

# Redevelopment Success Stories- Report for EPA Region 5

## Brownfield Redevelopment Program, Michigan Department of Environmental Quality, Remediation and Redevelopment Division

### **Creative Arts Center**

2801 West Vernor Highway

Detroit, MI 48209

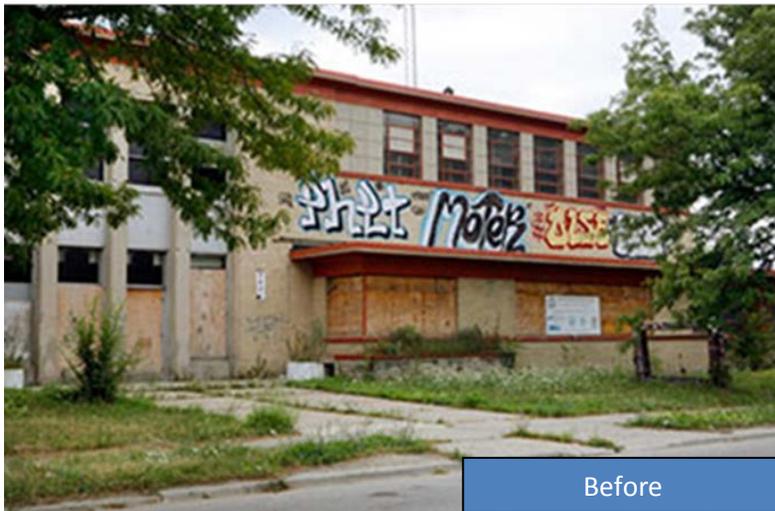
[www.555arts.org](http://www.555arts.org)



After



**Summary:** The Detroit/Wayne County Port Authority utilized a Department of Environmental Quality (DEQ) brownfield grant in conjunction with a number of additional redevelopment incentives to repurpose an abandoned police precinct. The collaborative effort resulted in a public art studio that not only provides work spaces for emerging artists, but also art education programs for the community.



Before

### **Site Characteristics and History:**

The property was first developed in 1937, when a gasoline filling station was built on the site. The City of Detroit acquired the property in 1949, demolished the gas station and constructed a police precinct. The police precinct was in operation until 2006, at which time the property was abandoned by the city of Detroit. Southwest Housing Solutions Corporation bought the property from the city of Detroit on October 1, 2009.

### **Environmental Issues and Remediation:**

Following removal of an underground storage tank (UST) in 1996, petroleum-related substances were found in the soil at concentrations that exceeded applicable soil and indoor-air criteria. To address the environmental risk, contaminated soils were removed and appropriately disposed in a landfill.

**Redevelopment:**

The site was converted into a neighborhood arts center called 555 Center for Public Arts which provides classrooms, studio spaces, and performance venues for residents of the City of Detroit. The building design included sustainable features such as: energy efficient windows with insulated glass; super insulated walls and ceiling assemblies; energy efficient lighting control systems; low volatile organic compound paints and products; high recycle content carpet; and installation of energy star appliances. In addition, the development also includes rain gardens, a green roof, and a grey water irrigation system installed to capture and reuse rain water runoff.

**Funding and Incentives:**

This project was truly a collaborative effort. In addition to the DEQ \$160,000 Brownfield Redevelopment Grant, other sources of funding (totaling \$1,276,173) included:

Neighbor Works Grant	\$74,000
Detroit Port Authority	\$8,500
Brownfield Tax Credits	\$75,000
Community Development Block Grant – City of Detroit	\$127,500
Wayne County – U.S. EPA Revolving Loan Fund	\$180,000
Wayne County – Community Development Block Grant	\$200,000
Detroit Investment Fund (Private)	\$300,000
Erb Family Foundation	\$75,000
Other Foundations & Developer Equity	\$246,703

The DEQ used its 128a funding to support staff to conduct outreach efforts with the city of Detroit to build an incentive package that would supplement the Brownfield Redevelopment Grant. Using 128a funding, the DEQ staff conducted a Petroleum Assessment Grant Eligibility Determination for the Detroit-Wayne County Port Authority to complete a Phase 1 and Phase 2 Environmental Assessment and determine the impacts of the former leaking underground storage tank at the site.

**Economic Impact:**

The redevelopment resulted in an increase in the State Equalized Value (SEV) from \$0 prior to redevelopment to \$250,000 following redevelopment activities. In addition, the project leveraged approximately \$1.2 million in private investment and resulted in approximately 20 full-time equivalent jobs and 15 part-time jobs.

**Social Benefits:**

The 555 Center for Public Arts aims to further enrich and diversify cultural life in Detroit by providing facilities and work spaces for emerging artists. The center includes: affordable studios and workspace, gallery space, exhibition programs, arts education programming, an artist in residency program, and public art. This project converted a neighborhood eyesore into a lively and productive creative space.

**Environmental Benefits:**

The project resulted in the removal and disposal of contaminated soils, thus negating the need for an indoor-air treatment system. An energy-efficient heating and cooling system, green roof, and an eco-friendly rain water system was installed, to improve storm water discharges to the Detroit River.

**Additional Background on the Web:** [www.555arts.org](http://www.555arts.org)

## **Grand Rapids Urban Market**

435 Ionia SW and 109 Logan SW  
Grand Rapids, MI 49503  
[www.downtownmarketgr.com](http://www.downtownmarketgr.com)

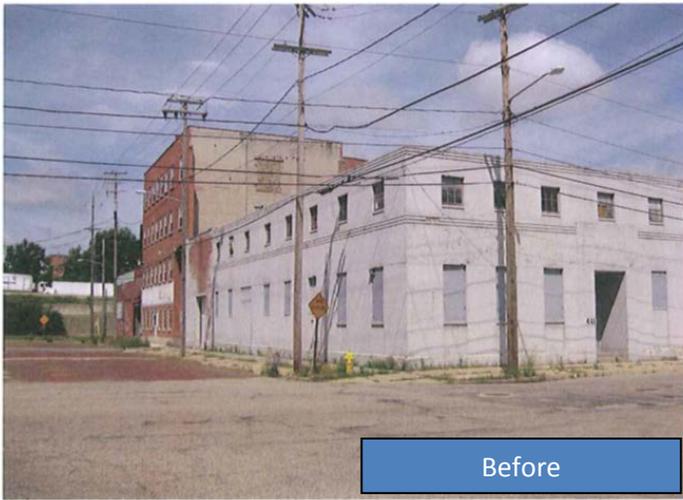


After



### **Summary:**

The Grand Rapids Downtown Development Authority (DDA) utilized a Michigan Department of Environmental Quality (DEQ) brownfield grant in conjunction with other local, state, and federal incentives and resources to redevelop a former industrial and warehouse site. The resulting redevelopment was a year-round, indoor/outdoor farmer's market which is anticipated to spur further development in the area.



Before

### **Site Characteristics and History:**

The 3.45-acre site consisted of two former industrial properties which had a number of previous uses, including: warehousing and distribution businesses, an insulation company, and a foundry. A railroad spur also serviced the property. In 2007 the Grand Rapids DDA acquired the abandoned properties with the intent to foster redevelopment in the area.

### **Environmental Issues and Remediation:**

The site contained surficial soil contamination from railroad and other historical industrial operations, as well as

five underground storage tanks (USTs). Two of these USTs were removed from 435 Ionia in 1990. During the removal of two other USTs in 1997, a release of diesel fuel was reported. The release remained open until the site cleanup in 2012. Six unsafe buildings were demolished, one 8,500-gallon UST was removed, and approximately 52,000 tons of contaminated soil were excavated and removed from the site at that time.

### **Redevelopment:**

The Grand Rapids Urban Market is a year-round, indoor/outdoor urban farmer's market which provides space for a number of vendors and has additional space designated for restaurants, educational

## ***Grand Rapids Urban Market***

facilities, food processing and production facilities, a rooftop greenhouse, as well as retail and office space. The Market has a number of sustainable features including a green roof and a geothermal heating and cooling system. In addition., the site increases walkability from the nearby residential areas and provides access via public transportation.

### **Funding and Incentives:**

In addition to a \$1,000,000 DEQ Brownfield Redevelopment Grant, the project was approved under the Brownfield Redevelopment Financing Act, 1996 PA 381, for \$776,749 in state and local tax increment financing to reimburse the developer for eligible environmental costs. The city also utilized its United States Environmental Protection Agency (EPA) Petroleum Site Assessment grant to conduct the initial site assessments and prepare a due care plan and provided the DDA with a sub grant from their EPA Revolving Loan Fund grant for another \$200,000.

The DEQ uses its 128a funding to support staff in working with communities on grant and loan projects. Grant staff helped the city of Grand Rapids organize the environmental activities to meet the requirements of the Brownfield Redevelopment Grant. Using 128a funding, DEQ staff conducted a Petroleum Assessment Grant Eligibility Determination for Grand Rapids to complete a Phase 1 and Phase 2 Environmental Assessment and determine the risks related to former leaking underground storage tanks at the site.

### **Economic Impact:**

The redevelopment resulted in an increase in the State Equalized Value (SEV) from \$17,846 prior to redevelopment to \$1,222,200 following partial completion of the redevelopment activities. After full build out, it is anticipated that the SEV will be in excess of \$4,500,000. In addition, the project leveraged approximately \$12 million in private investment and resulted in the creation of approximately 230 full-time jobs. The impact of this project is expected to reach beyond the boundaries of the property itself and encourage further economic growth in this area.

### **Social Benefits:**

The site consists of a year-round indoor and outdoor downtown market with more than 80 stands. There is 25,000 square feet of market space, including a restaurant, a brewery, retail shops, a commercial kitchen, a rooftop greenhouse and a hands-on kitchen for kids. The market replaced two underutilized properties, will provide healthy food options for area residents, and will allow food entrepreneurs a way to develop their businesses.

### **Environmental Benefits:**

The project resulted in the removal and disposal of approximately 52,000 tons contaminated soil, thus allowing a vacant, contaminated area to be repurposed into be a thriving market. Sustainable practices were utilized wherever possible such as the use of sustainable and local building materials, installation of a green roof and geothermal heating and cooling, and providing increased walkability and access to public transportation.

### **Additional Background on the Web:**

[Urban Market Background and Design Concept](#)

[www.downtownmarketgr.com](http://www.downtownmarketgr.com)

## **Northville Garage**

202 West Main Street  
Northville, MI 48167

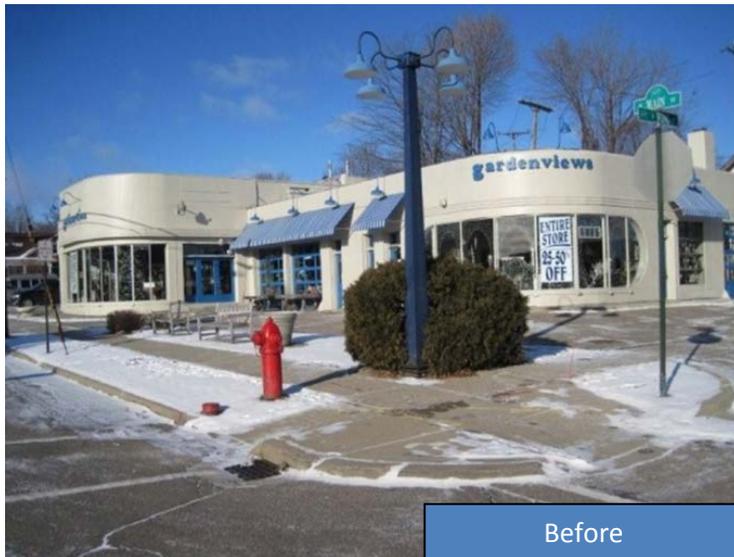
[www.garagenorthville.com](http://www.garagenorthville.com)

After



### **Summary:**

The city of Northville received Brownfield Redevelopment Grant funding from the Department of Environmental Quality (DEQ) to facilitate the redevelopment of a former dry cleaner and gas station. The .45-acre site was heavily contaminated with dry cleaning solvents and petroleum products from historical operations. Grant funds were used to address the environmental impacts on the site and allow the building to be redeveloped into a popular grill restaurant called the Garage.



Before

### **Site Characteristics and History:**

The site was developed in 1941 as a gas station, and had also been used as a dry cleaning facility. The site was used as a car service garage called Cal's Car Care from 1986 until 1993. A release of fuel and oil was found on the site. Five underground storage tanks, which originally contained gasoline, diesel fuel, fuel oil, and waste oil, were removed. Eighty cubic yards of petroleum-impacted soil was removed.

### **Environmental Issues and Remediation:**

Prior to the start of remediation, tetrachloroethene (PCE) in the soil exceeded the levels set out in the Generic Residential Cleanup Criteria from Part 201 of the Michigan Natural Resources and Environment Protection Act 1994 PA 451, as amended. A passive soil vapor ventilation system was installed. Highly impacted soils beneath the building were excavated, transported, and disposed of. An impermeable vapor barrier was installed on the floor of the entire 6,500 square foot building, as well as in the basement walls and floor. Grant funds were utilized to remove contaminated soils under the building and to design and install a passive vapor barrier under the building.

## ***Northville Garage***

### **Redevelopment:**

The owner has rehabilitated the existing structure and renovated the property into a restaurant. The developer retained the historical architectural design of the building in the downtown area, as well as complementing local businesses. The developer added some trees around the property to minimize runoff and heat-island effects.

### **Funding and Incentives:**

A Clean Michigan Initiative (CMI) Brownfield Redevelopment Grant (BRG) in the amount of \$249,600 was awarded, \$246,773.07 of which was spent. Additional private investment was estimated about \$1,350,000. State funded investigation, interim response, and corrective actions addressing the petroleum products amounted to \$803,421.46.

The DEQ uses its 128a funding to support staff in developing guidelines for vapor intrusion (VI) controls. The VI guidance assisted the DEQ staff with verifying the adequacy of the remediation and controls that were implemented at this site and paid for with the BRG. Without the VI guidance, the project would not have been able to move forward, as site conditions were extremely complex and required staff to be involved during the entire remediation and redevelopment process.

### **Economic Impact:**

The redevelopment resulted in an increase in the State Equalized Value (SEV) from \$411,740 prior to redevelopment to \$552,890 following completion of the redevelopment activities. In addition, the project leveraged approximately \$1,365,000 in private investment and resulted in the creation of approximately 25 jobs.

### **Social Benefits:**

The restaurant known as The Garage opened in 2012. It serves American food and has a seating capacity of 244. The Garage has a charming, historic feel, which adds character to the Northville downtown area. It preserves some of the town's history by redeveloping and renovating the existing building instead of demolishing it.

### **Environmental Benefits:**

Soils with significant PCE concentrations were removed and properly disposed of in a landfill and a vapor barrier installed beneath the building to negate unacceptable exposures to hazardous vapors, resulting in the redevelopment of the property. Reuse of the existing structure not only preserved the character but also resulted in a more sustainable development.

### **Additional Background on the Web:**

[www.garagenorthville.com](http://www.garagenorthville.com)

## **Rylee's Ace Hardware/Former Clark Station**

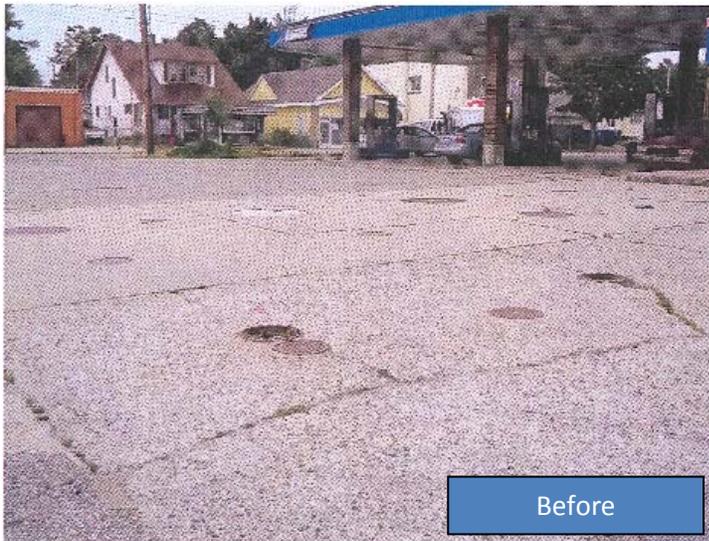
21 Garfield St NW and 1205 West Fulton  
Grand Rapids, MI 49504

[www.ryleesace.com/grand-rapids-west-fulton-ace-rylees](http://www.ryleesace.com/grand-rapids-west-fulton-ace-rylees)



### **Summary:**

The city of Grand Rapids Brownfield Redevelopment Authority sought a variety of State and Environmental Protection Agency (EPA) Brownfield incentives to facilitate the redevelopment of a former gas station. The funds were used to perform environmental assessments and address the risks associated with gasoline related contamination for the soil, groundwater, and indoor air pathways. The project resulted in the 10,000 square foot Rylee's Ace Hardware Store.



### **Site Characteristics and History:**

The site consists of two parcels, one of which was a gas station and car wash and the other which had been a residential property since the 1950s. The former Clark/Value Market Express station, located at 1205 West Fulton, operated from 1953 until 2008, when the Kent County Treasurer foreclosed upon the property due to unpaid property taxes of the previous owner.

### **Environmental Issues and Remediation:**

In 2010 the city of Grand Rapids conducted a phase 1 environmental site assessment using funds from their EPA

Petroleum Assessment Grant. The site was identified as having four 10,000-gallon underground storage tanks (USTs) that were closed in place, severely limiting the redevelopment opportunities. After Kent County acquired the property through tax reversion, the city again turned to its EPA assessment grant to fund further phase 2 work at the property. Significant soil and groundwater contamination was identified and a resulting soil and groundwater cleanup was conducted using the city's EPA Revolving Loan Fund grant.

## ***Rylee's Ace Hardware/Former Clark Station***

The cleanup included the removal of the four USTs and a used oil tank, followed by the removal of approximately 1,300 tons of impacted soil and about 5,350 gallons of contaminated groundwater from the area. A Liquid Boot vapor barrier was installed under the building floor as an engineering control to protect against potential vapor intrusion and asbestos was abated in the residential structure.

### **Redevelopment:**

The former gas station and residential property were converted into what is now the 10,000-square foot Rylee's Ace Hardware Store. In addition to the new store and parking facilities, a number of public infrastructure improvements, including new sidewalks and curb and gutters, were included as part of the redevelopment project. The new store improves the neighborhood commercial business district and enhances the neighborhood's overall appearance.

### **Funding and Incentives:**

The Michigan Department of Environmental Quality (DEQ) approved tax increment financing (TIF) under the Brownfield Redevelopment Financing Act, 1996 PA 381 for \$279,500 to reimburse the developer for eligible environmental costs. In addition, the city utilized approximately \$40,000 of its EPA Petroleum Site Assessment grant to conduct the initial site assessments and another \$250,000 from their EPA Revolving Loan Fund (RLF) grant to fund the project. Repayment of the RLF will be made with state and local TIF.

To round out the funding, the Michigan Economic Development Corporation approved state and local TIF totaling around \$397,000 for non-environmental activities and provided a \$211,000 Community Revitalization Program grant.

Using 128a funding, the DEQ conducted a Petroleum Assessment Grant Eligibility Determination for the city of Grand Rapids to conduct a Phase 1 and Phase 2 Environmental Assessment and determine the risks of a former leaking underground storage tank at the site.

### **Economic Impact:**

The redevelopment resulted in an increase in the State Equalized Value (SEV) from \$178,500 prior to redevelopment to \$341,300 following completion of the redevelopment activities. In addition, the project leveraged approximately \$1.12 million in private investment and resulted in the creation of approximately 11 full-time jobs.

### **Social Benefit:**

This project removed an aesthetic blight from the neighborhood and put a functional business in its place. The store increased business traffic to the area, improving the entire business district in this urban neighborhood.

### **Environmental Benefit:**

Removing the USTs and impacted soil from the site improves groundwater quality. The site was previously impacted due to historical releases at the site.

### **Additional Background on the Web:**

[www.ryleesace.com/grand-rapids-west-fulton-ace-rylees](http://www.ryleesace.com/grand-rapids-west-fulton-ace-rylees)

## **F.C. Mason Co. Expansion**

511 N Mead Street  
St. Johns, MI 48879  
[www.fcmaison.com](http://www.fcmaison.com)



### **Summary:**

Clinton County, the City of St. Johns, F.C. Mason, Federal Mogul and the Michigan Department of Environmental Quality (DEQ) partnered to revitalize a former manufacturing plant in downtown St. Johns, Michigan.

Federal-Mogul is the party responsible for trichloroethylene (TCE) contamination beneath the building. They addressed their environmental obligations by placing a restrictive covenant on the deed and prohibiting use or occupancy of the building unless engineering controls were installed to eliminate potential subsurface vapor intrusion. Grant funds from the DEQ were provided to assist F.C. Mason (the developer) install a passive vapor mitigation system to address their due care obligations.



### **Site Characteristics and History:**

The site, located at 511 North Mead Street in St. Johns, had been owned by Federal-Mogul since 1947, when it became a manufacturing plant for automotive bearings and bushings. As part of the manufacturing process, TCE was used to degrease manufactured parts prior to plating operations. In 2007, Federal-Mogul identified major amounts of TCE contamination in the soil beneath the building. The plant closed in 2008, leaving behind a vacant 265,000 square foot industrial building on 10.88 acres adjacent to the downtown area.

### **Environmental Issues and Remediation:**

A response action was undertaken by the liable party to address lead deposition over a large portion of the community. In addition, Federal Mogul is addressing its obligations associated with impacted groundwater with an ongoing groundwater remediation system. The significant levels of TCE in the soils

## ***F.C. Mason Co. Expansion***

beneath most of the building posed a vapor intrusion (VI) risk and therefore needed to be addressed if the building was to be reused. As a result, a vapor barrier was designed and installed to prevent vapors from rising through the floor and harming employees in the building.

### **Redevelopment:**

The F.C. Mason Company is a Tier I supplier of steel components for commercial grade agricultural equipment. They were looking to expand and consolidate their operations and as a result acquired the Federal Mogul property. The redevelopment of this formerly vacant and contaminated building has resulted in bringing an active manufacturing facility back to the city of St. Johns.

### **Funding and Incentives:**

A Clean Michigan Initiative (CMI) Brownfield Redevelopment Grant (BRG) in the amount of \$1,000,000 was awarded to the project to address VI related issues within the structure. In addition, an EPA Petroleum Site Assessment grant was utilized to conduct assessment activities related to petroleum storage at the site.

The DEQ uses its 128a funding to support staff in developing guidelines for vapor intrusion (VI) controls. The VI guidance assisted the DEQ staff with verifying the adequacy of the remediation and controls that were implemented at this site and paid for with the BRG. Using 128a funding, the DEQ staff conducted a Petroleum Assessment Grant Eligibility Determination for Clinton County to conduct a partial assessment at the site and determine the risks to groundwater from petroleum substances.

### **Economic Impact:**

Following redevelopment, there are now 95 full-time equivalent positions at this location, and there has been approximately \$2.5 million in private investment. The State Equalized Value (SEV) of the property prior to redevelopment was \$650,000. The increase in the SEV is anticipated to be determined at the end of 2013.

### **Social Benefit:**

Prior to remediation, this property had a vacant, 265,000-square foot building. Now the site is back in productive use with expansion of a local company on the property that has provided new job opportunities.

### **Environmental Benefit:**

The building was able to be re-used instead of demolished. The TCE still exists under the floor, but the floor of the building has been sealed as to allow for workers to be able to safely use the building.

### **Additional Background on the Web:**

[www.fcason.com](http://www.fcason.com)

## **Brownfield Premier Improvements**

415 North Paul Street

Dowagiac, MI 49047

[www.premierdiecast.com](http://www.premierdiecast.com)



### **Summary:**

The Dowagiac Brownfield Redevelopment Authority sought Michigan Department of Environmental Quality (DEQ) brownfield redevelopment grants totaling approximately \$661,000 to address environmental conditions at a vacant manufacturing facility. The funds were used to perform an environmental assessment, address oil-saturated debris and surfaces, and provide engineering controls to address the environmental risks associated with site. This funding paved the way for the redevelopment of the property, allowing Premier Tool and Die Cast Corporation (Premier) to reuse the site and create a number of new manufacturing jobs for the area.



### **Site Characteristics and History:**

This approximately five-acre property was first developed in 1919 by the former Du-Wel Corporation whose operations included machining, plating, and aluminum casting. In 1989, Inverness Casting Group purchased the site and their operations focused primarily on aluminum casting. When this group filed for bankruptcy, the company's assets were purchased by ICG Castings, Inc., which was then in operation from 2003-2008. In 2008, ICG Castings closed and the property was left vacant.

### **Environmental Issues and Remediation:**

When the ICG Castings, Inc. property was vacated, several environmental risks were left behind. Specifically, the site was left with a number of abandoned containers of petroleum distillates/solvents and lubricants, residual chemicals, metal smelting, die casting, widespread oil/chemical spillage, and residual oil sludge. Since there were imminent and substantial risks to the public and environment, the United States Environmental Protection Agency (EPA) carried out a Time-Critical Removal Action in

## ***Brownfield Premier Improvements***

2010. The city of Dowagiac Brownfield Redevelopment Authority (DBRA) voluntarily entered into an Administrative Order on Consent to address the remaining environmental concerns. The work agreed to by the DBRA was partially paid for with DEQ grant funds.

Previous investigations showed that there were concentrations of aluminum in the soil and groundwater above the criteria laid out in Part 201 of the Michigan Natural Resources and Environmental Protection Act, 1994 PA 451 as amended. In addition, levels of volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) were present in the groundwater and that exceeded the generic Part 201 criteria. This contamination will be contained through continuing due care obligations of the new owner.

### **Redevelopment:**

Premier, a die casting company, renovated the abandoned manufacturing facility, putting the formerly vacant building back into productive use. This company casts aluminum parts for various types of industries. This new facility allows the company to machine parts for a variety of manufacturing uses and will employ 100-200 workers in which some employees will be transferred from a Premier facility in New York.

### **Funding and Incentives:**

The Dowagiac Brownfield Redevelopment Authority received a \$594,333 and a \$67,193 Site Reclamation Grant to address brownfield conditions at the site. Funding was used to complete a baseline environmental assessment (BEA) for the developer, remove oil-saturated debris, clean oil-saturated floors and walls, clean out sumps, perform an asbestos survey, provide engineering controls, and demolish a deteriorated and dangerous building addition. In 2011, the Michigan State Tax Commission approved a \$2,650,000 Industrial Facilities Exemption, from 1974 PA 198, for Premier to help redevelop and rehabilitate the plant. This tax incentive allows manufacturers to help renovate, and expand aging factories, and assist in building new facilities.

As part of its 128a funding, the DEQ conducted oversight of the purchaser's removal action on behalf of EPA, and participated in the final site inspection, including a photographic documentation of the work conducted. Using 128a funding, DEQ's grant and project managers were able to coordinate site cleanup activities with the Dowagiac Brownfield Redevelopment Authority and Premier to ensure the goals of the Site Reclamation Grant were met.

### **Economic Impact:**

The State Equalized Value (SEV) of the property is now \$1,353,300. Prior to redevelopment, the SEV was slightly higher, but due to the bankruptcy of the former owners, taxes were not being paid on the property. Premier is now paying the taxes. In addition, the project leveraged approximately \$2 million in private investment and resulted in the creation of approximately 20 full-time jobs. After full build out, it is anticipated that up to 80 additional jobs may be created and an additional \$7 million in private investment will occur.

### **Social Benefit:**

Some of the social impacts of this project include increasing the tax base, creating a safer environment for workers and nearby residents, creating jobs, and eliminating an eyesore from this community.

## ***Brownfield Premier Improvements***

### **Environmental Benefit:**

Environmental risks associated with the property, including 800 tons of oil-saturated debris on the floors of the building were removed, sumps and floors were cleaned, the wastewater treatment system was cleaned, and other due care obligations were addressed, allowing for the safe redevelopment and reuse of the site.

### **Additional Background on the Web:**

[www.premierdiecast.com](http://www.premierdiecast.com)