



Community Revitalization Program (CRP)

Criteria:

- Downtown or traditional commercial center
- Importance of the project to the community
- Catalyst for revitalization of community/region
- Show applicant financial need
- Reuse of historic structures
- Mix use preferred
- Local community support
- Creation of jobs
- Extent of contamination
- Project financially sound
- Sustainability & increased density
- Address underserved markets

Grants Maximum amount is \$1 Million per project

Loans Maximum amount is \$10 Million per project

Terms:

- Performance based
- Flexible terms
- Below market interest rates
- Possible forgivable terms
- extended grace or repayment provisions
- Loans may be assignable



****Projects can receive both grants and loans-
not to exceed \$10 Million per project**

Brownfield MBT Amendments

Urban Redevelopment Projects:

- Up to 20% tax credit in 2008, 2009, 2010
- After 2010, Up to 15% tax credit
- Include downtowns or commerce centers of qualified local units of government & county seats



ACT 198 Industrial Facilities Tax (IFT) Abatement

- Must be industrial use
- Applicable to personal property, new construction & rehab projects
- Abatement is approximately 50% for up to 12 yrs
- Negotiate with local municipality
- Available anywhere in the state



ACT 328 Property Tax Abatement

- Available only in distressed, eligible communities and any project for which a MEGA jobs credit has been awarded
- Applicable to industrial and certain commercial projects, including most office buildings
- Applicable to personal property (furniture, fixtures and equipment)
- 100% abatement of taxes for as many years as agreed to by local municipality

Neighborhood Enterprises Zone (NEZ)

- Available only in core communities
- Applicable to residential development (new construction and rehabilitation of existing structures)
- Abatement is approximately 50% for new construction and nearly 100% for rehab of existing facilities (freeze taxable value existing building)

Obsolete Property Rehabilitation Act (OPRA)

- Available only in core communities
- Applicable to rehab of existing structure of commercial use
- Abatement is approximately 75% for first six years, if agreed to by both municipality and state, and 50% for an additional six years

Federal Historic Preservation Tax Credit

- 20% tax credit for a building that is:
 - "certified historic structure", "registered historic district" or "certified rehabilitation"
 - A non-historic building that was placed in service before 1936
- The amount of the credit is 20% of the amount spent in a certified rehabilitation of certified historic structure
- Ten percent (10%) Tax Credit
 - At least 50% of the building's walls existing at the time the rehabilitation began must remain in place as external walls at the work's conclusion
 - The amount of the credit is 10% of the amount spent to rehabilitate a non-historic building built before 1936

Incentives Applicable to Creation of Jobs: Michigan Business Development Program (BDP)

PA 250 of 2011 Replacement for MEGA Jobs Credits

Up to \$10 Million in grants, loans, or other economic assistance from the MSF

- Must create at least 50 jobs, or 25 jobs if in a rural area for high tech jobs
- Retail projects will not qualify (MSF policy)
- New programs not available for retention of jobs
- Performance based
- MSF Board has approved guidelines for the program

Other Financial Incentives

New Markets Tax Credit (NMTC)

- Project must be in eligible census tract (generally low income communities)
- Federal income tax credit equal to 39% of the NMTC allocation, spread over seven years
- Generally, a tax credit investor will pay about 72% of the calculated tax credit amount at the time of closing the NMTC transaction
- The key is obtaining all allocation from a community development entity (CDE)
- Must maintain debt on the project for at least seven years
- On \$10 million NMTC allocation, the project will receive \$3.9 million in federal income tax credits, which will generally be funded at \$2.8 million by the tax credit investor
- The net amount to the project would typically be slightly less than \$2 million because of all of the professional fees and fees charged by the CDE
- NMTC projects are very complicated and take several months
- Most projects are eligible except certain "sin" businesses (golf courses, country clubs, etc.) and note that gross rent from residential units must be less than 80% of the total gross rent from the project
- Because of the debt requirement for seven years, residential condominium projects usually do not work

MDEQ Grants and Loans

- Available only at contaminated sites
- Grant and loan are obtained through local municipality, which can receive only one grant and loan per year
- A project can obtain a maximum of \$1 million in grant and \$1 million in loan
- Proceeds are generally used for cleanup activity & demolition
- There must be private investment and job creation

Brownfield Redevelopment in Berkley, MI

New Headquarters
for Strategic Energy Solutions, Inc.
TIF Reimbursable ~ \$100,000 and
MBT credit of \$50,000



New Regional Office for
PM Environmental, Inc.
TIF Reimbursable ~ \$100,000 and
MBT of \$35,000



Hazardous Materials in Existing Buildings

Jon Balsamo
Building Facilities
Services Manager

Asbestos, Lead Paint and Hazardous Materials

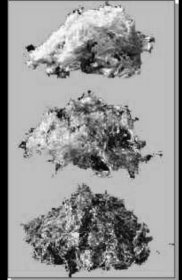


Asbestos Key Definitions

- **Asbestos - Containing Material (ACM)** - Any material containing more than 1% asbestos
- **Friable** - May be crumbled, pulverized, or reduced to powder by hand pressure when dry (EPA)
- **Intact** - Has not been crumbled, been pulverized, or otherwise deteriorated so that the asbestos is no longer likely to be bound with its matrix (OSHA)

Definition and Types of Asbestos

- Naturally occurring
- Definite chemical composition
- Inorganic
- Having a definite shape (fibrous)



Three Main Types

- Chrysotile
- Amosite
- Crocidolite

Physical/Chemical Characteristics

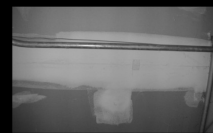
- Forms Long Thin Fibers
- High Tensile Strength
- Thermal, Electrical, and Sound Insulation
- Wear and Friction Properties

Uses of Asbestos

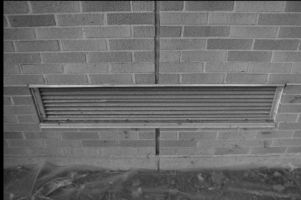
- Insulation products
- Surfacing material
- Textiles
- Concrete-like products
- Paper products
- Roofing products
- Flooring products
- Compound products



Uses of Asbestos continued



Uses of Asbestos continued



Asbestos Related Diseases

- **Asbestosis:**
Scarring of the lung tissue, which can impede normal respiratory function
- **Mesothelioma:**
Malignant tumor of the lining of the chest or abdominal cavities
- **Lung cancer:**
Malignant tumor in the lung

The combination of smoking and asbestos exposure create a synergistic effect, causing a 50%-500% increase in cancer/ disease risk

Federal Asbestos Regulations

- Environmental Protection Agency (EPA)
- Regulations Asbestos Hazard Emergency Response Act (AHERA)
 - Inspections Management Plans Response Actions
 - Training Record Keeping District Responsibilities
- National Emission Standards for Hazardous Air Pollutants (NESHAP)
 - Demolition activities Asbestos mills
 - Renovation activities
 - Roadways
 - Project notifications Manufacturing
 - Waste disposal
 - Fabricating
- Remove friable RACM prior to demolition unless:
 - Category I nonfriable and in good condition
 - Encased in concrete
 - Not accessible/not discovered until after demolition began
 - Category II nonfriable, probability low that material will become friable during demolition
- Remove friable RACM prior to renovation if impacted unless:
Project Notification Requirements
 - Removal of > 10 linear feet or 15 square feet of friable ACM, notification to MDLARA 10 calendar days in advance
 - Removal of > 160 square feet or 260 linear feet of friable ACM, notification to MDEQ 10 working days in advance

Federal Asbestos Regulations

Occupational Safety & Health Administration (OSHA)
Asbestos Construction Industry Standard

- Multi-employer worksites Regulated areas
- Exposure assessments
- Methods of compliance
- Prohibitions
- Respiratory protection
- Protective clothing
- Hygiene facilities & practices
- Communication of hazards Housekeeping
- Medical surveillance Training

Section (d)(5) of the Standard states:

All general contractors on a construction project which includes work covered by this standard shall be deemed to exercise general supervisory authority over the work covered by this standard, even though the general contractor is not qualified to serve as the asbestos "competent person" as defined by paragraph (b) of this section. As supervisor of the entire project, the general contractor shall ascertain whether the asbestos contractor is in compliance with this standard, and shall require such contractor to come into compliance with this standard when necessary.

State of Michigan Asbestos Regulations

Public Act 135 of 1986

Regulates licensing of asbestos abatement contractors and their activities

Exempts trade group from licensing requirements

Electrical contractors HVAC contractors

Plumbing contractors Residential builders & maintenance contractors

Public Act 440 of 1988

Asbestos Workers Accreditation Act

Public Act 92 of 1993-Seller Disclosure Act

Sellers to disclose information on the presence of health and environmental hazards such as asbestos

Rule 6601 - Employers to instruct employees in the recognition and avoidance of unsafe workplace conditions and the regulations applicable to control any existing hazards. Asbestos would be one such hazard.

Lead Paint

- Is not heavily regulated in commercial buildings
- "Abatement" must be conducted by a licensed lead abatement contractor
- "Disturbance" which can occur with maintenance, renovation or demolition, requires two hour lead paint awareness training
- Should never be sanded or welded. This is a frequent OSHA violation
- Disposal can be considered hazardous waste if the paint itself is removed and disposed. For example, if a building's walls are water blasted to remove paint, the remaining paint debris can be considered hazardous waste, requiring special disposal
- The EPA Lead Renovation, Repair and Painting (RRP) requires contractors working in child occupied residences/targeted housing and child occupied facilities (i.e. schools, daycares, etc.) constructed in and prior to 1978 to have special training and take special precautions on-site when disturbing painted surfaces
- Target housing constructed prior to 1978 (i.e. government funded multi residential) often requires a full lead inspections and risk assessments

Lead Paint



Lead Regulations

- Environmental Protection Agency (EPA)
- Renovation, Repair and Painting Rule (RRP)
- Department of Housing and Urban Development (HUD)
- Guidelines for Hazard Identification and Abatement in Public and Indian Housing
- Occupational Safety & Health Administration (OSHA)
- Lead Construction Standard:
 - Demolition of structures where lead is present
 - Removal or Encapsulation of lead materials
 - New construction, alteration repair of lead
 - Installation of products containing lead
 - Lead contamination/emergency cleanup
 - Transportation, disposal, storage or containment of lead where construction is performed

Lead Regulations Continued

OSHA Interim Protection

- Until exposure monitoring is conducted employer must institute the following interim protection requirements:
 - Respiratory protection/protective clothing
 - Change areas
 - Hand washing facilities
 - Biological monitoring
 - Training

Permissible Exposure Limit:

- The employer shall assure that no employee is exposed to lead at concentrations greater than 50ug/m³, 8hr TWA

Hazardous Materials

- Materials require special handling & disposal prior to being impacted by renovations or building demolition such as:
- PCB & Mercury Containing equipment
- Light ballasts, transformers, mercury light tubes, switches & thermostats
- Containers, refrigerants & Universal Wastes
- Paints, cleaners, solvents, lab equip, drums, batteries, oil/water separator basins, or equipment that may contain wastes classified as hazardous, regulated or universal in nature
- These materials can be removed by an abatement or demolition contractor
- Demolition contractor should be aware of State & Federal regulations governing removal, packaging & transportation & disposal

Technical Specifications for Asbestos Abatement

- Worker's dress, safety equipment, respiratory protection and emergency planning
- Preparation of work area
- Decontamination
- Methods of Asbestos removal
- Acceptance criteria for reoccupancy and contractor release
- Air monitoring
- Stop work order

Inspection & Physical Assessment Process

- Assemble equipment & supplies
- Obtain copies of floor plans
- Walk through building starting at lowest floor
- Observe above suspended ceilings
- Enter every room & utility space including crawl space
- Locate any materials specified as asbestos-containing in the construction documents
- Test all suspect materials for friability
- Record the location & description of all suspect materials
- All suspect materials being sampled should be identified and sample diagrams drawn of the homogeneous area, identify and locate on the floor plans and/or write description
- Complete physical assessment on friable ACBM and thermal system insulation and record the physical assessment information



Inspecting for Asbestos Containing Materials

Focus on Identifying:

- Surface materials
- Thermal system insulation
- Miscellaneous materials
- Homogeneous areas are delineated and the suspect materials are sampled and analyzed
- If suspect materials are not sampled, they must be assumed to contain asbestos



Asbestos Abatement



Asbestos Abatement Continued



Building Facilities Services

- Comprehensive asbestos, lead paint and hazardous materials management programs for renovation and demolition projects, including surveys in residential, industrial, commercial, institutional and municipal buildings.
- Lead-based paint inspections and risk assessments for public housing and child occupied facilities, including lead paint inspections in support of the EPA Renovation, Repair, and Painting (RRP) Rule.
- Total project management including the preparation of bidding specifications, management of the bidding process, oversight of removal activities, third-party and worker exposure air monitoring, and documentation of compliance with project specifications and local, state and federal regulations.
- Development of management processes based on PM's industry experience and best management practices.
- Management of facility decommissioning projects involving the removal of asbestos-containing materials, industrial wastes and regulated building wastes.
- Project planning and coordination across interdisciplinary project teams.
- Monitoring for compliance with current state and federal regulations.



20-year Anniversary in 2012

Professional

- Engineers
- Architects
- Biologists
- Scientists
- Geologists

Certifications:

OSHA
UST
HUD MAP PCNA
ASTM PCA
Asbestos
Hazardous Waste
Lead



Services

- Environmental Site Assessments
 - Phase I, II & III
- Asbestos, Lead & Mold Inspections
- Brownfield Redevelopment Consulting
- Property Condition Assessments
- Baseline Environmental Assessments
- Ground Penetrating Radar services
- Remediation Management
- Environmental Compliance Audits
- Underground Storage Tank Management



A subsidiary of PM focusing on
sustainability & energy management
LEED Accredited professionals & Architects

- Building Shell Testing
 - LEED credit in future
- LEED Process Management
- Thermal Imaging
- Energy Audits
- Green Property Condition Assessments



Rated #1 Environmental Service Provider in Michigan

State	Company Rank 3Q12	Company Transactions 3Q12	Company Market Share 3Q12	Phase I Transactions by:		
				Number 1 Firm	Number 2 Firm	Number 3 Firm
Michigan	1	278	14%	PM Environmental, Inc.	88	77
Tennessee	2	57	6%	87	PM Environmental, Inc.	37
North Carolina	6	52	3%	106	82	67
Florida	13	57	2%	229	128	104
Alabama	21	7	1%	52	38	35
Mississippi	27	2	1%	30	28	17
Oklahoma	36	3	0%	50	49	31
Arkansas	38	1	0%	20	19	11
Indiana	40	5	0%	54	47	41
Georgia	43	11	1%	163	143	121



