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.fcmason.com