



# BROWNFIELD purchase & unified services platform



# INTRODUCTION



The value of corporate-owned legacy real estate assets bottomed in the early 1990s predominantly due to strict application of joint and several liability for environmental damage recoveries.

For 28 years, IMPACT Environmental has been working with Fortune 500 companies and real estate developers to craft its expertise to become a one-of-a-kind legacy asset "Brownfield" property expert. IMPACT Environmental has found a way to generate value in Brownfield properties where none previously existed. The value is measured from both tangible and intangible metrics that are important in today's corporate cultures. They consider the many stakeholders that are involved with a Brownfield redevelopment project.

## Property Acquisition

In search of opportunity, we seek to purchase non-performing Brownfield properties in an "as-is" state. When we identify opportunity, our in-house staff performs a cross-platform engineering analysis to identify the costs associated with facilities decommissioning and site remediation and profit potential in recaptured market value. Understanding the relationship property owners and their brand have with the community both before and after purchase, a project plan is developed to detail how work will be completed. After discussions with the seller, their specific demands and deadlines are identified for the corporate accounting and reporting, and integrated into the plan. Plan iterations are generated toward creation of a final written offering. When the seller agrees with all of the terms of the offering, contracts can be negotiated with set legal requirements and obligations. Transfer, on an all cash basis, is executed.

## One uniform vision; many important stakeholders

Project stakeholders include Brownfield property owners, redevelopers, regulators, end-users, the community that will live with the project, and all of the press coverage that the project will receive. Understanding and deftly addressing ALL stakeholder concerns and perceptions is what sets us apart in Brownfield redevelopment.

## Unified services platform

Not all projects demand the same expertise, so we have arranged our corporate divisions to make Brownfield-based services scalable. We can offer world-class services that exceed any projects demands. This can be done as we are divided into divisions that have compounding capabilities.

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An industry-leading 28 year old environmental consulting engineering firm with a \$25MM professional and pollution liability policy (per incident, zero cap umbrella). Expert at subsurface investigation and remediation with thousands of successful projects completed to date. This division of IMPACT Environmental operates an in-house public relations department to competently and caringly address stakeholder perceptions from project beginning to end.

A strategically-positioned waste management company that manages environmental liability through recycling and beneficial use regulations through a proprietary process (EDEN). Extensive, multi-state, facility network that has successfully recycled/beneficially used material in excess of 10MM tons.

A wholly-owned excavation and heavy civil site construction, demolition and earth-work company. With company owned heavy equipment and dewatering assets and full "Flexible" financing credit. This division of IMPACT Environmental is up to any Brownfield project challenge.

A one-of-a-kind recycled products manufacturer that can deliver 100,000 cubic yards of a structural fill to a Brownfield project within a week of notice. The company can supply recycled products that meet or exceed the raw resources they replace to support environmental remediation and/or the general construction requirements for Brownfield projects.

A well-structured real estate development company that leverages IMPACT Environmental's 25 year history of successful remediation and redevelopment. The company is managed by an experienced team of executives including two environmental attorneys, financiers and an environmental insurance authority. The company maintains closely held private and institutional capital partners that can deliver on large-scale financial demands, where necessary.

## Corporate Structure

CORPORATE FOCUS	LEGAL ENTITY	COLOR CODE ICON
Environmental Consulting, Investigations and Remediation	Impact Environmental Closures, Inc.	e
Waste Management; Beneficial Use and Recycling of Solid Waste/ Transport	Impact Environmental Consulting, Inc.	w
Heavy Civil Site and Earth Work, Grading, Demolition and Construction Dewatering	Impact Site Works, LLC	s
Recycled Products Manufacturer and Distribution/Transport Company	Impact Materials, LLC	m
Brownfield Redevelopment Company/ Real Estate Sales and Marketing	Impact Brownfield Partners, LLC	b

## Value-Added Chain

Our belief is that profit margin should not be measured purely in a financial context. Brand protection, risk reduction and sustainability are the new commodities of corporate culture. IMPACT Environmental can reduce costs and manage risk with our unified services platform that aligns the interests of stakeholders. Projects that present great risk and or uncertainty that would otherwise not be economically feasible can be controlled because we can:

- i) guide the project into the most appropriate Brownfield-type program to reduce environmental liabilities for stakeholders;
- ii) manage risk to stakeholders with insurance instruments;
- iii) channel the best public relations to protect the brand and reputation of stakeholders;
- iv) assess environmental impacts and pair remediation techniques with construction activities;
- v) avoid cost overruns associated with environmental cleanup and civil construction;
- vi) achieve a sustainable use of the property that will complement stakeholders' legacy;
- and, vii) perform long term care necessary to responsibly address legal covenants.

All of these capabilities are used to create both tangible and intangible profit margins for stakeholders.

The strength of these divisions comes from diversity in ownership with common Management Control; a unified services platform. This platform was instrumental in IMPACT Environmental earning the 2005 Phoenix Award for Brownfield excellence. The following table presents information on the companies that comprise the unified services platform of IMPACT Environmental.

*The color coded icons provided in the table are designed to provide the reader of this document the means to quickly understand the parts of IMPACT Environmental that can be used alone or any combination to provide the services necessary to stakeholders of a Brownfield project. Later in the document these coded icons will be used to proportionally identify the services provided for a variety of project case histories.*

We've been defining an industry for over

# two decades.



# PROJECT CASE HISTORY

NJ Zinc West Plant  
PALMERTON, PA



Stakeholders: CBS Viacom, Palmerton Township, Northface Development;  
IMPACT Environmental



Each project has its own unique technical, administrative and public relations demands. Some involve containing an environmental problem to a Brownfield project to limit liability, maximize a remedial approach and improve stakeholder value. Others involve mass excavation and/or capping areas of concern. Some projects demand administrative adaptations to address certain stakeholder or specialty insurance products. Matching the right capital partner, internal or external, to the right project is also important for completion of a successful project. In all cases, we deliver flexibility and options to stakeholders.

This site was first developed 125 years ago by the New Jersey Zinc Company, the major zinc smelter in the United States. NJ Zinc operated two separate plants at the site, the east and the west plants, that functioned to receive zinc oxides and carbonates for smelting to produce zinc bars and powders. The process generated heavy metal pollution in the surrounding soils, surface and ground waters. Environmental investigation and remediation was identified to be required after the facility was decommissioned by NJ Zinc successor, Horse Head Industries, Inc. in the late 1980s. The remediation has been performed in the PADEP Act 2 Brownfield Program. Environmental liabilities for stakeholders were truncated by the Act 2 program. Under the program, parts of the property have been capped with an earthen protective layer that will allow for the construction of a planned suite of warehouses. The project is in the second of the three remedial phases that will be required in order to safely reuse the site.

The environmental liabilities and responsibilities were established as part of the property purchase agreement. The agreement requires CBS Viacom Corporation, the surviving entity of Horse Head Industries, to hold the environmental liabilities and perform the natural resource monitoring and remediation; Phase III Environmental, LLC, the environmental and civil contractor, decommissioning existing structures and building the earthen protective cap; and, Northface Development, LLC, the Brownfield purchaser, to demolish the existing buildings and redevelop the site into an industrial park.

The major challenges of this project for IMPACT Environmental were to craft terms of the Operating Agreement on behalf of CBS Viacom, Phase III and Northface; perform the decommissioning of many of the plant production modules; import the appropriate fill necessary to raise the site above the residual contaminants without disrupting residential neighborhoods; monitor on-site soil and groundwater quality; and, performing the permitting necessary to make sources of fill for the cap readily available.



## Fairmont Chemical NEWARK, NJ



*Stakeholders: City of Newark, Morris Companies; IMPACT Environmental*

The site was first developed in the early 20th century as a chemical works for Fairmont Chemical Corp. After a series of divestment transfers, during which contamination was discovered, the property was purchased by the Morris Companies, who took the responsibility for environmental investigation and remediation through the NJDEP Site Remediation Program (SRP). Under the NJDEP SRP environmental liabilities are truncated for stakeholders.

The planned redevelopment, which was contemplated under a Waterfront Development Permit with the City of Newark, was tied into a larger number of properties that were acquired through condemnation. Part of the remediation of the site required building demolition and placement of an earthen cap to raise grade away from existing residual contamination in site wide soils. The cap is completed and construction of a 700,000 square foot building is scheduled to begin in 2016.

The major challenges of this project for IMPACT Environmental were to perform hot-spot removal, import the appropriate fill necessary to raise the site above the residual contaminants without impacting the Passaic River; processing the fill to meet a structural specification; placement and compaction of the processed fill through surcharging; and, site survey work to meet final construction grades.



Ruins Of Down Neck

Michael William Sullivan © 2007

## Acme Rubber HAMILTON, NJ



*Stakeholders: Hamilton Township; Cherokee Group; IMPACT Environmental*

Acme-Hamilton was a mechanical rubber goods company that manufactured fire and gasoline hoses, conveyor belts, and other rubber products at the site from the late 1800s to approximately 1978. The site is located in Hamilton Township, New Jersey, and consists of a 12.63 acre parcel of land. The site is improved with approximately 60,000 square feet of warehouse and office space. The site was historically subdivided circa 2006 from a larger portion of the Acme-Hamilton facility.



This new hose frees one fireman when he's needed most.

**It's not the most likely hook up in the world, but it would come in handy if you had to make a quick connection to a hydrant. We did it to demonstrate the value of our new hard suction hose section to the Los Angeles County Fire Department.**

**Our new hose is easier to use in tight spots than any hard suction hose.** What you can't see is that it's lighter weight, stronger, and more flexible than conventional hard suction hose. It's also lighter and easier to move, just how light and flexible Centex hose is.

**This is the Los Angeles County fireman's new hose.** It's a smooth bore, reinforced with a pliable outer jacket, and has a built-in pump-to-hydrant ar-



On-site operations included the vulcanization of rubber, and lead coating of rubber hoses. Five types of rubber curing systems were in common use. Rylco Rubber took over the site in 1985, and the site has undergone various environmental investigations since that time. Residual contamination includes lead and petroleum hydrocarbon impacts to soil and groundwater.

IMPACT Environmental is currently conducting remedial investigation activities and interim remedial measures as the LSRP under the NJDEP SRP. Under the NJDEP SRP environmental liabilities are truncated for stakeholders. In 2012, the property was purchased by IMPACT Environmental and the Cherokee Group.

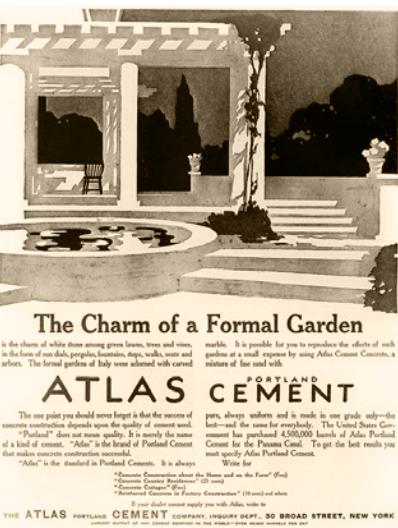
The major challenges of this project for IMPACT Environmental were to purchase the property through a tax lien strategy; investigate the property as the LSRP within the NJDEP SRP; perform hot-spot removal; and, import the appropriate fill necessary to raise the site above the residual contaminants without impacting the nearby residential neighborhoods. Future challenges will include processing the fill to meet a structural specification; placement and compaction of the processed fill through surcharging; site survey work to meet final construction grades; and, the sale of the property.

## Atlas Cement Quarry NORTHAMPTON, PA



**Stakeholders:** Northampton Town; Total Recycling Resources; Krapf Family; IMPACT Environmental

The Atlas Cement Quarry was a natural cement open cut mine operating on 76 acres in Northampton, Pennsylvania. It began operations in 1895 providing a large volume of the cement used to build the Panama Canal. The quarry lies within the Lehigh Valley and contains sedimentary deposits of the Trenton Limestone ("the cement belt"). By the late 1930s the quarry was all but exhausted and abandoned as a large hole with up to 60' walls and having an estimated volume of 1,000,000 cubic yards. Since its permit expired prior to modern mining laws it was not subject to any Federal Mine Reclamation requirements.



The Atlas Quarry was taken over by IMPACT Environmental to reclaim in 2007 under contract with Total Recycling Corporation (TRC). TRC, which purchased the site circa 1979, had been attempting to reclaim the mine over several decades with little success. The project demanded that the materials used to restore the grade to the former mine met the Clean Fill quality standards established by the PADEP. Environmental liabilities on this project are truncated with IMPACT Environmental's \$25MM EPIC® insurance policy.

IMPACT Environmental working under an exclusivity contract finished its reclamation of the quarry in November 2014. The site is now sitting adjacent to the newly announced FEDEX Hub Warehouse complex that is being constructed in Allentown (adjacent to Allentown International Airport).

The major challenges of this project for IMPACT Environmental were to perform hot-spot removal, import the appropriate fill necessary to raise the site above the residual contaminants without impacting the surrounding residential neighborhoods; processing the fill to meet a structural specification; and, site survey work to meet final construction grades. Future challenges will include compaction of the fill through surcharging; construction of the base grade for slab construction; and, sale of the property.

## RD Wood/Griffin Pipe FLORENCE TOWNSHIP, NJ

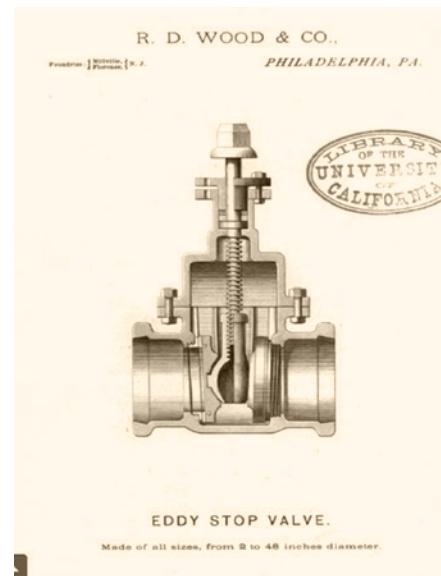


**Stakeholders:** Griffin Pipe, Florence Township, Consolidated Asset Management; Real Estate Capital Investment Partners; IMPACT Environmental

RD Wood & Company constructed an iron foundry along the Delaware River in Florence Township, New Jersey in 1865. The facility was designed to construct cast iron pipe, fire hydrant, gaslight and other water, gas, and wastewater bearing valve and pipe fitting systems. In 1867, the plant was greatly enlarged to over 15 acres to provide higher production rates. In the 1870s, a rail spur was installed to speed delivery to domestic and international buyers. By 1934, Griffin Pipe, a subsidiary of Amstead Industries, acquired the site and continued to expand reaching its aerial zenith in the 1970s to encompass 218 acres.

Today, what remains on the site occupies 140 acres that includes roads, product storage areas, production areas, vehicle repair areas, fueling depots, rail transfer facilities and open vegetation. IMPACT Environmental is currently conducting remedial investigation activities and interim remedial measures as the LSRP under the NJDEP SRP. Under the NJDEP SRP environmental liabilities are truncated for stakeholders.

The major challenges of this project for IMPACT Environmental were to guarantee completion of the remediation to secure capital partners; investigate the property as the LSRP within the NJDEP SRP; perform hot-spot removal; and, import the appropriate fill necessary to raise the site above the residual contaminants without impacting the nearby residential neighborhoods. Future challenges will include processing the fill to meet a structural specification; placement and compaction of the processed fill through surcharging; site survey work to meet final construction grades; and, the sale of the property.



# TWO DECADES OF BROWNFIELD EXPERIENCE

CLIENT/SITE	STAKEHOLDERS WITH CLIENT AND IMPACT	DIVISION CODE
NYC-MTACC East Side Access, 2nd Avenue Subway, Sunnyside Yards, Queens-Manhattan, NY	NYS Commuters, NYS Department of Environmental Conservation, NYC Transit Authority, Amtrak, Queens Residents	e w s
Rheingold Brewery Project, Bushwick, NY – <b>PHOENIX AWARD WINNER 2005</b>	NYC Housing Preservation and Development, Ridgewood Bushwick Senior Citizens Counsel, NYS Housing Partnership, NYS Affordable Housing Corp., Bluestone Industries, Chase Bank, NYC Planning Commission	e w 
Spartan Petroleum, 40 Sites, Brooklyn, Queens, Manhattan and Nassau County, NY	Long Island Communities, Nassau County Department of Health Services, NYS Department of Environmental Conservation, Spartan Petroleum Inc.	e w s
Melody Cleaners Site, Melody Cleaners, Hicksville, New York	Hempstead Water Authority, NYS Department of Health, NYS Department of Environmental Conservation, Lowden Family Trust, East Meadow School District, Nassau County Department of Health	e w s b
Ridgewood Bushwick Senior Citizens Council, Melrose Place, Brooklyn, NY	NYC Housing Preservation and Development, Ridgewood Bushwick Senior Citizens Counsel, NYS Housing Partnership, NYS Affordable Housing Corp., Bluestone Corp., Chase Bank, NYC Planning Commission	e w m
Bayer Corp., Hicksville, NY	Simone Properties, NYS Department of Environmental Conservation, NC Department of Health	e w m
Lincoln Park Landfill Closure Project, Hudson County, Jersey City, NJ	Hudson County Improvement Authority, Hakensack Riverkeeper, NJ Department of Environmental Protection, the Meadowlands Commission, Hudson County Parks Department.	w m
WTC Remediation Project, Greenwich Street Corridor, Manhattan, NY	NYC Planning Commission, Silverstein Properties, NY/NJ Port Authority, Turner Construction, Perini Construction Corp., Dupont, Specialty Products Corporation	w m
General Motors Corp., Linden, NJ	Duke Realty, City of Linden, NJ Department of Environmental Protection	w m
Columbia University Manhattanville Project, Harlem, NY	Harlem Residents, NYC Mayors Office of Environmental Remediation, NYS Department of Environmental Protection, Bovis Lend Lease, Langan Engineering, EE Cruz Corp.	e w
Bill Wolf Petroleum, Brooklyn, NY	NYS Department of Environmental Conservation, Nassau County Department of Health, NYC Mayors Office of Environmental Remediation	e w s
Sherwood Equities, 550 W. 21st Street, Manhattan, NY	Chelsea Residents, NYC Mayors Office of Environmental Remediation, NYS Department of Environmental Protection, Sherwood Equities	e w s m
Acacia, West Tremont, Bronx, NY	NYC Planning Commission, Hudson Housing Capital, NYS Energy Research and Development, NYC Mayors Office of Environmental Remediation	e
Celotex, Fullerton Slag Bank, Allentown, PA	Krapf Family, Total Recycling Resources, the City of Allentown, PA Department of Environmental Protection	e s m b
Hunts Point Alternative Fuel Station, Bronx, NY	NYC Planning Commission, NYC Economic Development Corp., Bronx Community Board, NYC Department of Small Business Services	e b

## Human Assets

The staff of IMPACT Environmental is dedicated to providing expert services for shareholders on Brownfield projects. Our dedication is tempered by our expertise and polished by our diversity of education and experience. The following table illustrates the education and experience of our staff members, and then provides context within our unified service platform.

STAFF MEMBER	TITLE/LICENSE	EDUCATION	EXPERIENCE	DIVISION CODE
Rich Parrish, P.G.	CEO/Geologist (TN)(NY)	University of Stony Brook, BA - Earth & Space Science	30+ Years Private (Impact Enviro.)/Gov. (Municipal)	e m w
Julie LaVan, Esq.	General Counsel / Attorney (NJ)(PA)	Philadelphia U., BA - Finance/Widener, JD - Law	10+ Years Practice in Environmental Law (LaVan Law)	b e
Joel Rogers, P.E.	VP/Professional Engineer (NY)(NJ)(PA)	University of Michigan, BSE - Civil Eng./ Manhattan College, ME, Enviro. Eng.	18+ Years Private Enviro. Consultant (EnviroSolutions/ Gannet Fleming/Impact)	e w
Scott Aschoff	Principal	University of Pennsylvania, MS; BS - Business Admin./ Marketing	20+ Years Senior Officer in Private Finance (DLJdirect/ OCEANdrive Capital)/Investment Banker (Credit Suisse, Bank of Montreal)	b
Nathan Kalenich	VP/ Engineer	Drexel University, BS - Eng.	14+ Years Private Eng. (Pure Soils/RTK/Impact Enviro.)	m w
Kevin Kleaka	VP/Engineer	University of Plattsburgh, BS degree in Environmental Sciences and Chemistry	18+ Years Private Eng. (Impact Enviro.)/Chemist (Wyeth Ayerst)	e b
Jonathan Morgan	Vice President		25+ Years Private Construction (JPM/Impact Enviro.)	s
Waid Worden	Principal	CUNY at Queens College, BA - Accounting	25+ Years Accounting/ Finance (Bloomingdales/ Pricewaterhouse Coopers/ Standard & Poor's/Impact) 3+ Years SiteWork	s
Catalyst Partners	Stephen Parnes, Esq. Mike McMullen, RPE	University of Colorado, MA - Enviro.	Eng. 20+ Years Private Eng. (Arcadis/ Marsh /Zurich)/ Brownfield Developer	e b s

## Summary

Simply stated, we monetize non-performing real estate assets, remove liabilities from the balance sheet and help our clients securely exit from the non-core businesses of environmental remediation and real estate development. We welcome you to see our capabilities in person.

Welcome to Solid Ground.



**Corporate Headquarters:** 170 Keyland Court, Bohemia, NY 11716 T: 631-269-8800

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**Southern New Jersey:** 271 West Main Street, Moorestown, NJ 08057

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