

MICHIGAN BROWNFIELD REGULATORY REVIEW

D.S. Card and R.H. Kummler

Hazardous Waste Management Program, College of Engineering Rm 1164, Wayne State University, Detroit, MI 48202; Phone: (313)577-3861, Fax: (313)577-3810.

ABSTRACT

In 1995 and 1996, the state of Michigan enacted landmark legislation which dramatically changed the legal philosophy created at the federal level through the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980. CERCLA had created the concepts of joint and several liability, and retroactive liability, which were a radical departure from traditional Angelo Saxon-based law. The 1995 amendments to the Michigan Environmental Response Act (MERA), codified in part 201 of Public Act 451 of 1994, the Natural Resources and Environmental Protection Act, are referred to as "Part 201." Part 201 provided critical liability reform and a new strategy for cleanups based upon actual risk and realistic probable exposure. The 1996 legislation provided new financial incentives in an overall system designed to ensure brownfield redevelopment on a massive scale. Under these laws, new buyers can acquire contaminated property without liability, provided they comply with certain provisions, including the performance of a Baseline Environmental Assessment (BEA) prior to or within 45 days of acquiring the property. Michigan communities can now offer tax increment brownfield financing, tax credits against the Michigan Single Business Tax, and loans and grants for development-related activities. An internal report of the MDEQ in 1996 indicated that over 400 Baseline Environmental Assessments were filed in the first year of operation, more than 10 times the number of cumbersome covenantsnot-to-sue issued in the previous four years under the old legislation. The 1996 financial package created a state board to oversee redevelopment and authorized municipalities to create their own local boards, which are beginning to happen. This paper will describe the results of Michigan's strategy.

Key words: brownfields, Michigan, regulations, business strategy

BACKGROUND

The concept of returning contaminated properties, which have been abandoned or are otherwise fallow because of contamination to a different but economically productive use while providing for environmentally acceptable containment is an important aspect of community development that is referred to as brownfield redevelopment. The pioneering legislation of the 60's and 70's (Cox, 1995) referred to as RCRA (Resource Conservation and Recovery Act) and CERCLA (Comprehensive Environmental Response, Compensation and Liability Act), and delegated state laws there under, had the unintended effect of encouraging the disuse of contaminated sites and encouraging the development of virgin or so called "greenfield" sites (Trigger, 1997). While the overall benefits of RCRA and CERCLA are undeniable, this adverse aspect of federal and state law required correction, because of the tremendous benefits of brownfield redevelopment, particularly for the urban environment (Reott and Grayson, 1998). Properties, which have been abandoned, pay no local taxes, or are devoid of jobs, do not spread the cost of infrastructure and because they must be restricted, do not allow community improvements in open space. Thus, through brownfield redevelopment, the community as a whole benefits and with the proper structure, individual investors benefit as well.

Michigan's political leaders were among the early advocates of changes to federal law and the state of Michigan has led federal law by introducing the necessary legislation to remove the historical impediments to brownfield redevelopment despite the potential continuation of federal liability. Michigan's legal changes (Trigger, 1997; Woodruff, et al., 1999) have restructured the liability standards, performed research to reduce site remediation costs, and have created financial incentives and institutions to support redevelopment with emphasis at the local level. Thus, developers have moved to take advantage of the incentives and changed enforcement climate. Michigan put together a program in which the economic bottom line is beneficial for both developers and communities with a variety of funding options, including special brownfield redevelopment financial incentives, grants from public agencies, tax increment financing (TIF) programs, and guarantees which provide funding for site assessment, remediation, land acquisition, developing infrastructure, and environmental cleanup. Key changes in the law have restricted liability to those who actually created the problem. Because there is a two-way incentive, brownfield redevelopment can be initiated either by a local community or by an individual developer. On June 5, 1995, major amendments to Michigan's primary environmental cleanup law, Part 201, Environmental Remediation of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 201), were enacted. The principal objectives of these amendments, introduced by Representative Kenneth Sikkema and signed into law by Governor John Engler, were to 1) put fairness in the CERCLA liability by only holding persons who caused the contamination responsible for the cleanup; 2) remove excess conservatism from the cleanup standards by recognizing the need for land-use-based relative risk; and 3) create mechanisms to assist in returning contaminated property to productive use (Trigger, 1997).

INTRODUCTION

According to the Michigan Department of Environmental Quality (MDEQ, 1997), a brownfield is "abandoned, idle, or underused industrial and commercial properties where redevelopment is complicated by real or perceived contamination." Greenfields, on the other hand, are sites which have not been previously developed and are generally in rural or suburban areas. In principle, these sites are not contaminated and therefore new industrial development on greenfields may contaminate a virgin site. While such generalizations are not always true, this is the perception (MDEQ, 1997; Littman, 1998).

Brownfield redevelopment benefits local community and states because (CRDC, 1997) of the ability to

- 1. retain or recover tax base;
- 2. create or retain jobs; and
- 3. spread the cost of existing infrastructure, and possibly to preserve open space.

Recovery of Tax Base

Abandoned sites usually produce little or no tax revenues for cities, counties, or states. Because of the perception, as well as occasional reality, that the contamination may spread beyond the existing site, the existence of brownfield properties has a depressing effect on surrounding property values which further decreases the potential of the community. Insurance rates in the vicinity can also impact business economics.

Job Creation

The reutilization of brownfields offers communities the opportunity to bring back jobs to the original location. Unused properties offer no opportunities for jobs.

Amortization of Existing Infrastructure

Brownfield communities have already invested in roads, sewers, and utility services for prior usage. Hence, the presence of infrastructure reduces the cost to a developer, as well as local and state government.

Space Preservation

One of the uses of reclaimed brownfields has been the opportunity to create parks, wetlands, and golf courses, which enhance the attractiveness of the community.

Community Benefits

Area stakeholders in the community have a direct role to play and can therefore potentially benefit as follows:

- i. Lending Institutions. Lending institutions are key to the opportunities presented by brownfield redevelopment. When there is a collective action by the regulatory community to encourage brownfield redevelopment, there is less risk to the lender and more local opportunities for investment. In Detroit, as much as 25% of the urban environment has been under-utilized brownfields.
- ii. Developers. Developers can now take advantage of a team approach in choosing growth property and to minimizing their risk in a properly structured efforts to rehabilitate property.
- iii. The Property Owner. The property owner, whether private or public, will have an opportunity to obtain fair value for a property that can be productive and revenue positive.
- iv. Government. Local and state environmental agencies benefit when property is rehabilitated because it minimizes or eliminates their environmental list of concerns. Tax roles are augmented.
- v. Real Estate Brokers. Real estate brokers have the opportunity to contribute to the sale of property as well as to realize higher commissions for surrounding property. In addition, under the 1995 Amendments, Michigan communities can offer tax increment financing specifically for brownfield projects, tax credits against Michigan's single business tax for sites located in a brownfield zone, and offer loans and grants for site investigation and development activities.

THE MICHIGAN STRATEGY

Michigan has been a leader in promoting brownfield redevelopment (CDRC, 1998), recognizing the need to provide legislation, guidance, education, and financial incentives. The CDRC study

rated the existing 41 statewide programs according to 10 criteria: liability protection, cleanup criteria, financial incentives, climate and attitude of state and local municipalities, state oversight, agreements with the EPA, related policy issues, participation requirements, fee structure, and eligible parties. There is ample technology available for the job (USEPA, 1997a,b).

Michigan's Funding Mechanisms

The Environmental Response Division (ERD) administers MDEQ programs that involve the cleanup and redevelopment of contaminated sites. ERD administers Part 201 (Environmental Remediation) of the Natural Resources and Environmental Protection Act, 1994 Public Act 451, as amended, and portions of the federal Superfund program (Comprehensive Environmental Response, Compensation, and Liability Act — CERCLA). Funding assistance for brownfield redevelopment is available from a number of state sources including:

- Revitalization Revolving Loan Fund
- Site Reclamation Grants
- Site Assessment Grants
- Site Reclamation Program
- Clean Michigan Initiative (CMI)
- Waterfront Redevelopment Grant Program
- The Cleanup and Redevelopment Fund (CRF)
- Brownfield Redevelopment Authorities
- Single Business Tax Credit
- Federal Taxpayer Relief Act
- Superfund Brownfield Site Assessments
- Coastal Management Program
- Michigan Transportation Economic Development Fund
- Other sources

In addition, Michigan communities have been the recipients of 11 USEPA Brownfield Pilots as of March 1999 (see Figure 1), at \$200,000 each.

The Clean Michigan Initiative is a \$675 million environmental plan passed by the voters in a statewide referendum with seven critical objectives, but the largest is the brownfield redevelopment and environmental cleanup at \$335 million.

Michigan's State Board

The package of legislation described above created a state board within the Michigan Department of Environmental Quality consisting of the MDEQ director, a director of the State Department of Management Budget, and the chief executive officer of the Michigan Jobs Commission or their designees. The latter has been a significant instrument of the governor's attempts to continue revitalization of Michigan. Hence, this board is extremely important to the process.

Brownfield Redevelopment Authorities (BRAs)

Under the Brownfield Redeveloping Financing Act, municipalities in the state of Michigan may establish Brownfield Redevelopment Authorities to facilitate local brownfield development through activities such as:

- 1. Paying or reimbursing parties for cleanup activities.
- 2. Leasing, purchasing, and conveying property.
- 3. Accepting grants and donations of property or other things of value.
- 4. Investing the authority's money.
- 5. Acquiring property insurance.
- 6. Borrowing money.
- 7. Engaging in lending and mortgaging activities associated with property it acquires.

The authorities may also establish and administer site-remediation revolving funds to finance redevelopment activities. The basic thrust of these BRA activities is aimed at reducing the economic incentives that would otherwise favor greenfield development. Linton (1999) reports that 113 BRAs have been established in Michigan as of March 1999 (see Figure 2).

Tax Increment Financing

Through the Brownfield Redevelopment Authority, municipalities are also allowed to capture tax increment revenue on taxes levied after December 31, 1996. The BRA may issue and sell tax bonds to finance their brownfield plan. They will capture taxes levied for school operating purposes, if their activities are approved by MDEQ prior to January 1, 2001.

Michigan Single Business Tax Credit

Michigan has long levied a single business tax on businesses within the state of Michigan. That tax was amended to extend a tax credit to non-liable owners and operators of contaminated facilities who conduct cleanup activities on their property. Such redevelopment activities may include demolition, construction, restoration, etc. on the eligible property in the brownfield zone.

Liability Reform

On June 5, 1995, Michigan Governor John Engler signed into law MERA Amendments implementing a major overhaul of the liability structure applicable to environmentally contaminated property. Unlike federal law, the new Michigan law does not impose liability upon a property owner merely because of property ownership. Liability is only imposed upon those causing the release of contamination. The law provides the conditions under which such liability relief is granted, principally dealing with due care to prevent exacerbation or to prevent movement which would injure a third party. Liability for remediation is imposed generally only on those who own or operate a facility which is or was responsible for an activity causing the contamination at the facility. Even the definition of "facility" was changed to define a facility subject to this law as one which exceeds

the residential criteria of contamination. Removing the provisions of that statute that imposed such liability on those that merely own or operate property essentially eliminated the strict status liability infamous under CERCLA. Only the owner or operator of the facility at the time of disposal of the hazardous substances is liable. By completing and complying with the baseline environmental assessment procedures, a new owner or operator is not liable for the prior contamination at the facility. Moreover, the burden of proof is placed upon MDEQ to establish which person is liable under MERA. In addition, the MERA Amendments protect lenders, fiduciaries, etc. from liability, such as insurance companies and pension funds. All of these provisions assume that the non-liable parties did not act as a manager of the facility at the time that the hazardous substance was released. The amendments also contain appropriate protection from negligent, reckless, or willful misconduct.

If the release migrates onto another property, the owner of that second property is not liable for the contamination unless he or she was responsible for an activity that caused the contamination. Moreover, they are exempt from due care obligations.

While the new MERA Amendments, as state law, cannot supersede federal law and hence may not prevent the federal government from bringing federal claims under CERCLA, nonetheless, an innovative provision provided by the MERA Amendments is designed to provide at least limited protection under CERCLA. Under this provision a person who is in compliance with MERA is considered to have resolved his or her liability through the state in an administratively approved settlement under CERCLA, which at least would prevent the state from future use of CERCLA delegated capability.

Cleanup Criteria

The MERA Amendments abolished previous cleanup criteria and established criteria based upon categories of land use. Two categories were created: limited and unlimited. At an unlimited land use site, there must be an exposure barrier such as a parking lot, which limits access to contaminated areas. In the limited category, residential criteria will be applied to residential property, commercial criteria to commercial property, etc. A restrictive covenant that constrains the use of that land to activities commensurate with the cleanup criteria must be on file and must be legally enforceable. In terms of the risk assessment, the carcinogenic risk level was changed from one-in-a-million risk of additional cancer to the 95% of upper bound on the calculated risk of one cancer in 100,000 individuals above background.

Qualifying for MERA Exemption

In order to qualify for MERA provisions, a new owner or operator of property must perform a Baseline Environmental Assessment (BEA) within 45 days after purchase, occupancy, or foreclosure. A BEA is an evaluation of environmental conditions that exist at the facility at this initiation event; it defines, as best possible, the existing conditions at the facility so that a subsequent release

by the new owner can be distinguished from pre-existing contamination. If the BEA does not disclose contamination, which is subsequently found, then the owner or operator would qualify for defense in the liability as an innocent purchaser. The new owner may petition MDEQ within six months of the BEA for a written determination that the owner qualifies for the exemption.

Baseline Environmental Assessment

As stipulated by MDEQ rule 903, an evaluation of environmental conditions may be used as a BEA only for property that is a facility as defined by Part 201 of the Act. A primary objective of a BEA is to establish a basis to distinguish existing contamination from a new release. The rules provide for three categories of BEAs, being N, D, and S. A "Category N" BEA is conducted for a facility where the petitioner does not intend to have a significant use of hazardous substances. A "Category D" BEA is conducted for a facility where the petitioner intends to employ significant hazardous substance, but different from those constituting existing contamination. A "Category S" BEA is conducted for a facility where future significant use of hazardous substances will be similar to those constituting existing contamination. These three categories of BEAs are known as A, B, and C, respectively. Each category requires the following (NTH, 1999):

- i. Legal description and property tax identification numbers or ward and item numbers.
- ii. Names and chemical abstract numbers of all hazardous substances known to have been released at the property.
- iii. Basis for concluding facility status.
- iv. Identification of locations and environmental media affected.
- v. Identification of the following known to be present: aboveground storage tanks or surface impoundments; underground storage tanks; barrels, containers, and other receptacles; and a general description of contents and quantity of the preceding items.
- vi. Photographs that depict important features of the property, including visually evident releases and tanks, impoundments, and containers.
- vii. Statement of future hazardous substance use, if any, including names and chemical abstract service numbers.

In addition to the information requirements itemized above, Category S BEAs also require the following:

- i. Identification and quantification of each hazardous substance that is part of the known existing contamination at the facility, if the hazardous substance will be used at the facility.
- ii. General projections about the fate of contamination, including: property features that may influence migration, identification of known sources of hazardous substance releases; and documentation of known vertical and horizontal extent of hazardous substances in excess of residential criteria.
- iii. Relevant information to confirm the presence of, quantify, and delineate the horizontal and vertical extent of hazardous substances that have potentially released on the property.

MDEQ rules provide for application of engineering controls, isolation zones, and/or stipulated conditions in order to satisfy certain provisions of the technical standards, including commingling of existing contamination with new releases.

Affirmative Obligation to Remediate

A new provision under the MERA Amendments requires that the owner or operator of a facility who knows that the property is a facility and who is liable under MERA must diligently pursue response activities. This is a major change from prior law which allowed owners to simply sit on the property. In addition, none of the funds and tax abatement available through the amendments are applicable to the liable person, retaining the "Polluter Pays" concept previously imbedded in Michigan law.

STATE OF MICHIGAN REVIEW

The state of Michigan's Department of Environmental Quality (MDEQ) reviewed the early results of the 1995 amendments in a report issued in July of 1996 (Linton, 1996). At that time, based upon a random telephone survey to determine the effect of the June 5, 1995, Part 201 amendments on brownfield redevelopment, 20 of 33 Michigan municipalities surveyed reported an increase in the actual development of brownfield properties, resulting in over \$200 million in private investment and the creation of more than 2,300 jobs. In the first year of operation, over 425 baseline environmental assessments were submitted, over ten times the number of applications which had been submitted under the old covenant-not-to-sue legislation. This is significant testimony to the effectiveness of the new legislation.

Linton (1999) conducted the latest MDEQ update on the impact of the 1995 Part 201 amendments on cleanup and redevelopment. In June 1997 the same 33 municipalities were surveyed again to obtain updated information about the effectiveness of the amendments through the second year of implementation. The most recent follow-up survey of the 33 municipalities was conducted in March 1999.

These surveys, following the first few years of implementation, indicated that the amendments had begun to impact brownfields redevelopment in a significant way. The primary aspect of the amendments that helped to facilitate redevelopment is the change from a "strict" to a "causation-based" liability scheme. Further evidence showed that substantial reductions in environmental cleanup costs had occurred as a result of the development of more realistic risk assumptions, improved land-use based cleanup criteria, and the concept of "due-care" which limits cleanup obligations for developers. The amendments had given the state one of the most effective laws in the country for brownfield redevelopment programs (Consumer Renaissance Development Corporation, 1999). Follow-up surveys of the 33 municipalities in June 1997 and March 1999 have shown that the amendments continue to have a significant impact on reducing environmental cleanup

costs and redeveloping previously contaminated properties.

From 1996 to 1999, most of the communities (28-31) reported strong interest in redeveloping brownfield properties in their communities.

- Twenty of the 33 municipalities surveyed in 1996 had reported an increase in actual redevelopment of brownfield properties. In 1997, 27 of the 33 reported an increase in actual redevelopment and in 1999, 27 of the 33 municipalities have reported an increase in actual development of brownfields. Table 1.0 summarizes the results of the survey.
- Projected development in the 33 communities reporting in 1999 totaled \$1,024,988,000 in private investment, an increase of 223 percent over 1997, and the creation of 4,796 new jobs, an increase of 39 percent over the projected 1997 job creation numbers.

Records of the DEQ show the following:

- 2,635 Baseline Environmental Assessments (BEAs) were received by the DEQ as of April 6, 1999. This is well up from the 425 BEAs received by July 8, 1996. Approximately 73 BEAs are now being received by the DEQ each month.
- 309 sites have been removed from Michigan's inventory of sites of environmental contamination since June 5, 1995, because they no longer met the definition of a site of environmental contamination or all the necessary cleanup activity was completed.
- Over \$57.8 million in federal, state, and private party funds were saved at Michigan Superfund sites as a result of the changes in the Part 201 cleanup criteria and an increasing focus on landuse-based cleanups designed to foster redevelopment. This includes \$29 million in savings reported in 1997.

An independent performance measure can be obtained by looking at the records of the State Reclamation Program and the Site Assessment Fund grants in Tables 2 and 3. The private investment and job creation numbers are self-reported, and hence some caution is needed in their use. Nonetheless, the tables illustrate that the program got off to an excellent start but has slowed possibly because of fund depletion (only \$2,903,073 remain in the SRP and \$600,000 in the SAF). The Clean Michigan initiative is expected to revive these programs.

CONCLUSIONS

Michigan's Brownfield Redevelopment Program is one of the leading programs in the U.S. and is effectively promoting the reuse of brownfield sites, although much remains to be accomplished. The initial funding has been used, but the bonding funds from the Clean Michigan Initiative should renew the effort.

ACKNOWLEDGEMENTS

This study was supported by a grant from the State Policy Center, College of Urban, Labor & Metropolitan Affairs, Wayne State University. Special thanks go to James Linton of the MDEQ Environmental Response Division and Bob Terry of the MDEQ Environmental Assistance Division for their extensive cooperation and support.

REFERENCES

- Consumers Renaissance Development Corporation, "Brownfield Redevelopment Guide" (1997).
- Consumer Renaissance Development Corporation, "National Comparative Analysis of Brownfield Redevelopment Programs," October (1998).
- Cox, D., Handbook on Hazardous Waste Materials Management, 5th Edition, Institute for Hazardous Materials Management (1995).
- Littman, Margaret, "Building a New New Jersey," Brownfield News, August (1998), p. 15.
- Linton, J., MDEQ Environmental Response Division, "The Part 201 Amendments: One Year Later," (1996).
- Linton, J., MDEQ Environmental Response Division, March (1999).
- Michigan Department of Environmental Quality, Environmental Response Division, <u>R3 Newsletter</u>, Spring (1999).
- Michigan Department of Environmental Quality, Environmental Response Division, <u>R3 Newsletter</u>, Fall (1997).
- NTH Consultants, Ltd, Comments on Michigan's BEA Regulations (1999).
- Rasher, B., Speech to CHMM Michigan Meeting, February (1999).
- Reott, R, T., and E. L. Grayson, "Risk-Based Corrective Action: Lessons for Brownfields," EM, November (1998), p. 34.
- Trigger, G.R., Michigan Brownfields Legislation, in Brownfields: <u>A Comprehensive Guide to Redeveloping Contaminated Property</u>, edited by Todd S. Davis and Kevin Margolis, ABA Section of Natural Resources, Energy and Environmental Law, p.461-486 (1997).
- USEPA, Office of Solid Waste and Emergency Response, <u>Tool Kit of Information Resources for Brownfields Investigation and Cleanup</u>, EPA 542-B-97-001 (1997a).
- USEPA, Office of Solid Waste and Emergency Resource, <u>Road Map to Understanding Innovation</u>
 <u>Technology Options for Brownfields Investigation and Cleanup</u>, EPA 542 B-97-002
 (1997b).
- Woodruff, F. M., C.M. Denton, and S.M. Wyngaarden, "Michigan's Brownfield Initiative," CHMM Annual Meeting, 1999.

Table 1. Survey of 33 municipalities. Impact of 1995 Amendments (Linton, 1999).

	1996	1997	1999
Private Investment	\$221,573,000	\$317,316,000	\$1,024,988,000
Total Jobs Created	2,379	3,431	4,796
Total Number of Projects	48	84	134

Table 2. Michigan SRP and SAF fund activity.

	SRP	SAF
1996	25 Projects 34 Cities 23,000,000	84 Projects 24 Cities 9,000,000
1997	40 Projects 29 Cities 24,753,619	96 Projects 39 Cities 9,418,234
1998	37 Projects 31 Cities 26,143,918	97 Projects 39 Cities 9,423,324
1999	49 Projects 42 Cities 29,800,000	96 Projects 38 Cities 9,371,440

Michigan Environmental Response Division, Spring 1999 Newletter.

Table 3. SRP and SAF activity, continued.

	Total Grant \$ Cumulative	(SRP) Private Investment, \$	Job Creation
1997	34,339,901	384,189,000	5389
1998	35,567,242	458,689,000	5342
1999	41,468,371	519,889,000	5922

Michigan Environmental Response Division, Spring 1999 Newletter.

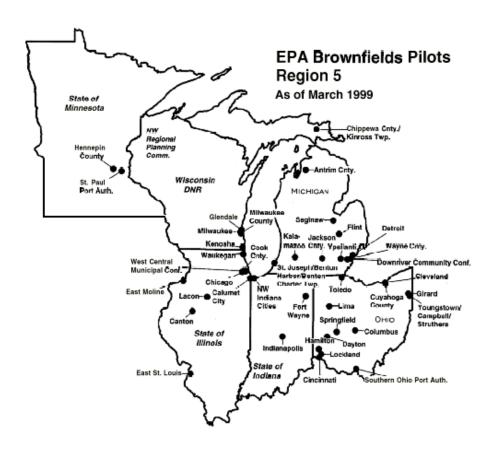


Figure 1. Map of EPA Region 5 brownfield pilots.

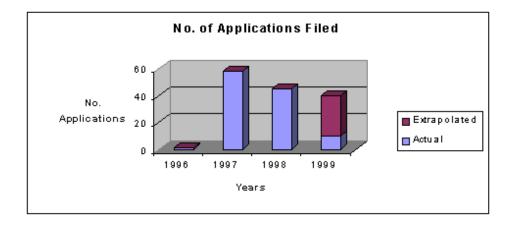


Figure 2. Number of BRA applications filed with the Michigan Secretary of State.