Economic Impact Analysis For a Remediated and Redeveloped FMC Site

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Neil Tocher, PhD

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Executive summary

Main Objective: The main objective of the present report is to provide an independent analysis of the economic impact which will likely result from a timely remediation and redevelopment of the FMC site. The analysis was conducted by Neil Tocher, PhD, a professor at the College of Business at Idaho State University (ISU), for the Power County Development Authority (PCDA).

Report Assumption: The FMC portion of the EMF superfund site is slated to be reclaimed by FMC to a commercially usable quality by the spring of 2015. Notably, the present economic impact analysis was prepared under the assumption that such reclamation will be completed as scheduled.

Report Outline: The report is divided into four main sections as follows:

1. Analysis of potential commercial uses of the redeveloped site
2. Projected economic influence of site redevelopment
3. Proposition of a unified regional land development strategy
4. Benchmark comparisons of previously remediated sites

Report conclusions are summarized as follows:

1. Analysis of potential commercial uses of the redeveloped site

The primary conclusion of this section of the report is that a reclaimed FMC site will be very attractive to employers in the skilled manufacturing and product distribution industries. Such a conclusion is based on the following criteria:

Multimodal transportation access (rail, interstate, & airport):

- Two mainline rail tracks of the UP Railroad run parallel to the property
- Multiple spur tracks are constructed from 133-pound rail and can accommodate 400 railcars at an estimated length of 45 feet per car
- One rotary railcar inverter onsite
- Located on Interstate 86 (I86) and 5 miles from the intersection of I86 and I15
- Three miles away from Pocatello Regional Airport which has capability to land large jets and has 3,200 acres of land (1600 of which is not yet developed)

Access to electricity, water, and natural gas:

- Property's Western boundary is ¼ mile away from Idaho Power's Kinport electrical distribution center that has 345 to 360 Kv transmission line capacity
- Idaho Power's Don Substation is located within the plant site and can be served from the Kinport, Goshen and Brady Substations through existing transmission lines

- One high-pressure (425 psig) natural gas pipeline, owned by the Pacific Northwest Pipeline Company, runs through the plant site
- Approximately $12 million of assets are already on site, including $10-12 million of rail infrastructure
- *Presence of the Don Substation will save future occupants from having to build millions of dollars of electrical transmission lines (valued at $2 million/mile)*

Given the above, the report concludes that a remediated FMC site likely represents the area's best possibility for attracting major industrial development and associated high paying jobs. Importantly, such a conclusion is very similar to conclusions reached by the Shoshone Bannock Comprehensive Plan, which finds that the redevelopment of the FMC land along with the development of the Pocatello airport land is critically important to the tribes' future economic viability.

2. Projected economic influence of site redevelopment

To estimate the economic impact that would likely result from redeveloping the remediated FMC site, the report generates analysis based on scenarios of 300, 400, and 500 jobs being created with average employee salaries of $30,000, $40,000, and $50,000 respectively.

Highlights of the economic impact predictions are as follows:

- the creation of 300, 400, or 500 new jobs with an associated direct payroll infusion into the local economy of between $9 million and $25 million
- the creation of between 360 and 600 indirect jobs for the local economy
- capital investment by associated companies of between $40 and $60 million
- between $600,000 and $900,000 of local property taxes paid by the future site occupants
- between $1 and $2 million of annual local purchases by future site occupants
- between $5,350,000 and $18,850,000 in new disposable income will be created by the 300-500 new jobs
- approximately 70% of residents of Bannock County own homes, suggesting that the 300-500 new jobs created by site redevelopment would result in between 210 and 350 homes being purchased leading to between $525,000 and $875,000 in annual property taxes for local municipalities

3. Proposition of a unified regional land development strategy

FMC Airport Industrial Park: As mentioned above, the key assets of the FMC site are multimodal transportation access, and access to large amounts of electricity, water, and natural

gas. While such assets are needed by all industrial users, they are likely most valuable to those companies operating in the skilled manufacturing industry. Further, it is also important to note that such an asset base is fairly similar to the asset base possessed by the approximately 1,600 acres of undeveloped land near the Pocatello Airport. As such, it is argued here that a remediated FMC site in combination with the 1,600 acres of undeveloped land at the airport could potentially create a 3,000 acre industrial park.

Pocatello Regional Airport site assets:

- 3,250 acres property of which 1,600 acres are potentially available for development. A 600-acre industrial site has been established and 450 acres are ready to be developed
- 24 Buildings – terminal, hangars, shops, fire station, warehouses, and 7 Parking lots
- 3.04 miles of runway with capacity to land large jets
- 3.50 miles of taxiway
- 75 acres paved ramp space with 75 tie downs
- 8 miles streets, sewer, water utilities, 10.2 Acres grass– 2 city parks with pavilion

Why create a unified land development strategy? The ability to attract large scale industrial development, with its associated high paying jobs, will dramatically increase if a joint industrial park using the Pocatello Airport and the FMC site is developed and marketed to firms in the skilled manufacturing and product distribution industries. The financial impact of undertaking such a unified land development strategy on the area economy would be huge, possibly even larger than the previous economic impact of the FMC plant.

Previous Economic impact of FMC Plant: In the year 2000, the FMC plant and its related mining operation had a payroll of over $42 million and an average salary/benefit package of over $70,000 per employee. The plant also paid $1.4 million in property taxes to Power County, which accounted for approximately 25% of the county's yearly tax base.

Multiplier Effects: A development strategy aimed at attracting high paying jobs to the community will have a large economic multiplier effect on existing area businesses. Among other impacts, such jobs would facilitate more purchases of homes, cars, retail goods, restaurant meals, and local airport traffic. Local municipalities would also benefit from increased property tax collections enabling additional funding for improvements to schools, roads, parks and many other civic needs.

Projected Economic Impact: The total economic impact to local communities of implementing a unified land development strategy for the FMC site and the airport properties could easily be $100 million. Figuring that such an industrial park could easily create 1,000 jobs at average

salaries of between $40,000 and $50,000 per employee, the resultant benefit would be as follows:

$40,000 average salary projection

- 1,000 jobs with an average salary of $40,000 resulting in a direct payroll infusion of $40 million to local communities
- 1,200 indirect jobs with average salaries of $25,000 resulting in an indirect payroll infusion into local communities of $30 million
- $21 million of added payroll costs for employee benefits (30% benefit cost)

Total impact = $91,000,000

$50,000 average salary projection

- 1,000 jobs with average salary of $50,000 resulting in a direct payroll infusion of $50 million to local communities
- 1,200 indirect jobs with average salaries of $30,000 resulting in an indirect payroll infusion into local communities of $36 million
- $25.8 million of added payroll costs for employee benefits (30% benefit cost)

Total impact = $111,800,000

4. **Benchmark comparisons of previously remediated sites:** Benchmark analysis of previous phosphorus site remediation provides clear evidence of the following:

1. The proposed remediation plan by the EPA for the FMC site is aligned with similar such plans which have been successfully carried out at many former phosphorus plants throughout the country.

2. Once remediated, industrial redevelopment is the best option for the FMC site. Clear evidence suggests that industrial redevelopment of remediated EPA sites leads to high paying sustainable jobs returning to the communities where such remediation and redevelopment have taken place. Further, the unique bundle of assets which is already in place at the FMC site is best suited for industrial users, providing more credence to the statement that industrial redevelopment is the best course of action for the FMC site.

3. It is possible for Native American Tribes, municipalities, and companies to work in a unified manner to remediate and redevelop former phosphorus plant site locations. Referencing the Tennessee Valley Authority's remediation and redevelopment plan for the former Elemental Phosphorus Production Plant on the Muscle Shoals Reservation in Alabama demonstrates what is possible when such entities work collectively to achieve a common good.

Introduction

The present report provides an independent economic impact analysis of redeveloping the FMC portion of the Eastern Michaud Flats (EMF) Superfund site. It has been prepared by Neil Tocher, PhD, who is a professor in the College of Business at Idaho State University (ISU), for the Power County Development Authority (PCDA).

The FMC portion of the EMF superfund site is slated to be reclaimed by FMC to a commercially usable quality by the spring of 2015. Notably, this valuation analysis was prepared under the assumption that such reclamation will be completed as scheduled.

Major topics of the present report include the following:

- Analysis of potential commercial uses of the redeveloped site
- Projected economic influence of site redevelopment
- Proposition of a unified regional land development strategy
- Benchmark comparisons of previously remediated sites

Note: The present report is derived from independent analysis performed by Neil Tocher, PhD, of the ISU College of Business. Hence, report conclusions do not necessarily reflect the opinions of PCDA, FMC, or any other stakeholders of the reclamation process.

Acknowledgements: Neil Tocher wishes to thank Heather Claussen and Oana Iacovita for their tireless and terrific work on this project. Their research, editing, and overall critiquing of the project throughout its development dramatically increased the quality of the final product. I would strongly suggest here that any employer could significantly improve their organization by hiring Heather and Oana!

Analysis of Potential Commercial Uses of the Redeveloped site

This section of the report provides a range of potential commercial uses of the remediated property. Potential commercial site users described in this section have either previously expressed interest in the site or are currently in negotiations with local economic development agencies about locating operations on portions of the site. Notably, however, where necessary, actual company names of potential commercial users have been withheld to protect the firm's competitive position.

FMC Site assets[1]

From its opening in 1949, the FMC plant in Pocatello was the largest elemental phosphorus producing facility in the world. Partially due to the uncontrolled rise of electricity rates in mid-2000, the FMC plant closed in 2001 and its demolition was completed in 2006. Since then, FMC has worked closely with the United States Environmental Protection Agency (EPA), the State of Idaho, and the Shoshone Bannock Tribes to develop a proposed cleanup plan and ensure that the property is ready for redevelopment.
Located in Power County, and partially within the Fort Hall Indian Reservation, the FMC property is zoned Heavy Industrial (HI) and has extremely unique characteristics appropriate for industrial redevelopment.[2] A list of the property's unique characteristics and its assets is provided below:

Asset	Description
Location	- located in the SE Idaho region comprised of about 280,000 people - located on Interstate 86 - Two hours away from Sun Valley, Jackson Hole, Salt Lake City and Yellowstone Park - Three miles away from City of Pocatello comprised of about 50,000 people - Three miles away from Pocatello Regional Airport - One mile SW of Portneuf River, a tributary of Snake River - Five miles away from the intersection of Interstate 86 and Interstate 15 - 4,449 feet above mean sea level - located on deeded, "fee" land within the exterior boundaries of Fort Hall Reservation, home of the Shoshone -Bannock Tribes - frontage road at the site's main entrance is U.S. Hwy. 30

[1] FMC Plant – Pocatello Data Sheet
[2] FMC Pocatello, Idaho http://fmc-idaho.com/

Property Size	- a total of 1,400 acres of land distributed as follows: o FMC plant site: 1,180 acres o Land between Hwy. 30 and Hwy. 86: 128 acres o Land north of Interstate 86: 92 acres
Rail Infrastructure	- Two mainline rail tracks of the Union Pacific Railroad run parallel to the property - multiple spur tracks constructed from 133-pound rail that can accommodate 400 railcars at an estimated length of 45 feet per car - One rotary railcar inverter on site
Power	- property's Western boundary is ¼ mile away from Idaho Power's Kinport electrical distribution center that has 345 to 360 Kv transmission line capacity - Idaho Power's Don Substation is located within the plant site and can be served from the Kinport, Goshen and Brady Substations through existing transmission lines - one high-pressure (425 psig) natural gas pipeline owned by the Pacific Northwest Pipeline Company runs through the plant site
Water	- Three potable water wells and pump systems on site
Water Treatment Systems	- active sewer connection to the Pocatello wastewater treatment plant

Potential Commercial Users

Below is a list of firms which have had discussions with PCDA about locating operations on a remediated FMC site. Importantly, the main barrier to such companies locating operations on the site and providing economic benefit for the local area is a lack of remediation. Interested parties continue to wait for remediation, but such parties will eventually have to take their business elsewhere if the site is not remediated in a timely manner. That said, the below list does indicate that a variety of commercial users are interested in locating operations on the site and such interest exists from potential commercial users prior to any cleanup processes beginning. It is the opinion of this report that interest from commercial users in the FMC site will significantly increase once cleanup begins and will continue increasing throughout the three year remediation process. Further, the high level of interest from commercial users in a site that is for the most part not ready for use at the present time provides strong evidence of the site's value. Finally, it

must also be noted that an empty site creates no jobs and provides no real economic benefit to anyone.

Refined Energy Holdings – The original proposal was for this operation to be located on the FMC site. The proposed project location changed from the FMC site to the Heavy Industrial Zone near Con Agra. The project scope has also changed to a $1 billion agricultural products center producing ammonia, urea, & urea ammonium nitrate (nitrogen fertilizers) using coal gasification technology. The construction phase will employ between 750 and 1,350 workers. Once operational, the plant will employ approximately 150 employees with an average annual payroll of $7.5 million. The plant will also purchase approximately $6 million worth of supplies and services annually.

Project Sunshine - This project was also a proposed coal gasification operation which approached PCDA in 2005 about locating a 420 MW production facility on the FMC site which would have cost approximately $1.2 billion to construct.

Advanced Energy Idaho – This was a proposed ethanol production facility which approached PCDA about locating on the FMC site in 2005.

Altera Energy – this group proposed to use portions of the FMC site for 35 wind mills to produce approximately 50 MW of power and also wanted to eventually locate a solar power generation facility on site.

Consolidated Ethanol – This was a group which inquired about locating an ethanol production facility on the FMC site during 2006.

Hoku Scientific – During 2007, PCDA and Hoku had discussions about locating Hoku's current Pocatello facility on the FMC site.

Pe-Ben & Ruby Pipeline – This was a 2009 gas-line project particularly interested in a storage & staging area for El Paso natural gas. This would have been a short-term (18 month) lease at $250 per acre.

Edgewood Green Technologies - During 2010, Edgewood Green Technologies approached PCDA about locating a 20 megawatt solar farm on a 100 acre portion of the FMC site. This project would employ approximately 70 employees during construction and would create 10 to15 permanent jobs once operational.

Flying J – Has had conversations with PCDA about locating a truck stop on the 92 acre plot east of the interstate.

Maverik – Has had recent conversations with PCDA about a fuel transloading station on a portion of the FMC site.

Zeolite – Has also had initial conversations with PCDA about locating a zeolite transloading business on a portion of the FMC site.

Proposals Submitted to the Department of Commerce for the FMC site

Below is a list of potential commercial development projects for which local economic development agencies such as PCDA and the Bannock Development Corporation (BDC) have submitted proposals to the Department of Commerce recommending that such development take place on the FMC site. It is again notable that so many proposals have been submitted on land which has not yet been remediated. The fact that so many proposals can be submitted demonstrates that the current site assets, such as its location in a transportation corridor and the site's existing access to electricity, pipelines, and water are very valuable. Secondly, the number of jobs associated with many of the commercial development projects discussed below speaks to the large positive economic impact that will result from site redevelopment in surrounding communities. Finally, as stated above, it is the opinion of this report that businesses' interest in locating operations on the former FMC site will significantly increase once remediation begins and will continue increasing until remediation is completed in 2015.

Project Tut – This proposal was submitted in 2011 for a silicon smelting facility which would create 100 jobs at an average salary of $55,000 plus benefits. The facility would need between 90 and 100 acres of land with access to rail, electricity, natural gas, and water. Creation of the facility would require a capital investment of between $120 and $130 million on behalf of the company.

Project Kobe – This proposal was submitted in 2011 for a Japanese manufacturing facility which would need between 25 and 50 acres of land in the western US with access to rail, interstate, airport, and 15 to 30 megawatts of power.

Project Everest - This proposal was submitted in 2007 for a high-tech distribution center which needed between 50 and 60 acres of land with interstate and rail access. The project would employ between 300 and 400 people at $12 per hour with full benefits.

Project Poly Plant 2 – This proposal was submitted in 2007 for a 2,500 metric tons per year polysilicon manufacturing plant. This plant would create 300 jobs, of which between 60 and 90 would be high level engineers. The project would require 100 acres (plus an additional 300 acres available for future expansion) which possess rail and interstate access.

Project Gold Rush – This proposal was submitted in 2006 for a manufacturing plant which needed 500 acres of land with access to rail service, interstate highways, and 100-120 megawatts of power. Once operational, the project would create 600 jobs initially and would grow to approximately 1,200 employees over 10 years.

Project Aristotle – This proposal was submitted in 2006 for a company which produces and sells semiconductor grade polycrystalline silicon globally. The operation would employ 300 employees initially with potential for 600 jobs. The project would require approximately 1,000 acres of land with access to rail, interstate, airport, and 100-400 megawatts of power. The project is also associated with a capital investment of between $800 million and $2 billion.

Project Compass – This proposal was submitted in 2006 for a Tier IV data center operation. The project would create between 30 and 50 jobs, utilize a 180,000 square foot building, and require a capital investment of between 40 and 70 million dollars on behalf of the company.

Project Ripkin – this proposal was submitted in 2005 for a Distribution Center which would need 500 acres of land near interstates. The project would employ between 650 and 1,000 people by its third year of operations. Notably, the company behind this project would also make a $100 million investment in real property and a $25 million investment in personal property.

Conclusions reached by other studies about best use of FMC Site

Over the past several years, a few studies have been conducted on how best to utilize a remediated FMC site. The key conclusions of such studies are highlighted below:

Report: The Knowlton Group Marketing Assessment (Knowlton Realty Advisors, LLC) - 2005[3]

The key finding/argument in this report was that the FMC property should be redeveloped into the Pocatello Distribution Center. The report cited several possible clients, including Project Ripkin discussed above, to argue that the FMC site is well suited for a large distribution center because of its access to rail, interstate highways, the airport, power, natural gas, and water.

[3] Knowlton Realty Advisors, LLC, *The Knowlton Group Marketing Assessment*

Report: Road to Redevelopment: FMC Pocatello Properties (Vita Nuova, LLC) - 2004 [4]

This report considered the asset base on the FMC property and then outlined industries which the site is best suited to serve in the below matrix.

Industry	NW Location in the U.S.	Rail Access	Site Access	Water Supply	Available Power
Warehousing and Distribution	**X**	**X**	**X**	**-**	**X**
Paper & Allied Products	**X**	**X**	**X**	**X**	**X**
Wood Products	**X**	**X**	-	**X**	**X**
Food & Kindred Products	-	**X**	**X**	**X**	**X**
Chemicals & Allied Products	**X**	**X**	-	**X**	**X**
Primary Metals Industry	-	**X**	-	**X**	**X**
Technology & Silicon	**X**	-	**X**	**X**	**X**
Power Generation	**X**	-	-	**X**	**X**

Based on the assets and potential of the FMC Pocatello site, Vita Nuova found the following potential uses for the property:

- **Fulfillment Distribution Hub**
  - Due to FMC property assets and existent changes in transportation logistics and freight transportation practices (proximity to rail, airport and highways)
  - Intermodal distribution or Packaging and fulfillment industries

- **High Tech Design and Assembly**
  - Property is part of the *Eastern Idaho Technology Corridor*
  - Availability of water for manufacturing of silicon and other high tech assemblies, knowledge based assets growing in the region

- **Traditional Manufacturing**

[4] Vita Nuova LLC, *Roadmap to Redevelopment*: *A Marketing Study on the FMC Properties*

- **Power Generation**
    - Wind power development potential (based on Fort Hall Reservation wind speed measurement data)
    - Waste-to-energy facilities (renewable energy from the combustion of municipal solid waste)

- **Emerging Markets**
    - Biobased Products (Ethanol industry) (power potential especially)
    - Fuel Cells Energy(power potential especially)
    - Lithium Battery Producers (power potential especially)
    - Eco/Business/Industrial Park (the clustering of businesses and industries into a collaborative approach and in proximity to other industrial businesses)

Given the industries that are best suited to the FMC site, a list of many of the companies in each of these industries which were operating in Idaho as of 2004 is provided below:

Industry	Companies in Idaho as of 2004 (Vita Nuova)
Warehousing Distribution & Fulfillment	-Airborne Freight Corp. -Coldwater Creek -United Parcel Service
Paper & Allied Products	-Boise Corp. -Potlatch Corp.
Wood Products	-Bennett Lumber Products -Boise Corp. -Louisiana Pacific Corp. -Stimson Lumber -Woodgrain Millworks, Inc. -Trus Joist, A Weyerhauser Business
Food & Kindred Products	-Heinz Frozen Foods -Amalgamated Sugar Co. -Clean Springs Foods, Inc. -Nestle -McCain Foods -Glanbia -Anheuser-Busch -Armour Fresh Foods, Inc.
Technology & Silicon	-Idaho National Laboratory (INL) -Environmental Laboratory

	-Idaho Accelerator Center -Northwest Research Alliance -ON Semiconductor -Scientech -Micron Technology, Inc. -Micronpc -Zilog, Inc. -SCP Global Technologies -Hewlett-Packard
Power Generation	-Idaho Power Company -PacifCorp/Utah Power -Avista Corporation -City of Idaho Falls -Kootenai Electric Coop, Inc. -Hoku Solar

Report: Idaho Optimum Initiative (IOI) Final Report - 2005[5]

This report is very similar to the Vita Nova report outlined above in that its major goal was to outline a comprehensive strategy for redevelopment of the FMC site. Many of the conclusions in the IOI report mirrored those of the Vita Nova study. The IOI report, however, placed a clear emphasis on the benefits of developing the FMC site into an industry cluster centered on alternative energy generation.

Conclusions of Current Report

Given the above, the present report concludes that a remediated FMC site likely represents the area's best possibility for attracting major industrial development and its associated high paying jobs. Importantly, such a conclusion is very similar to conclusions reached by the Shoshone Bannock Tribes Comprehensive Plan, which finds that the redevelopment of the FMC land along with the development of the Pocatello airport land is critically important to the tribes' future economic viability.[6]

Further, while site assets, such as access to rail, interstate highways, a regional airport which can land large jets, power, water, and natural gas are likely valuable to companies in a variety of industries, it is also argued here that the FMC site is likely best suited for companies in the skilled manufacturing and product distribution industries.

[5] Idaho Optimum Initiative, *The Idaho Optimum Initiative Final Report*
[6] Shoshone-Bannock Tribal Planning Department, *Shoshone-Bannock Tribes Comprehensive Plan*, September 2010

While the possibilities are infinite, three manufacturing alternatives which may be particularly well suited for operations on a remediated FMC site are as follows:

1. Ethanol production - Given the availability of wheat straw, corn, and other associated crops coupled with the Chevron tank farm and petroleum fill line that runs through the property, the site is a prime location for Ethanol production.

2. Metal grade silicon – this option fits well on the site because of the access to high levels of electricity. Such a claim is validated by the interested parties such as "Project Tut" which have already expressed interest in manufacturing silicon on the site.

3. Combined cycle “peaking power” generation plant - Given the availability of natural gas and distribution / transmission lines, such a facility would be a natural fit for a remediated FMC site.

Hence, it is reasonable to assert that a remediated FMC site can potentially create hundreds, if not thousands, of high paying jobs for the region. As such, the next section of the present report considers the economic impact that adding hundreds of jobs in the skilled manufacturing and distribution industries would have upon the local region.

Economic Influence of Site Redevelopment

This section of the report provides estimates of the economic impact that will be provided to the Power/Bannock County area as a result of the redeveloped site being occupied by large employers. Items such as number of jobs, county tax base, total payroll and the resultant economic multiplier of new industrial activity were used to estimate economic impact.

Allstate Economic Impact Highlights

The Economic impact conducted by the Bannock Development Corporation (BDC) is contained in Exhibit 1 below. Highlights of that analysis include the following:

- The creation of 500 new jobs at an average salary of $35,000 per job for an estimated payroll of $17,500,000 that will be infused into the local economy by the year 2013. The company will add workers in waves and thus the entire $17.5 million payroll infusion will not be felt by the local region until the 2013 calendar year.

- The creation of 600 indirect jobs because of the 500 Allstate jobs which are created by the new service center. When new jobs are created by one large development such as the Allstate service center, a multiplier effect is created. While economic theory explaining multiplier effects in detail is beyond the scope of this report, the basic idea of a multiplier is that when 500 new jobs are created by one company in a community, the individuals in those jobs will spend their disposable income primarily within the community where they live, which will in turn create additional jobs. In simpler terms, the 500 new employees of Allstate in Chubbuck will spend money on such items as groceries, clothing, cars, housing, dining out, etc. Since this money was not previously being spent in the community, it will create new jobs in the above industries. Finally, the federal impact tool recommends a multiplier of between 1.2 and 3.8 and this report chose to use the lowest economic multiplier. Thus, the creation of 600 indirect jobs in the community is a conservative estimate.

- A capital investment of $22,000,000 by Allstate Corporation to build the new call center and purchase the equipment to operate it.

- $440,000 of annual local property taxes paid by Allstate.

- $500,000 of annual local purchases by Allstate from area businesses.

- $11,350,000 in new disposable income will be created by the 500 new Allstate jobs.

- Approximately 350 of the 500 Allstate employees are expected to purchase homes in the local community, which will create an additional $875,000 in annual local property taxes.

Summary of Allstate Impact

Once the Allstate service center is operational with a full workforce at the end of 2012, the Pocatello Chubbuck region will see a significant economic expansion. The creation of 1,100 new jobs, the increased tax base for local municipalities, and the significant payroll infusion into the regional economy will all be highly beneficial. The above being stated, it must also be noted that all the figures used to make the above conclusions are estimates. Hence, there is no guarantee that the predicted economic benefits will take place. However, it must also be noted that the Allstate economic impact estimate presented below is conservative in nature. The estimate uses a small multiplier, assumes a lower average salary than the company predicts, and uses fairly high estimates for housing costs, which actually constrains the disposable income that will be created by the Allstate Jobs. Therefore, while the Allstate Economic Impact is an estimate, this report argues strongly that the predictions will come to fruition.

FMC Site Redevelopment

To estimate the economic impact that would likely result from redeveloping the remediated FMC site, three scenarios are developed in the tables on the pages below. **Scenario 1** (Exhibit 2) assumes a creation of 300, 400, or 500 jobs with average salaries of $30,000 and company capital investment of 40, 50, or 60 million dollars. The $40 million investment is associated with 300 employees, the $50,000 investment is associated with 400 employees, and the $60 million investment is associated with the 500 employee prediction. **Scenario 2** (Exhibit 3) uses the same framework, but assumes an average salary of $40,000. **Scenario 3** (Exhibit 4) uses the same framework with an average salary of $50,000 assumed. Highlights of the economic impact predictions are noted below:

- The creation of 300, 400, or 500 new jobs with an associated direct payroll infusion into the local economy of between $9 million and $25 million.

- The creation of between 360 and 600 indirect jobs for the local economy. Again, using the conservative indirect jobs multiplier of 1.2, the 300 employee option would create approximately 360 indirect jobs, the 400 employee option would create approximately 480 indirect jobs, and the 500 employee option would create 600 indirect jobs. It is also important to note that the developed site would likely be best suited for skilled manufacturing jobs, which may create many more indirect jobs than the Allstate customer service jobs discussed above. Skilled manufacturing jobs

would create indirect employment in areas such as electrical service, machine repair, safety training, and maintenance. Such jobs typically pay a living wage and are not generally created by customer service centers. Therefore, the indirect jobs prediction proposed here is fairly conservative.

- Capital investment by associated companies of between $40 and $60 million. While such investment would be welcomed, it is also notable that the $40-$60 million range proposed here is again fairly conservative. For example, the yogurt processing plant which is slated for development in Twin Falls will employ 400 employees and comes with an associated capital investment of $100 million. Thus, capital investment by future skilled manufacturing operations on the FMC site may be far greater than the $40-$60 million range.[7]

- Between $600,000 and $900,000 of local property taxes paid by the future site occupants.

- Between $1 and $2 million of annual local purchases by future site occupants. Again, it would seem that a skilled manufacturing company with between 300-500 employees would purchase far more than between $1 and $2 million in goods and services from local businesses, but the analysis in the present report strove to take a conservative position on its predictions.

- Between $5,350,000 and $18,850,000 in new disposable income will be created by the 300-500 new skilled manufacturing jobs.

- Approximately 70% of residents of Bannock County own homes, suggesting that the 300-500 new jobs created by site redevelopment would result in between 210 and 350 homes being purchased leading to between $525,000 and $875,000 in annual property taxes for local municipalities.

General comments on the Skilled Manufacturing Industry versus the Service Industry

As previously noted, the Allstate call center jobs will create a significant boost to the local economy. That said, it must be noted that call centers and other service jobs can locate practically anywhere in the country and in countless places throughout the world. Skilled manufacturing, on the other hand, requires massive infrastructure to begin operations such as access to several modes of transportation and access to water, electricity, and/or oil/natural gas. New skilled manufacturing operations commonly spend millions of dollars to get such access in

[7] Idaho Statesman, *Twin Falls plant will bring 400 jobs, $100 million investment, group says. http://www.idahostatesman.com/2011/11/02/1863222/twin-falls-plant-will-bring-400.html*

place before the new plant can even begin operations. Notably however, the FMC site has access to rail, two major interstates and an underused regional airport which is able to land large jets. The site also has access to large amounts of electricity, water, and natural gas right on site. Hence, the combination of resources which are already in place at the FMC site will be very attractive to skilled manufacturing companies. As such, this report argues that there are a limited number of sites nationwide which possess the unique bundle of resources possessed by the FMC site. As such, once the site is remediated, it will be very attractive to a large group of companies who have a limited number of places where they can suitably locate operations. Therefore, it is predicted here that a remediated FMC site would be redeveloped by private employers offering high paying jobs in a very timely manner.

Conclusions

The above discussion along with the numerical economic impact analysis presented in the four exhibits below creates a very powerful argument for remediating and redeveloping the FMC site. The fairly conservative predictions put forth here suggest that a redeveloped site would create between 300 and 500 new jobs with a direct payroll infusion into the local community of between $9 and $25 million. Further, given the unique bundle of resources the site currently possesses which will likely be very valuable to skilled manufacturing companies, redevelopment should take place very soon after site remediation is completed.

Exhibit 1: Allstate Economic Impact Analysis[8]

This analysis assumes that the new Allstate call center in Chubbuck will create 500 jobs with an average salary of $35,000, a company capital investment of $22 M, and annual local purchases by the company of $500,000.

Average Salary		**$ 35,000.00**	Source: Allstate
#of Workforce		**500**	Source: Allstate
Company Capital Investment		**$ 22,000,000.00**	Source: Allstate
Local Purchase: Annual		**$ 500,000.00**	Source: Allstate
Idaho Corporate Tax Rate		0.079	State Tax Commission
Idaho Corporate Tax Rate: Adjusted w/ Tax Credits		0.040	State Tax Commission
Idaho State Income Tax Rate: Over $22,075/year		0.078	State Tax Commission
Local Property Tax Rate		0.020	Bannock/City of Pocatello
State Sales Tax Rate		0.060	State Tax Commission
Sales Tax Returned to County		0.250	State Tax Commission
Workforce: Percent Homeowners		0.700	US Census for Bannock County
Workforce Number Homeowners		350.000	US Census for Bannock County
Workforce: Percent Renters		0.300	US Census for Bannock County
Workforce: Number Renters		150.000	US Census for Bannock County
Indirect Employee Multiplier		1.200	Federal Impact Tool (Range is 1.2 to 3.8)
Average Cost of New Home		$ 125,000.00	Pocatello Realtor's Association
Average Monthly Payment on Home		$ 1,250.00	Mortgage + Prop Tax
Annual HH expense on shelter:		$ 15,000.00	Monthly *12

[8] Bannock Development Corporation, *Allstate Economic Impact Analysis*

Homeowner			
Annual Property Tax on Home		$ 2,500.00	Calculate
Percentage of house payments to Tax		0.167	Calculate
Average Renter's Share of Taxes: Per Renter/Monthly		$ 500.00	Idaho Department of Labor Bannock
Annual HH expense on Property Tax for shelter: Renter		$ 6,000.00	Monthly *12
Company Economic Impact			
# of Employees	500		
Average Worker Salary	$ 35,000.00		
Total Payroll		$ 17,500,000.00	
Capital Investment		$ 22,000,000.00	
Property Taxes Paid: Annual		$ 440,000.00	
Local Purchase of Goods, in $$/year	$ 500,000.00		
Sales Taxes: Annual	$ 30,000.00		
Sales Taxes returned to County: Annual		$ 7,500.00	
Workforce Economic Impact			
# of new jobs	500		
Average salary	$ 35,000.00		
Total Necessary Expenditure: Annual for Shelter Homeowners	$ 15,000.00		
Total Necessary Expenditure: Annual for	$ 6,000.00		

Shelter Renters			
Disposable Income: Homeowners	$ 20,000.00		
Disposable Income: Renters	$ 29,000.00		
Total Disposable Income Circulated in Community		$ 11,350,000.00	
Property Taxes paid by Homeowners		$ 875,000.00	
Property Taxes paid by Renters		$ 150,000.00	
Sales Taxes: Annual from Disp Income	$ 681,000.00		
Sales Taxes returned to County: Annual		$ 170,250.00	
State Income Tax Revenues: Annual	$ 1,365,000.000		
Indirect Workforce Created			
Indirect Workforce Created	**600**		

Exhibit 2: Economic Impact resulting from redeveloping the remediated FMC Site - Scenario 1

Scenario 1 assumes a salary of $30,000 for 300, 400, & 500 jobs respectively with capital investment of $40 M, $50 M, and $60 M respectively, and local purchases of $1 M, $1.5 M, and $2 M respectively.

Average Salary		**$30,000**		**$30,000**		**$30,000**
#of Workforce		**300**		**400**		**500**
Company Capital Investment		**$40,000,000**		**$50,000,000**		**$60,000,000**
Local Purchase: Annual		**$1,000,000**		**$1,500,000**		**$2,000,000**
Idaho State Income Tax Rate: Over $22,075/year		0.078		0.078		0.078
Bannock county Property Tax		0.020		0.020		0.020
State Sales Tax Rate		0.060		0.060		0.060
Sales Tax Returned to County		0.250		0.250		0.250
Workforce: Percent Homeowners		0.700		0.700		0.700
Workforce Number Homeowners		210.000		280.000		350.000
Workforce: Percent Renters		0.300		0.300		0.300
Workforce: Number Renters		90.000		120.000		150.000
Indirect Employee Multiplier		1.200		1.200		1.200
Average Cost of New Home		$125,000.00		$125,000.00		$125,000.00
Average Monthly Payment on Home		$1,250.00		$1,250.00		$1,250.00
Annual yearly expense on home		$15,000.00		$15,000.00		$15,000.00
Annual Property Tax on Home		$2,500.00		$2,500.00		$2,500.00
Average monthly Rent		$500.00		$500.00		$500.00
Annual Rent		$6,000.00		$6,000.00		$6,000.00

Company Economic Impact						
# of Employees	300		400		500	
Average Worker Salary	$30,000.00		$30,000.00		$30,000.00	
Total Payroll		$9,000,000.00		$12,000,000.00		$15,000,000.00
Capital Investment		$40,000,000.00		$50,000,000.00		$60,000,000.00
Property tax (.015 Power County)		$600,000		$750,000		$900,000
Local Purchases – Annual	$1,000,000.00		$1,500,000.00		$2,000,000.00	
Sales Taxes: Annual	$60,000.00		$90,000.00		$120,000.00	
Sales tax - Annual County share		$15,000.00		$22,500.00		$30,000.00
Workforce Economic Impact						
# of new jobs	300		400		500	
Average salary	$30,000.00		$30,000.00		$30,000.00	
Annual Home Payment	$15,000.00		$15,000.00		$15,000.00	
Annual total Rent	$6,000.00		$6,000.00		$6,000.00	
Disposable Income: Homeowners	$15,000.00		$15,000.00		$15,000.00	
Disposable Income: Renters	$24,000.00		$24,000.00		$24,000.00	
Total Disposable Income		$5,310,000.00		$7,080,000.00		$8,850,000.00
Property Taxes Homeowners		$525,000.00		$700,000.00		$875,000.00
Property Taxes Renters		$9000		$12,000		$15,000
Sales Taxes - Disposable Income	$318,600.00		$424,800.00		$531,000.00	
Sales Taxes - annual county share		$79,650.00		$106,200.00		$132,750.00
State Income Tax Annual	$702,000.000		$936,000.000		$1,170,000.00	
Indirect Workforce Created	**360**		**480**		**600**	

Exhibit 3: Economic Impact resulting from redeveloping the remediated FMC Site - Scenario 2

Scenario 2 assumes a salary of $40,000 for 300, 400, & 500 jobs respectively with capital investment of $40 M, $50 M, and $60 M respectively, and local purchases of $1 M, $1.5 M, and $2 M respectively.

Average Salary		**$40,000**		**$40,000**		**$40,000**
#of Workforce		**300**		**400**		**500**
Company Capital Investment		**$40,000,000**		**$50,000,000**		**$60,000,000**
Local Purchase: Annual		**$1,000,000**		**$1,500,000**		**$2,000,000**
State Income Tax Rate		0.078		0.078		0.078
Bannock county Property Tax		0.020		0.020		0.020
State Sales Tax Rate		0.060		0.060		0.060
Sales Tax Returned to County		0.250		0.250		0.250
Workforce: Percent Homeowners		0.700		0.700		0.700
Workforce Number Homeowners		210.000		280.000		350.000
Workforce: Percent Renters		0.300		0.300		0.300
Workforce: Number Renters		90.000		120.000		150.000
Indirect Employee Multiplier		1.200		1.200		1.200
Average Cost of New Home		$125,000.00		$125,000.00		$125,000.00
Average Monthly Payment		$1,250.00		$1,250.00		$1,250.00
Annual home payments		$15,000.00		$15,000.00		$15,000.00
Annual Property Tax on Home		$2,500.00		$2,500.00		$2,500.00
Average monthly Rent		$500.00		$500.00		$500.00
Annual Rent		$6,000.00		$6,000.00		$6,000.00

Company Economic Impact						
# of Employees	300		400		500	
Average Worker Salary	$40,000.00		$40,000.00		$40,000.00	
Total Payroll		$12,000,000.00		$16,000,000.00		$20,000,000.00
Capital Investment		$40,000,000.00		$50,000,000.00		$60,000,000.00
Property tax (.015 Power County)		$600,000		$750,000		$900,000
Local purchases – annual	$1,000,000.00		$1,500,000		$2,000,000	
Sales Taxes: Annual	$60,000.00		$90,000.00		$120,000	
Sales Taxes – County share		$15,000.00		$22,500.00		$30,000.00
Workforce Economic Impact						
# of new jobs	300		400		500	
Average salary	$40,000.00		$40,000.00		$40,000	
Annual expense on Home	$15,000.00		$15,000.00		$15,000	
Annual expense on Rent	$6,000.00		$6,000.00		$6,000.00	
Disposable Inc. Homeowners	$25,000.00		$25,000.00		$25,000	
disposable income renters	$34,000.00		$34,000.00		$34,000	
disposable income total		$8,310,000.00		$11,080,000.00		$13,850,000.00
Property Taxes Homeowners		$525,000.00		$700,000.00		$875,000.00
Property Taxes Renters		$90,000		$120,000		$150,000
Sales tax: Disposable income	$98,600.00		$664,800.00		$831,000	
Sales Taxes – county share		$124,650.00		$166,200.00		$207,750.00
State Income Tax Revenues	$936,000.000		$1,248,000		$1,560,000	
Indirect Workforce Created	**360**		**480**		**600**	

Exhibit 4: Economic Impact resulting from redeveloping the remediated FMC Site - Scenario 3

Scenario 3 assumes a salary of $50,000 for 300, 400, & 500 jobs respectively with capital investment of $40 M, $50 M, and $60 M respectively, and local purchases of $1 M, $1.5 M, and $2 M respectively.

Average Salary		**$50,000**		**$50,000**		**$50,000**
#of Workforce		**300**		**400**		**500**
Company Capital Investment		**$40,000,000**		**$50,000,000**		**$60,000,000**
Local Purchase: Annual		**$1,000,000**		**$1,500,000**		**$2,000,000**
State Income Tax Rate		0.078		0.078		0.078
Bannock county Property Tax		0.020		0.020		0.020
State Sales Tax Rate		0.060		0.060		0.060
Sales Tax Returned to County		0.250		0.250		0.250
Workforce: Percent Homeowners		0.700		0.700		0.700
Workforce Number Homeowners		210.000		280.000		350.000
Workforce: Percent Renters		0.300		0.300		0.300
Workforce: Number Renters		90.000		120.000		150.000
Indirect Employee Multiplier		1.200		1.200		1.200
Average Cost of New Home		$125,000.00		$125,000.00		$125,000.00
Average Monthly Payment on Home		$1,250.00		$1,250.00		$1,250.00
Annual yearly expense on home		15,000.00		$15,000.00		$15,000.00
Annual Property Tax on Home		$2,500.00		$2,500.00		$2,500.00
Average monthly Rent		$500.00		$500.00		$500.00
Annual Rent		$6,000.00		$6,000.00		$6,000.00

Company Economic Impact						
# of Employees	300		400		500	
Average Worker Salary	$50,000.00		$50,000.00		$50,000.00	
Total Payroll		$ 15,000,000		$20,000,000.00		$25,000,000
Capital Investment		$40,000,000		$50,000,000.00		$60,000,000
Property tax (.015 Power County)		$600,000		$750,000		$900,000
Local purchases: annual	$1,000,000		$1,500,000		$ 2,000,000	
Sales Taxes: Annual	$60,000.00		$90,000.00		$ 120,000.00	
Sales Taxes returned to County		$ 15,000.00		$ 22,500.00		$ 30,000.00
Workforce Economic Impact						
# of new jobs	300		400		500	
Average salary	$50,000.00		$50,000.00		$50,000.00	
Annual expense on Home	$15,000.00		$15,000.00		$15,000.00	
Annual expense on Rent	$6,000.00		$6,000.00		$6,000.00	
Disposable Income: homeowners	$35,000.00		$35,000.00		$35,000.00	
disposable income: renters	$44,000.00		$44,000.00		$44,000.00	
disposable income total		$11,310,000		$15,080,000.00		$18,850,000.00
Property Taxes paid by Homeowners		$525,000.00		$700,000.00		$875,000.00
Property Taxes paid by Renters		$90,000		$120,000		$150,000
Sales tax: Disposable income	$678,600		$904,800		$1,131,000	
Sales Taxes returned to County		$169,650.00		$226,200.00		$282,750.00
State Income Tax Revenues: Annual	$1,170,000		$1,560,000		$1,950,000	
Indirect Workforce Created	**360**		**480**		**600**	

Proposition of a Unified Regional Land Development Strategy

A land development strategy for the reclaimed site is proposed in this section of the report which is aligned with both the current industrial focus of the region and designed to attract high paying, sustainable jobs to the area. At present, large employers in the region who offer such jobs include Con Agra, Simplot, Petersen's Inc., Heinz Frozen Food, ON Semiconductor, and Portneuf Medical Center.

The airport is owned by the City of Pocatello but located in Power County and the development of the FMC Site is under the control of the Power County Development Authority (PCDA). Leveraging a unified land development strategy for both properties will enhance the chances that regional economic development agencies will be able to bring meaningful jobs to the area. Such an action will likely dramatically enhance the viability of the Pocatello airport and its associated properties.

The FMC land is located next to the Pocatello airport, which controls 3,200 acres of land, of which approximately 1,600 acres are available for development. Recently, a 600 acre, mixed-use industrial park zoned for Warehouse/Distribution, Light Industry/Manufacturing, Professional Office/Business and Commercial Retail has been established on such land. Currently, the park has over 450 acres ready to develop and transportation access by air, rail and interstate highway. The property is owned by the City of Pocatello and much of the property is located within an Urban Renewal District that will allow Tax Increment Financing for infrastructure requirements. Given the Park's asset base, it is likely very well suited for companies operating in the aircraft maintenance (repair and overhaul services) industry or the aircraft manufacturing industry. Such industries are well suited to the park because they would both conduct flight testing, require large facilities, and need aircraft parking aprons.

Finally, it must be noted that passenger air service at the Pocatello airport is declining. As the below tables document, in recent years the Pocatello airport has seen a general decline in both passengers and number of seats sold. The below tables also show that the airports in Idaho Falls and Twin Falls consistently have more passengers and higher load factors than Pocatello. Hence, while passenger air service is critical to the area, one must also conclude that the Pocatello airport's viability likely depends upon generating additional revenue streams besides those that are generated by passenger air service.

Load factors[9], available seats, and onboard passengers for the Pocatello, Idaho Falls, and Twin Falls airports

Pocatello (PIH)

	2006	2007	2008	2009	2010	2011
Total Passengers - Origin	35,581	30,581	26,601	22,543	21,281	12,638
Total # of Seats	74,054	60,344	52,616	45,038	42,910	25,640
Load Factor	48.05%	50.68%	50.56%	50.05%	49.59%	49.29%
Total # Passengers - Destination	35,826	30,487	26,167	22,390	20,623	12,383
Total # of Seats	74,280	60,367	52,712	45,088	43,090	25,735
Load Factor	48.23%	50.50%	49.64%	49.66%	47.86%	48.12%

Idaho Falls (IDA)

	2006	2007	2008	2009	2010	2011
Total Passengers - Origin	152,510	171,029	156,123	143,675	145,900	83,946
Total # of Seats	215,920	241,126	239,760	215,778	194,017	111,417
Load Factor	70.63%	70.93%	65.12%	66.58%	75.20%	75.34%
Total # Passengers - Destination	151,125	169,452	155,213	142,796	146,174	84,329
Total # of Seats	216,651	242,102	241,020	216,186	194,375	111,678
Load Factor	69.76%	69.99%	64.40%	66.05%	75.20%	75.51%

Twin Falls (TWF)

	2006	2007	2008	2009	2010	2011
Total Passengers - Origin	41,328	34,512	30,659	29,322	37,294	25,943
Total # of Seats	73,343	66,788	56,766	49,025	60,445	39,651
Load Factor	56.35%	51.67%	54.01%	59.81%	61.70%	65.43%
Total # Passengers - Destination	37,961	34,394	28,048	28,294	36,500	25,591
Total # of Seats	70,800	66,056	54,496	48,071	61,393	40,016
Load Factor	53.62%	52.07%	51.47%	58.86%	59.45%	63.95%

[9] Load factors are calculated as number of passengers divided by seats

Live Projects Interested in the Pocatello Airport land

The table below describes 14 proposed economic development projects which are currently in live negotiations with the Bannock Development Corporation (BDC) and considering locating on Pocatello airport land. As can be seen from a glance at the table, such projects are primarily in the skilled manufacturing and distribution industries. Further, such projects will employ skilled workers and pay competitive wages.

Project	Industry Affiliation	Business Needs	Estimated Employment	Status
Project 1	Advanced Manufacturing Steel Fabrication	-needs 12-15 acres, 60-100,000 SF -looking for rail and Interstate access	Approximately 100 skilled and semi-skilled employees	-still exploring other states as well
Project 2	Advanced Manufacturing Food Products Processing	-needs 15 acres, 150-200,000 SF -$30-50K in capital - needs Interstate access	200-300 employees	-expansion plans on hold -company has visited area twice
Project 3	High Tech Manufacturing Homeland Defense Project	-10-15 acres, large facility -Interstate access in this phase	30+high tech employees	-future needs may be situated at the airport
Project 4	Advanced Manufacturing Energy-Related	-50-100,00 SF -Blackfoot or Pocatello -Interstate access	Not yet projected	-company still securing financing -interested in setting up manufacturing plant in area
Project 5	Advanced Manufacturing Energy-related	-15 acres, facility size not yet projected -waste management/ reuse -Rail and Interstate access	Not yet projected	-company waiting for completion of a local project -would subcontract with that company and others
Project 6	Advanced Manufacturing Agricultural Chemical Processing	-100,000 SF, tall ceilings -need rail and Interstate	80-120 employees	-has requested secondary information -planning site visit in the near future

Project 7	Advanced Manufacturing Health Products	- 20+ acres, 500,000 SF facility -need rail and Interstate	Not yet projected	-lead through Commerce -still looking at other states
Project 8	High Tech Activity Homeland Defense Related	-10 acres, 20,00 0SF	20+ high tech employees	-long term project -to be developed in phases
Project 9	Advanced Manufacturing Various Industries	-30-40 acres -secondary locations for Japanese co's in light of earthquake and tsunami	Not yet projected	-exploratory request for information
Project 10	Advanced Manufacturing Energy-related	-20 acres, 50,000 SF -needs rail and Interstate	20 to 30 employees	-energy production
Project 11	Advanced Manufacturing Transportation	-20 acres, 100,00+ SF combined space -high capital expenditure, not disclosed	180-200 employees	-still exploratory -needs rail and Interstate
Project 12	High Tech Manufacturing Aviation Industry	-20-acre industrial site, +20 acres for Phase II -150+ million in capital	260 employees at full capacity	- still exploring several states -planning site visit when narrowed down to two states -wants access to runway
Project 13	High Tech Manufacturing Aviation Industry	-100,00-200,000 SF -high capital , not disclosed	200 employees	-interested in airport distribution capacity -wants access to runway
Project 14 (Petersen Inc.)	Advanced Manufacturing Energy related and Other Industries	-specialized steel fabrication company -sub with DOE, INL and others	Not yet projected	-possible new project that would utilize runway for industrial transport use

Comparison of FMC and Airport Site Assets

When developing a unified land development strategy, it is important to consider the assets, current tenants, and latest improvements of the Pocatello Regional Airport in conjunction with the assets which a remediated FMC site will offer. As mentioned, prominent FMC site assets include access to multimodal transportation, as well as large amounts of electricity, natural gas, and water. For a detailed review of the FMC site assets, please see the table on page 7 of this report. A detailed look at the site assets of the Pocatello airport and associated industrial park is contained in the following tables.

Pocatello Regional Airport site assets and latest improvements

Assets [10]	- 3,250 acres property of which 1,600 acres is potentially available for development. A 600-acre industrial site has been established and 450 acres are ready to be developed - 24 Buildings – terminal, hangars, shops, fire station, warehouses, and 7 Parking lots - 3.04 Miles runway with capacity to land large jets - 3.50 Miles taxiway - 75 Acres paved ramp space with 75 tie downs - 8 Miles streets, sewer, water utilities, 10.2 Acres grass – 2 city parks with pavilion
Latest Improvements [11]	- in January 2011, The City Council approved a request by the Pocatello Development Authority to create an Urban Renewal Area and Revenue Allocation District at the Pocatello Airport to make infrastructure improvements designed to facilitate development; such planned improvements include: o a one million gallon water tank o water, sewer, storm water franchise utility upgrades o road, curb and gutter improvements - a $365,000 project to extend and rehabilitate the rail spur and build an intermodal trans-load station has been presented; this facility will transfer goods and materials between rail cars and trucks, providing rail access to any tenant on the airport regardless of proximity to the spur; a trans-load station is an important element that will make the airport even more attractive to prospective clients.

[10] Airport Department, *Service Level Report FY10 with historical data* http://www.pocatello.us/finance/documents/Service_Level/FY10/sl10_airport.pdf.

[11] http://www.airportbusiness.com/web/online/Top-News-Headlines/City-OKs-renewal-district-at-Pocatello-Airport/1$40738 and Mayor communication – June 2011: http://www.pocatello.us/mayor/opeds/oped_62111 htm

Current tenants of the Pocatello Regional Airport[12]

Type of Tenants	Tenant
Fixed Based Operators (Private enterprise located on an airport that provides services to based and itinerant aircraft.)	1 Fixed Based Operator known as the Pocatello AvCenter (December 2010, Pocatello AvCenter had 22 full time employees and was leasing 57,269 square feet of maintenance, office, and aircraft storage space)
Regular tenants	**The National Weather Service** (a Federal agency within the National Oceanic and Atmospheric Administration) - responsible for weather forecasting and preparation of weather maps **Utah Helicopters** (the satellite facility of the helicopter flight academy training students in helicopter flying skills) **The U.S. Forest Service** (agency of the US Department of Agriculture)- administers the nation's national forests and grasslands **Idaho State University** (The university has several hangars and offers flight training and aviation-related career options for their students) **The Bureau of Land Management** (agency within the U.S. Department of the Interior) - which administers America's public lands. The Bureau of Land Management has an aviation fire support base at the Airport that is responsible for supporting resource and fire management programs through out of state **WesternAir Express** – the only company leasing building space for air cargo operations **City of Pocatello –** owns 9 hangars **SkyWest Airlines –** provides air travel services at the airport

[12] 2011 Master Plan, Chapter 1 – Current Conditions
http://www.pocatello.us/airport/documents/mp/PIH_mp_CH1_existing_conditions_v3.pdf

Pocatello Regional Airport Business Park[13]

Assets	- 600 acre, mixed-use park zoned for Warehouse/Distribution, Light Industry/Manufacturing, Professional Office/Business and Commercial Retail - The park has over 450 acres ready to develop and transportation access by air, rail and interstate highway - The property is owned by the City of Pocatello - Much of the property is located within an Urban Renewal District that will allow Tax Increment Financing for infrastructure requirements - Home to the Idaho Accelerator Center, which conducts advanced testing on accelerator-based detection of radioactive materials and other research
Additional Resources	- Proximity to research and development (ISU about 8 miles, INL about 50 miles, Idaho Accelerator Center, Center for Advanced Energy Studies) – ideal site for R&D activities - Access to high capacity power and major gas lines - Access to T1 lines from Qwest who offers popular networking services available near the site - Proximity to Interstate 86 and I-15 major north/south corridor - a Fixed Base Operator that offers fuel and hangar space and has routine service and maintenance capabilities - City Water and Sewer Available - Idaho Power and Intermountain Gas Services on Site

[13] Pocatello Regional Airport Business Park, http://www.pocatello.us/airport/documents/pra_business_park.pdf.

FMC Airport Industrial Park

As mentioned above, the key assets of the FMC site are multimodal transportation access, and access to electricity, water, and natural gas. While such assets are needed by all industrial users, they are likely most valuable to those companies operating in the skilled manufacturing industry. Further, it is also important to note that such an asset base is also fairly similar to the asset base possessed by the approximately 1,600 acres of undeveloped land near the Pocatello Airport. As such, it is argued here that a remediated FMC site in combination with the 1,600 acres of undeveloped land at the airport could potentially create a 3,000 acre industrial park.

Given the asset base of both areas, the current industrial users already occupying parts of the airport property, and the proposed industrial projects which are being discussed with the Bannock Development Corporation (BDC), this report proposes that the area should be developed as an industrial corridor for the skilled manufacturing and distribution industries and strongly suggests that local development authorities should work in a unified manner to create such a development.

An example of a major industrial park created around an airport is provided by the Texas Industrial park. More specifically, Alliance Airport at Fort Worth, Texas was developed by Ross Perot, Jr. to provide a facility that fully integrates industrial and commercial sites with telecommunications capabilities and air transportation services. This facility incorporates major airline maintenance, overhaul, air freight and operating facilities into a modern business park.

The Alliance Texas Park is a 17,000-acre master-planned, mixed-use community located in north Fort Worth. It offers a variety of commercial real estate options, including new industrial, office and retail. The park is home to 260+ companies, 30,000 employees and 7,400+ single-family homes. Its three main industries are air cargo, corporate aviation, and military. The park possesses an unparalleled multi-modal transportation program which is named Alliance Global Logistics Hub and consists of the following:

- Fort Worth Alliance Airport - 100% industrial airport
- BNSF Railway's Alliance Intermodal Facility: 600,000 annual lifts
- BNSF Railway and Union Pacific Class I rail lines
- Interstate Highway 35W
- Texas Highways 170 and 114
- FedEx Southwest Regional Sort Hub
- Alliance Air Trade Center

***Alliance Texas Industrial Park Statistics*[14]**

Statistics of the Alliance Texas Industrial Park	
Acres in the Alliance Texas Development	17,000
Economic Impact 1990 - 2009	$38.5 Billion
Economic Impact for Year 2009	$2.03 Billion
Total Public and Private Investment 1990 – 2009	$7,254,312,256
Private Investment (94.59%)	$6,865,802,366
Public Investment (5.41%) - includes roads, infrastructure and schools	$388,509,890
Square Footage Developed 1990 - July 1, 2009	31.2 million
Direct Jobs Created as of July 1, 2011	30,476
Indirect Jobs Created	68,165
Number of Companies as of July 1, 2011	260+
Number of Fortune 500, Global 500 and Forbes' Top Private Companies	50+
Number of International Companies	14
Single-Family Homes 1990 - Dec. 31, 2010	7,484
Apartments 1990 - 2010	288 units
Hotel Rooms 1990 - 2010	200
Total Number of Trees	36,527

[14] http://www.alliancetexas.com.

Uses of the Alliance Texas Industrial Park

Uses	Uses Details
Industrial Uses[15]	**Industrial Base:** - 240+ corporate residents - approximately 50 companies listed in the Fortune 500, Global 500 or Forbes' List of Top Private Companies - diversified industry clusters including telecommunications, pharmaceutical / life sciences, financial services, aerospace, aviation, automotive and logistics **Industrial products:** - Distribution centers, Manufacturing facilities, Rail-served facilities, Cross-dock facilities, Air cargo centers, Flex/Tech capabilities, Fully developed sites with infrastructure in place, Lease, purchase or build-to-suit **Industrial Development Statistics:** - 17,000-acre master-planned, mixed-use development - $36.4 billion economic impact to North Texas - 31.2 million square feet developed - 25 million square feet of industrial product developed - 13.6 million square feet of industrial product constructed by Hillwood
"Office" Uses[16]	**Corporate Services** - unmatched speed-to-market - build-to-suit; in-house construction services team - property management services - employee recruitment and out placement services - complimentary for AllianceTexas corporate residents - employee training courses from Tarrant County College - professional networking groups
Residential Uses[17]	**Monterra Village – Luxury apartment community** - 100% smoke free community - lagoon pool, fire pit, business center and more - more than 7,300 single family homes built within **Hillwood-developed communities**

[15] http://www.alliancetexas.com/Portals/0/PDF_Files/Industrial%20Summary%20-%20AllianceTexas.pdf
[16] http://www.alliancetexas.com/Portals/0/PDF_Files/Office%20Summary%20-%20AllianceTexas.pdf
[17] http://www.alliancetexas.com/Portals/0/PDF_Files/AllianceTexas_2010_Issue.pdf

	-active residential communities: Heritage, Saratoga and Creekwood Vaquero by Discovery Land Company estate homes surrounded by exclusive, private equity golf course; Ranked #1 DFW golf course by Dallas Morning News **Cost of Living Index** - Fort Worth is 8.9% below the national average (Source: ACCRA April 2010). - NE Tarrant County median home sale price is $161,800 (Source: Texas A&MReal Estate Center April 2010 **Deloitte University facility** -an over 700,000-squarefoot, that opened in 2011 and l includes 800 guest rooms, multiple conference spaces, dining venues, a business center, ballroom and a fitness center
Retail Uses[18]	**Alliance Town Center shopping and dining options** - historical downtown Roanoke - "Unique Dining Capital of Texas" - Marriott Hotel and Golf Club – four star hotel with championship golf course and conference rooms - Texas Motor Speedway – 2 NASCAR race weekends and IRL - The Speedway Club – private club with restaurant, exercise facilities and conference rooms - special Events: Fort Worth Alliance Air Show, AllianceTexas Corporate Challenge - AllianceTexas Community Newsletter - in total, 500 acres of community retail, dining, and entertainment
Fort Worth Alliance Airport (AFW)[19]	-world's first industrial airport and an international hub for air cargo -has corporate aviation facilities -corporate, military and cargo aviation
Air Cargo Services[17]	-can accommodate any air cargo need - from the Antonov, the world's largest cargo plane, to the FedEx Southwest Regional Sort Hub -full cargo handling services -air freight build / break -3PL services, forwarder and broker services -on-site US Customs and Border Protection -on-site Centralized Examination Station -direct aircraft ramp access -ramp parking for multiple wide body cargo jets

[18] http://www.alliancetexas.com/Portals/0/PDF_Files/AllianceTexas_2010_Issue.pdf

[19] http://www.allianceairport.com/ and http://www.alliancetexas.com/Portals/0/PDF_Files/AllianceTexas_2010_Issue.pdf

	-cargo handling services provided by Cargo Airport Services, USA, LLC -Alliance Air Trade Center - a99,000 SF facility handles multiple wide body aircraft; direct taxiway access

Conclusions

Why create a unified land development strategy? The ability to attract large scale industrial development with its associated high paying jobs will dramatically increase if a joint industrial park using the Pocatello Airport and the FMC site is developed and marketed to firms in the skilled manufacturing and product distribution industries. The financial impact of undertaking such a unified land development strategy on the area economy would be huge, possibly even larger than the previous economic impact of the FMC plant.

Previous Economic impact of FMC Plant: In the year 2000, the FMC plant and its two related mining operations had a payroll of over $42 million and an average salary/benefit package of $70,000 per employee. The plant also paid $1.4 million in property taxes to Power County, which was approximately 25% of the county's yearly tax base.

Multiplier Effects: A development strategy aimed at attracting high paying jobs to the community will have a large economic multiplier effect on existing area businesses. Among other impacts, such jobs would facilitate more purchases of homes, cars, retail goods, restaurant meals, and local airport boarding. Local municipalities would also benefit from increased property tax collections enabling additional funding for improvements to schools, roads, parks and many other civic needs.

Projected Economic Impact: The total economic impact to local communities of implementing a unified land development strategy for the FMC site and airport properties could easily be $100 million. Figuring that such an industrial park could easily create 1,000 jobs at average salaries of between $40,000 and $50,000 per employee, the resultant benefit would be as follows:

$40,000 average salary projection

- 1,000 jobs with average salary of $40,000 resulting in a direct payroll infusion of $40 million to local communities
- 1,200 indirect jobs with average salaries of $25,000 resulting in an indirect payroll infusion into local communities of $30 million.
- $21 million of added payroll costs for employee benefits. Such a number is derived from estimating employee benefit costs of 30% of salary

  Total impact = $91,000,000

$50,000 average salary projection

- 1,000 jobs with average salary of $50,000 resulting in a direct payroll infusion of $50 million to local communities
- 1,200 indirect jobs with average salaries of $30,000 resulting in an indirect payroll infusion into local communities of $36 million
- $25.8 million of added payroll costs for employee benefits (30% benefit cost)
  Total impact = $111,800,000

While the scope of the Texas Industrial Park is likely far beyond what can be accomplished at the Pocatello Airport, it does provide evidence that an airport can become the center of an industrial park. Further, it also suggests that an airport that is next to valuable land which holds great potential for development can serve as a key catalyst for such development. Therefore, the present report strongly encourages the Pocatello airport stakeholders to develop a master plan for creating an industrial park on the airport and FMC lands.

Benchmark comparisons of previously remediated sites

This section of the report provides an overview of the Environmental Protection Agency's (EPA) proposed interim Record of Decision (ROD) versus other documented phosphate mining remediation projects. Additionally, an analysis of the economic impact of redeveloping a variety of remediated sites is also provided. Such analysis demonstrates the positive economic impact that would result from a swift implementation of the remediation process on the FMC land.

Overview of Site Remediation Plan

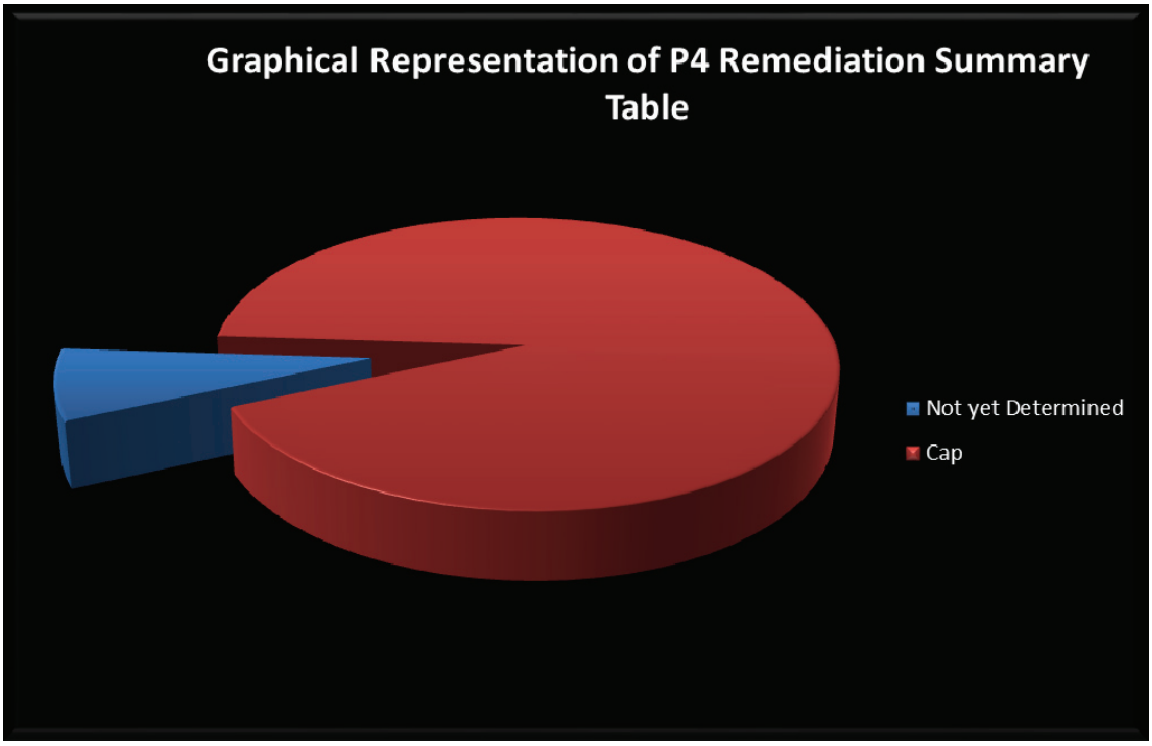
Elemental phosphorus (here on referred to as P4) is a direct result of phosphate ore shale processing. This material is considered a soil and water contaminant, is highly volatile when exposed to oxygen at room temperatures, and is essentially insoluble in water. P4, during normal phosphate processing operations, is contained beneath water in "phossy ponds" to prevent oxidation and potential spontaneous combustion. P4 does not readily break down over time and is harmful to all animal life, including humans. Other land contaminants that occur as a result of phosphate processing are arsenic, a well-known poison, and radionuclides.

As a direct result of the operations of the FMC phosphorus plant, the EPA has deemed approximately 1,400 acres of land, owned by FMC, as part of the EMF Superfund site. In an attempt to reclaim the land for future use, FMC, the EPA, and several local government authorities--including the Shoshone Bannock Tribal Council—have conducted multiple ecological, geographical and environmental site studies over a period spanning more than a decade. The actual studies and the official government reports can be found at www.EPA.gov.

The heart of the EPA's proposed cleanup plan revolves around the adoption of Soil Alternative 3 and Groundwater Alternative 2 remediation proposals; these proposed plans of action would require FMC to cap designated areas of the site within the FMC operating units, treat and monitor ground water contamination, and restore the land to an industrial useable state. Importantly, intensive research on the topic has shown that ET caps, close monitoring, and groundwater treatment are safe, effective, cost efficient, and proven. While alternatives to the EPA plan do exist, their use has been extremely limited and largely untested due to the associated risks involved. Excising P4 from contaminant laden soil carries with it the risk of spontaneous ignition. Below is a table which documents several P4 site remediations.

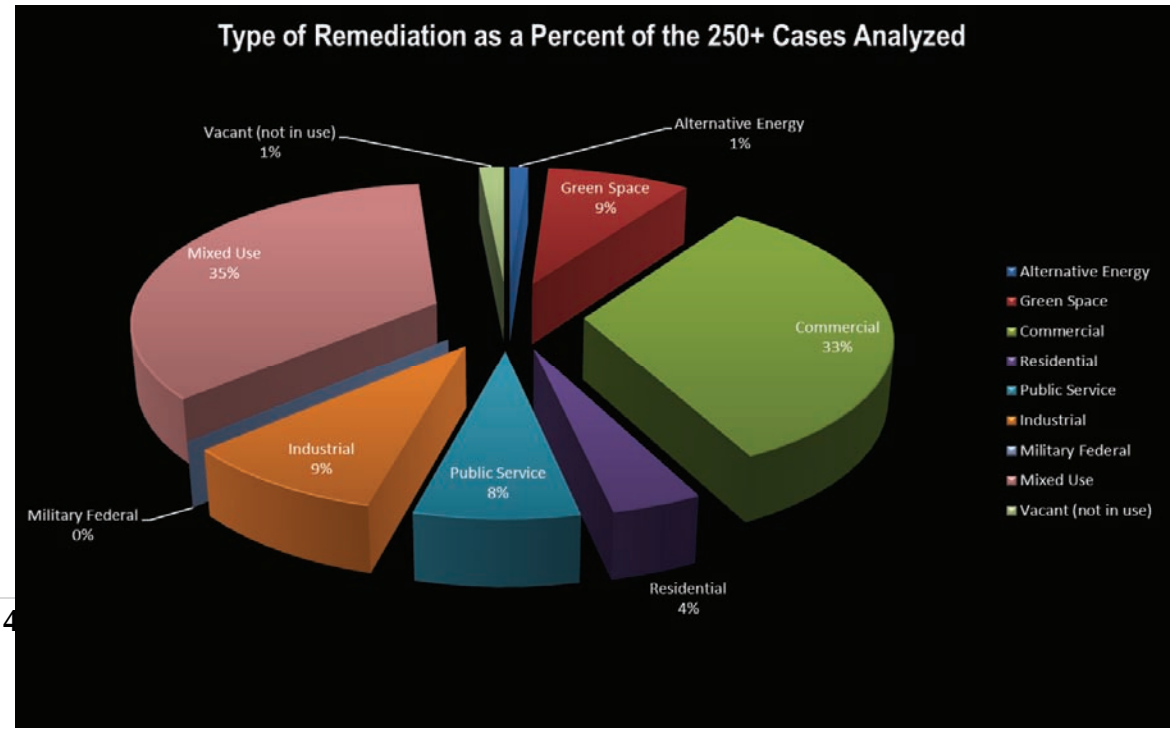
Summary of P4 Soil/Solid Waste Remedies - Commercial Sites	
Commercial P4 Product Manufacturing, Handling, and/or Disposal Sites	
Name and Location	**P4 soil/solid waste remedy and oversight agency**
Rhodia (fka Stauffer Chemical Company), former Elemental Phosphorus Production Plant, Silver Bow, MT	In the RCRA corrective action process, CA not yet determined [EPA]
Monsanto Company, Former Elemental Phosphorus Production Plant, Columbia, TN	Cap (design information not readily accessible over areas contaminated with elemental phosphorus). [State]
Monsanto Company, (aka P4 Production LLC), Elemental Phosphorus Production Plant, Soda Springs, ID	Cap (design information not readily accessible) over former ponds; operating facility subject to further remedial action at closure. [EPA]
Tennessee Valley Authority, former Elemental Phosphorus Production Plant, Muscle Shoals, Alabama	Cap (1 foot of limestone and 6 inches of concrete) over buried sludges. [State]
Stauffer Chemical Company, former Elemental Phosphorus Production Plant, Tarpon Springs, FL	Cap (design information not readily accessible) over unlined ponds after in-situ stabilization plans abandoned due to fires and uncontrolled reactions. Groundwater remedy includes cut off wall for shallow aquifer. [EPA]
Stauffer Chemical Company (Rhone Poulenc) former Elemental Phosphorus Production Plant, Mt. Pleasant, TN	Cap (desing information not readily available) and deed restriction. [State]
Exxon Mobil, ElectroPhos Division, former Phosphate Production Plant, Mulberry, FL	Cap (HDPE) over former ponds. Groundwater remedy also included low permeability soil bentonite slurry wall around the pond perimeter. [State]
Glenn Springs Holding Company (aka Hooker Chemical Co. and Occidental Chemical Co) former Elemental Phosphorus Production Plant, Columbia, TN	Cap (desing information not readily accessible) proposed as the final remedy for pond closures; formerly used alkali (i.e. lime) treatment on waste streams from P4 recovery process in active ponds. [State]
Agrifos Nichols Plant, former Phosphate Production Plant, Nichols, FL	Cap (earthen) 2 feet of soil cover over closed ponds; drummed and buried P4 solids. [State]
Albright and Wilson (aka ERCO), former Elemental Phosphorus Production Plant, Long Harbor, Newfoundland, Canada	Cap (design information not readily accessible) over "Mud Holes" after recoverable P4 removed. [Environment Canada]
Union Pacific Railroad Company - Fairfield (aka Suisun Marsh Phosphorus Railcar Derailment), Fairfield, CA	Cap (concrete) over 2 buried rail cars. [State]
Southern Industrial Machine Company (SIMCO), former phosphorus railcar cleaning facility, TN	Cap (design information not readily accessible) over former ponds. [Private part voluntary]
FMC, former Phosphate Production Plant, Newark, CA	Cap (concrete) over closed underground P4 concrete storage tank and impacted soils. [State]

A glance at the Summary of P4 Soil/Solid Waste Remedies Table and its graphical representation (below) clearly demonstrates that the EPA proposed cleanup plan for the FMC site is aligned with successful cleanups of other former phosphorus plants. Hence, while P4 reclamation activities are critically important, it is the opinion of this report that the EPA proposed cleanup plan for the FMC site is aligned with accepted practices. Further, given that the explicit purpose of this analysis is to analyze the economic impact of redeveloping remediated sites, the focus of the rest of this section will now shift toward that end.



Post reclamation land uses vary widely but are limited in Southeastern Idaho due to EMF deed restrictions that have zoned the area for industrial and commercial use only; even so, the potential for economic impact is extremely positive.

Documented cases show reclaimed sites being utilized as Manufacturing locations, Shipping Container Storage Yards, Fire and Police Headquarters, Industrial Parks, and more.



Successful remediation and reclamation of former EPA Superfund sites across the nation has spurred the redevelopment of barren, vacant lands and, as a result, provided a boost to local communities willing to invest the time, money, and effort into seeing a project through to completion. This report has analyzed over 250 remediated EPA Superfund sites, in various stages of completion, to look at the environmental remedies put in place to protect human health as well as the post land reclamation effect on local economies (See Appendix 1). The table below provides an overview of our economic analysis, including site name, location, post-remediation development, and/or redevelopment plans. In some instances, case studies provided specific job creation counts or economic impact totals [US $], in other cases, industry averages for per store employee count and average industry salary were used (See "Redeveloped Superfund Site Economic Analysis Table"). From this analysis, it is clear to see that Mixed Use and Commercial redevelopment make up the majority of community projects—Mixed Use is defined as a combination of Commercial, Industrial, Residential, Open Space, and/or Green Space. While third in frequency, Industrial redevelopment by far exceeds all others in increased annual income or economic impact.

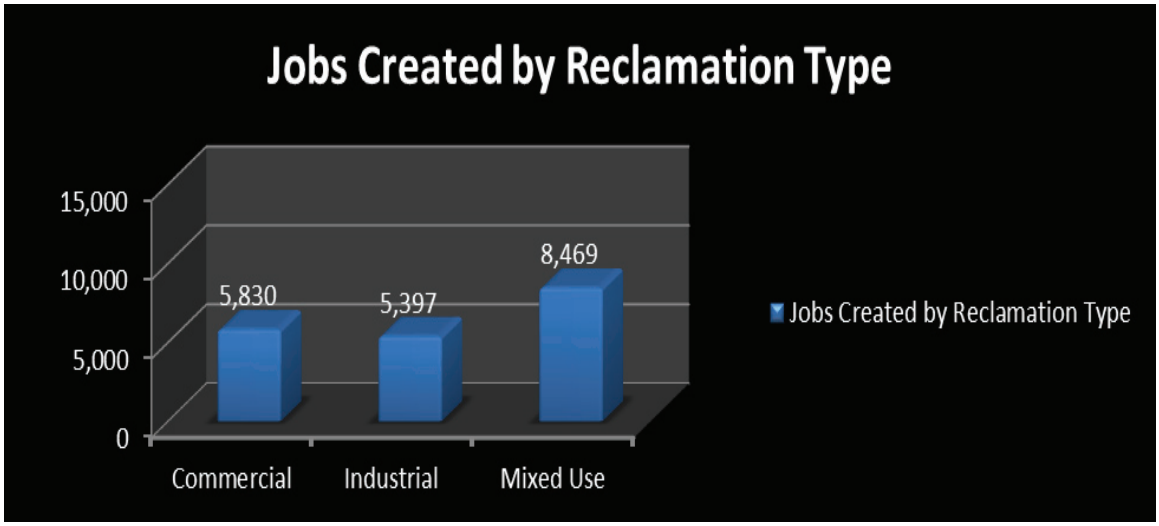
Redeveloped Superfund Sites Economic Analysis					
Name	**Reconstruction Type**	**Project Specifics**	**Jobs**	**Median Salary**	**Minimum Impact (in 000's)**
Tooele Army Depot	Mixed Use	Army Ammunition Storage, Private Industrial (Detroit Diesel)	390	$30,000	$11,700
Fulbright Landfill	Mixed Use	Wastewater Treatment Plant	6	$25,000	$150
PAB Oil & Chemical	Commercial	Golf Driving Range	10	$25,000	$250
Tex Tin	Commercial	Warehouse Distribution, Freight Forwarding, Container Storage, Truck-Stop	100		$4,000
HOD Landfill	Mixed Use	Community sports facility, Wetlands, Methane gas extraction to power the High School next door			$100
Matthiessen and Hegeler Zinc	Commercial	The Carus Chemical Company still produces the Potassium Permanganate	100		

Redeveloped Superfund Sites Economic Analysis					
Name	**Reconstruction Type**	**Project Specifics**	**Jobs**	**Median Salary**	**Minimum Impact (in 000's)**
Prestolite Battery	Commercial	Home Improvement Center, Banks, Gas Station, Convenience Store	200		$230
Southside Sanitary Landfill	Mixed Use	Landfill, Gas-to-Energy on-site system produces energy used by local surrounding businesses	106		$3,865
Folkertsma Refuse	Mixed Use	Wood Pallet Company relocated on-site, North of the Landfill and is still in operation	7		
Wurtsmith Air Force Base	Mixed Use	Private Residences, Small Cargo Airport, Medical Center, Community College, Museum, Condos	1000		
Boise Cascade/Onan Corp./Medtronics, Inc.	Mixed Use	Still owned and operated by the Onan Corp. and Medtronics	4000		
General Mills / Henkel	Mixed Use	BBD Holdings currently runs their business incubator program and has over 100 start-up business tenants	200		
Joslyn Manufacturing & Supply Co.	Commercial	Wickes Furniture, Minnesota Toro Inc., Baker Furniture, Caribou Coffee	200		
MacGillis & Gibbs Co. / Bell Lumber & Pole Co.	Mixed Use	Bell Lumber & Pole continues to operate as a wood treatment facility, New Brighton Corporate Park III replaced the MacGillis & Gibbs Co. land	550		$1,200

Redeveloped Superfund Sites Economic Analysis					
Name	**Reconstruction Type**	**Project Specifics**	**Jobs**	**Median Salary**	**Minimum Impact (in 000's)**
South Point Plant	Commercial	To date: 10 businesses, a satellite training center for Ohio University. Future plans include: more tenants, expanded facilities, an intermodal facility	200		
Murray Machinery,	Industrial	Non-Metallic Mining, Sand-and-Gravel Operation, Wood Truss Manufacturing Facility	227	$28,193	$6,400
Stauffer Chemical	Commercial	18 Hole Golf Course	20	$30,000	$600
Monsanto Corporation	Industrial	Monsanto Corp. continues to own and operate the land	500	$60,000	$30,000
Aberdeen Pesticides	Commercial	Caribou Coffee Roaster, Plumbing and Construction Retail Store	100	$35,000	$3,500
Benfield Industries	Commercial	Haywood Vocational Opportunities	90		

[20], [21], [22], [23], [24], [25], [26], [27], [28], [29], [30], [31], [32], [33], [34], [35], [36]

[20] http://www.epa.gov/superfund/sites/index.htm
[21] http://www.monsanto.com/careers/pages/jobsearch.aspx
[22] http://salarybox.com/area_salary.php?area=26820&id=3846&year=2010
[23] http://www.avjobs.com/salaries-wages-pay/airport-pay.asp
[24] http://www.adamsaai.com/TreasureIsland.html
[25] http://www.ehow.com/about_7426381_average-salary-fabricator.html
[26] http://www.nrdc.org/energy/renewables/missouri.asp
[27] http://www.asknumbers.com/mwh-to-kwh.aspx
[28] http://www.unitedpower.com/mainNav/greenPower/solPartners.aspx
[29] http://theoaklandpress.com/articles/2011/06/22/business/doc4e0289f2c20a7290375634.txt
[30] http://www.flaports.org/Assets/312011100301AM_Martin_Associates_Analysis_of_Seaport_Priority_Projects_February_2011.pdf
[31] http://www.wickedlocal.com/hingham/features/x1274022296/Hingham-Marine-Gateway-a-new-intermodal-center#axzz1dmh91d1k
[32] http://www.jobbankusa.com/jobs/washington_wa/job_employment_largest_employers.html
[33] http://psrc.org/assets/270/duwamish.pdf



For this analysis, we have also briefly compared the EPA proposed solutions for soil and groundwater contamination remediation at the former FMC site[37] to that of other similar elemental phosphorus (P4) contaminated sites and to that of other Superfund sites in general. In total, out of the 250+ cases reviewed, approximately one-half (126) sites utilize a soil, clay or impermeable stone cap, 90 call for groundwater treatment and monitoring, 55 call for gas collection/extraction/treatment, and 41 call for re-vegetation of the land. Our evaluation of the EPA's list of proposed and implemented remediation methods is not based on expert opinion, but for this analysis, we will assume that from what we have seen the proposals set forth by the EPA, and agreed upon by FMC, are within the range of normal and typical for the types of contamination present. Furthermore, all research documentation that we have found supports capping the EMF P4 soil contaminants rather than assuming the financial and personal risk associated with attempting to remove such an unpredictable and volatile compound.

Site-Specific Comparisons

For site-specific comparison, this report looked closely at the Tennessee Valley Authority's remediation and redevelopment of the former Elemental Phosphorus Production Plant on the Muscle Shoals Reservation in Alabama[38] and the Maury County

[34] http://www.trulia.com/real_estate/Duwamish-Washington/community-info/
[35] http://www.bls.gov/oes/current/oes333051.htm
[36] http://www.bls.gov/oco/ocos172.htm
[37] http://www.sbtribes-ewmp.com/documents/FMC-OU_documents/Treatment%20options/P4%20Treatment%20Technologies_FMC%20SFS%20july2010.pdf
[38] http://www.tva.gov/environment/reports/muscle_shoals/deis_volume2.pdf

Comprehensive Plan for redevelopment of the former phosphorus plants in Mt. Pleasant and Columbia Tennessee[39].

The Tennessee Valley Authority has worked closely with the state's Historical Preservation Society and local tribes to establish a plan that will redevelop approximately 1,340 acres of former phosphorus mined land. The plan calls for a phased approach to implementation, beginning with an "Incubator District" comprised of "small, innovative, possibly high-tech companies in need of creative space." Along with these small businesses, "support services such as coffee shops, dry cleaners and restaurants" could begin to invite people into the area and attempt to envelop the site's history and incorporate it into the community's future. The second phase proposed is a "Light Industrial District" for those firms requiring "more square footage." The planning committee suggests multiple building styles with a cohesive theme that would allow for various levels of up-front investment and reduce the barrier to entry for smaller startup firms. The committee also stresses the importance of focusing marketing efforts of the redevelopment on the area's unique multi-modal capabilities. A "Commercial District" follows the Light Industrial District and provides additional "supporting services, such as attorneys, medical centers and tax or accounting firms." "Open Space" or parks and wild-life habitats make up over 60% of the TVA's proposed redevelopment plan. The scattered caps prohibit extensive construction in certain areas and the aesthetic quality and ecological benefits make this a suitable use for a majority of the proposed community. While deed restrictions prohibit residential development, as proposed by TVA, the Power and Bannock County Development authorities could promote mass transportation to the area or rezoning of the Pocatello Regional Airport area to accommodate the required flow of people to ensure the redeveloped area's success.

Implementing a plan, similar to that suggested by TVA, would create hundreds of jobs within the first few years and potentially thousands as the development progressed. If the phased approach was utilized, but focused first on taking advantage of the FMC site's trans-modal (air, interstate, and rail) and high capacity electrical supply, light to heavy industrial manufacturers could be enticed to relocate or establish their firms in Southeastern Idaho and create hundreds of well-paying jobs. These jobs would be entirely new to the area, much like the recent Allstate and Hoku ventures in Bannock County, and would not decrease income for local businesses by competing with them for market share.

Similarly, Maury County, in Tennessee, is working on a Master Plan for the redevelopment and revitalization of their tri-city community. Multiple phosphorus production plants have previously operated in this area and provide prime real-estate for

[39] http://www maurycounty-tn.gov/Comp%20Plan/Final-Draft_Comprehensive%20Plan%20Document.pdf

redevelopment. These cities are growing rapidly and experiencing difficulty in maintaining public services as a result of the suburban sprawl. Much of the Master Plan works towards encouraging new-comers to consider relocating to a more centralized downtown area. The surrounding industrial sites will be used to create employment opportunities and to "incorporate many aspects of commerce such as professional office buildings, corporate office, regional office, high-tech and research facilities and small office campuses and light industrial uses such as warehousing and wholesale." "Appropriate landscaping and open space between buildings and adjacent land should be provided to help limit negative visual and noise impacts of activity within the district and surrounding areas. Internal transportation should be designed to accommodate heavy and large vehicles associated with industrial or shipping activity." The plan goes into great detail in how to develop a Master Plan for an area undergoing major redevelopment and is a good example for PCDA to reference going forward.

Fortunately for Power County and its residents, much of the infrastructure required to support a commercial or light industrial business park, as discussed in great detail in the Maury County Master Plan, are already in place and have been maintained over the years, even after FMC ceased plant operations. To sustain and grow industrial industries such as those previously mentioned, an intermodal transportation distribution center, similar to those built in Alliance, Texas and proposed for construction in Winter Haven, Florida could provide increased distribution of Idaho's historically rich agricultural produce and the new goods manufactured within the remediated FMC Superfund Site[40]. "Intermodal transportation – movement of consumer products and parcels using a combination of truck-to-rail-to-truck transfer – is the fastest growing segment of the rail industry . In addition, the efficiency of intermodal transportation, a single intermodal train can remove as many as 300 trucks off the highways, thereby having an impact on traffic congestion" and road wear and tear. "Importantly, intermodal transportation often involves the transfer of intermodal containers from ships arriving at the nation's ports for movement inland via rail." Increased distribution capabilities located in Southeast Idaho could further entice large manufacturing companies to relocate to Power and Bannock counties and increase the tax base exponentially; an increased tax base directly benefits local schools, tax payers and government/city initiatives. The economic impact of the Alliance Texas 2,500 acre intermodal distribution center created 20,000 jobs and $23 billion in economic impact over a 13 year period. The smaller 1,250 acre project proposed for Winter Haven, Florida projects 8,500 jobs and $10 billion in economic impact over a 10 year period. The annual payroll created in Winter Haven is projected to be $282.2 million annually. While the land available for an intermodal distribution center on the FMC land is closer to 1,400 acres, a smaller center of even 500 acres could create thousands of jobs and millions of dollars in annual pay for local Power and Bannock county residents.

[40] http://www mywinterhaven.com/documents/pio_20060111_ILC_Report_FINAL.pdf

Conclusions

The above discussion and analysis provides clear evidence of the following:

1. The proposed remediation plan by the EPA for the FMC site is aligned with similar such plans which have been successfully carried out at many former phosphorus plants throughout the country.

2. Once remediated, industrial redevelopment is the best option for the FMC site. Clear evidence suggests that industrial redevelopment of remediated EPA sites leads to high paying sustainable jobs returning to the communities where such remediation and redevelopment have taken place. Further, the unique bundle of assets which is already in place at the FMC site is best suited for industrial users, providing more credence to the statement that industrial redevelopment is the best course of action for the FMC site.

3. It is possible for Native American Tribes, municipalities, and Companies to work in a unified manner to remediate and redevelop former phosphorus plant site locations. Referencing the Tennessee Valley Authority's remediation and redevelopment plan for the former Elemental Phosphorus Production Plant on the Muscle Shoals Reservation in Alabama demonstrates what is possible when such entities work collectively to achieve a common good.

Appendix 1. *EPA Superfund Redevelopment Analysis*

EPA Superfund Redevelopment Analysis

Name	State	Prior Land Use	Contaminents of Concern	Remediation Type	Date	Reconstruction Type	Project Specifics
Indian Bend Wash Area	AZ	Multiple Former Industrial Activities	VOC	Air Stripping, Extraction, Discharge, Pump and Treatment, Natural Attenuation, Liquid Phase Carbon Adsorption	2011	Mixed Use	Student Dormitory, Shopping Mall, Public Park
Phoenix-Goodyear Airport	AZ		VOC, Metals	Excavation and Ground Water Treatment	2011	Industrial	Prefab Home manufacturer, Aircraft Maintenance Co.
Aerojet General Corporation	CA	Rocket Propulsion Development and Testing	VOC, Metals	Ground Water Treatment	2010	Alternative Ener	Solar Panel Farm
Alameda Naval Station	CA	Naval Training, Borax Processing Plant, Oil Refinery, Airport	VOC, Metals, Radioactives	Cap	1996	Mixed Use	Indoor Sports Facility, Museum, Soundstage, Commercial Businesses
Coalinga Asbestos	CA	Asbestos Mine	Metals, Inorganics	Cap	1992	Commercial	K-Mart Store
CTS Printex	CA	Printed Circuit Board Manufacturer	VOC	Excavation and Ground Water Treatment	1990	Industrial	CTS Printex - Printed Circuit Boards
Del Amo Facility	CA	Synthetic Ruber Manufacturer	VOC, Pesticides	Deed Restrictions, Cap,	2000	Mixed Use	Industrial Park, Open space park
Fairchild Semiconductor Corp. - Mountain View Plant	CA	Computer chip, semiconductor and silicon wafer Manufacturer	VOC, Metals	Excavation and Ground Water Treatment	1998	Industrial	Netscape Communication Campus
Fairchild Semiconductor Corp. - South San Jose Plant	CA	Semiconductor Manufacturer	VOC	Excavation and Ground Water Treatment	2000	Commercial	Shopping Center
Firestone Tire & Rubber Co. (Salinas Plant)	CA	Tire Manufacturer	VOC	Ground Water Treatment	1990	Industrial	Industrial Park
Frontier Fertilizer	CA	Pesticide and Herbicide storage, mixing and delivery	Pesticides, VOC	Cap and Water Treatment	2007	Green Space	Solar Panel Farm
George Air Force Base	CA	Air Force Base	VOC, Inorganics	Cap and Water Treatment	2011	Mixed Use	Federal Prison, International Airport, International Cargo Hub and Business Center
Hewlett-Packard	CA	Optoelectronic equipment manufacturer	VOC, Metals	Soil Vapor Extraction and Ground Water Treatment	1994	Commercial	Office Space
Intersil Inc. / Siemens Components	CA	Semiconductor Manufacturer	VOC	Excavation and Ground Water Treatment	2011	Industrial	Siemens
Jibboom Junkyard	CA	Metal Salvaging	Metals	Excavation	1990	Mixed Use	City Park, Interstate 5, Residential and Commercial Development
Lorentz Barrel & Drum Co.	CA	Barrel and Drum Recycling	VOC, Metals, Pesticides	Cap and Water Treatment	1998	Commercial	Parking Area, Park and Ride Commuter Parking
McColl	CA	Oil Refinery Waste Dump	VOC, Metals, Inorganics	Cap and Water Treatment	1998	Green Space	Golf Course
Newmark Ground Water Contamination	CA		VOC	Ground Water Treatment	2007	Mixed Use	Light industrial, Commercial, Residental
Norton Air Force Base	CA	Aircraft maintenance and logistics support for liquid fuel intercontiental ballistic missiles	VOC, Metals, Radioactives	Extraction, Excavation, Water Treatment	2007	Mixed Use	Airport, light industrial
Operating Industries, Inc., Landfill	CA	Landfill	VOC, Metal, Inorganics, Pesticides	Cap, Leachate Control	2011	Mixed Use	Electricity Generation (methane gas reuse), Geothermal Plumes, Solar Farms, Retail Marketplace
Pemaco Maywood	CA	Chemical Mixing Facility	VOC, Metals, inorganics, Pesticides	Cap, Extraction, Thermal Treatment	2008	Green Space	Public Park
Sacramento Army Depot	CA	Military Base specializing in electro-optics equipment repair, painting, metal plating and more	VOC, Metals	Cap and Water Treatment	2003	Commercial	Business Park
Sola Optical, USA	CA	Optical Lens Production	VOC	Cap and Water Treatment	2009	Commercial	Poultry Company
South Bay Asbestos Area	CA	Asbestos Wastes Landfill	Inorganics	Cap	2003	Commercial	Office Space
Synertek, Inc. (Building 1)	CA	Electronics Manufacturing	VOC	Ground Water Treatment	1992	Commercial	Office Space

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Name	State	Prior Land Use	Contaminents of Concern	Remediation Type	Date	Reconstruction Type	Project Specifics
Treasure Island Naval Station	CA	Military Shipyard Activities/Repair	VOC, Pesticides, Petroleum, Radioactives, Inorganics, Metals	Cap, Excavation, Natural Attenuation, Bioremediation	2010	Mixed Use	San Francisco Police Department Crime Lab, Residential/Retail Complex, Commercial building leases, Cultural and Educational Center, Wetlands, Research and Development Center
TRW Microwave	CA	Telecommunications Equipment Manufacturing and Microwave / Semiconductor Component Manufacturing	VOC,	Ground Water Treatment	1993	Vacant (not in use)	
Alaska Battery Enterprises	AK	Battery Recycling Facility	Metals	Excavation, Water Treatment	1995	Mixed Use	Glass and Window Company, Private Land Ownership and residence
Standard Steel & Metals Salvage Yard	AK	Metal Recycling and Salvage	Lead, PCB's	Waste solidification and Cap	1990	Commercial	Trucking Company equipment storage and parking
Bunker Hill	ID	Lead Smelting	VOC, Metals, Inorganics, PCB's	Cap and Excavation	2006	Mixed Use	Motel 8, McDonald's, Ski Resort
Allied Plating, Inc.	OR	On-Site Plating	Heavy Metals, VOC	Cap and Excavation	1994	Commercial	Heavy Equipment Storage
Joseph Forest Products	OR	Wood Treatment Facility	Metals, Inorganics	Excavation and Ground Water Treatment	1993	Green Space	Private Cow Pasture
Martin-Marietta Aluminum Co.	OR	Aluminum Smelting	Metals, Inorganics	Cap and Excavation	1994	Industrial	Aluminum Manufacturing
Reynolds Metals Company	OR	Aluminum Smelting	VOC, Metal, Inorganics, PCB's	Cap, Easement, Monitoring	2010	Mixed Use	Fed-Ex Distribution Center, Wetlands, Recreational Trail
Teledyne Wah Chang	OR	Zirconium and Rare Earth Metals/Alloy Production	Inorganics, Metals, PCB's, Radioactives, VOC	Excavation and Ground Water Treatment	2002	Industrial	Production of Zirconium and rare earth metals and alloys
Alcoa Smelter	WA	Aluminum Smelting	Inorganics	Excavation and Ground Water Treatment	1996	Industrial	Aluminum Smelting
American Crossarm and Conduit Co.	WA	Wood Treatment Facility	Metals, Base Neutral Acids	Deed Restrictions, Cap, Ground Water Treatment, Excavation	2002	Commercial	Machine Shop, Chehalis Fitlife Center
ASARCO Tacoma Shelter	WA	Copper and Lead Smelting and Refinement	Metals	Cap, Erosion Mitigation	2011	Mixed Use	Baseball Fields, Amphitheater, Commercial Business
Boonsnub/Airco	WA	Chrome Plating	VOC, Metals, Pesticides	Excavation, Water Treatment	2006	Industrial	BOC Gases (manufacture and distribute specialty compressed gases)
Commencement Bay	WA	Shipbuilding, Oil Refining, Chemical Manufacturing and Storage	VOC, Metals, Inorganics, PCB's	Sediment Dredging, Cap	2011	Mixed Use	Commercial business, Marine Habitat, Estuariane habitat, Residental
FMC Corporation (Yakima Pit)	WA	Pesticide Formulation	VOC, Pesticides, Metals	On-Site Inceneration, Excavation, Monitoring	1994	Commercial	Metal Fabrication, Parking Lot, True Value Hardware, Plant Resale Nursery, Butler RV, Stephens Metal Products
USDOE Hanford 1100 Area	WA	Plutonium Production	VOC, Pesticides, Metals, Inorganics	Cap, Excavation, Deed Restrictions	2011	Commercial	Livingston Rebuild Center (railroad repar and training center)
Harbor Island	WA	Industrial Island also used to handle Maritime Cargoes	VOC, Inorganics, Organics, Metals, Pesticides	Cap, Excavation, Ground Water Treatment	2011	Mixed Use	Public Park, Intermodal Rail yard
Lockheed West Seattle	WA	Shipyard	Unknown at this time	TBD	2011	0 - Response Re	Shipping Container Facility
Northside Landfill	WA	City Landfill	VOC	Ground Water Treatment	2009	Commercial	Active and Inactive Landfill
Northwest Transformer	WA	Transformer Reclimation, storage and manufacturing	PCB's	Cap	1995	Public Service	Public Parking
Oeser Company	WA	Wood Treatment Facility	Base Neutral Acids, Petroleum Hydrocarbon	Cap, Excavation, Ground Water Treatment	2007	Commercial	Oeser Company still owns and operates

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Pacific Sound Resources	WA	Wood Treatment Facility	Metals, Pesticides, PCB's, Base Neutral Acids	Cap, Excavation, Upland Slurry Wall	1994	Mixed Use	Intermodal Container Terminal Facility, Public Waterfront Park
Port Hadlock Detachment	WA	Landfill	VOC, Metals, Pesticides, Nitroaromatics	Cap	1997	Mixed Use	Naval Operations, Public Beaches, Tribal Fishing
Silver Mountain Mine	WA	Silver and Gold Mining	Inorganics, Metals	Cap, Physical Barriers	1997	Green Space	Grazing Land for Cows
Spokane Junkyard and Associated Properties	WA	Landfill for military surplus, heavy equipment, appliances, and electrical transformers	PCB's, Metals	Cap, Excavation	2001	Public Service	Multi-use Sports Complex
Toftdahl Drum Site	WA	Cleaned industrial waste drums for resale	PCB's, Metals	??	1988	Residential	
Wycoff-Eagle Harbor	WA	Wood Treatment Facility and Shipyard	VOC, Metals, Pesticides	Cap, River Dredging	1994	Public Service	WWII Nikkei Exclusion Memorial and Park
California Gulch	CO	Lead, Gold, Silver, Copper, Zinc and Manganese Mining - Zinc Smelting	Inorganics, Metals	Cap, Excavation	2011	Public Service	Recreational Trail, Mining History Trail, Public sports complex and soccer field
Central City-Clear Creek	CO	Gold and Silver Mining	Inorganics, Metals	Cap, Excavation, Extraction, Water Treatment, Zoning Regulations	2011	Commercial	Casino Resort, Hotels, Restaurants
Denver Radium	CO	Radium Processing and Brick Manufacturing	VOC, Metals, Pesticides, Radioactives	Cap, Excavation	1996	Commercial	The Home Depot
Lowry Landfill	CO	Landfill	VOC, Metals, PCB's, Pesticides, Radioactives, Inorganics	Gas Extraction Wells	2007	Commercial	Gas-to-Energy Plant
National Tunnel Waste Dump and Clay County Mine	CO	Gold and Silver Mining	Inorganics, Metals	Cap, Bioreactors, Aeration, Extraction, Water Treatment, Zoning Regulation	2011	Commercial	Casinos
Rocky Mountain Arsenal	CO	Chemical Weapon Manufacturing - Pesticide Production	VOC, Pesticides, Metals, Inorganics, Organics, PCB's	Cap, Containment, Excavation, Impermeable Barrier, Water Treatment	2011	Green Space	National Wildlife Reguge
Sand Creek Industrial	CO	Oil Refinery - Pesticide Manufacturing - Storage and Neutralization of Spent Acident Wastes - Landfill	VOC, Pesticides, Organics, Inorganics, Metals	Cap, Excavation, Inceneration, Gas extraction and treatment	1996	Commercial	Matteson Warehouse (railroad property), Colorado Paint Property
Smuggler Mountain	CO	Silver Mining	Metals	Excavation	1996	Commercial	The excavation unearthed more silver, allowing the mine to reopen for mining and for tourists
Summitville Mine	CO	Gold Mining	Inorganics, Metals	Drainage Ditch, Leachate Control, Containment, Dike/Berm, Surface Water Control (revegetation and slope stablilization)	2008	Mixed Use	Public land, Construction of a Hydro-Electric Power Plant
Anaconda Smelter	MT	Copper Smelting	Metals	Cap, Access Restriction, Land Use Restrictions, Revegetation, Bioremediation, Excavation, Surface Drainage Control, Natural Attenuation, Slope Stabilization, Water Treatment	2011	Commercial	Golf Course, Community-Counseling-and Correctional Services Site, NorthWestern Energy Mill Creek substation
East Helena Site	MT	Lead Smelting	Metals	Cap, Excavation, Zoning Regulations, Sedimentation, Landfarming, Incineration, Impermeable Barrier, Filtration, Bottom Liner	2009	Mixed Use	Neighborhood Park, Baseball field, Agriculture, School, Wetlands, Mixed Commercial/Residential Development
Milltown Reservoir Sediments	MT	Mining	Metals	Demolition (old dam), Excavation, Water Treatment, Natural Attenuation, Revegetation, Zoning Regulations	2004	Green Space	Public Park, City owned Cattle Ranch
Silver Bow Creek/butte Area	MT	Copper Smelting - Mining	Metals, Inorganics, Base Neutral Acids	Cap, Revegetation, Demolition, Water Treatment, Zoning Regulations	2006	0 - Response Re	Wetlands, Recreational Trails, Sports Complex, Driving Range, Geothermal Energy Development
Whitewood Creek	SD	Gold Mining	Metals	Disposal, Excavation, Institutional Controls, Revegetation, Soil Cover	1993	Public Service	Local irrigation, Livestock grazing, Recreation
Jacobs Smelter	UT	Smelting	Metals	??	2001	Residential	
Kennecott (North Zone)	UT	Copper, Lead, Zinc, Molybdenum, Arsenic, Gold and Silver-bearing metal ore processing	Metals	Excavation, cosolidation, water treatment	??	Mixed Use	EPA Energy Star Compliant Community complete with residential homes, parks, a recreational lake, pedestrian-friendly town centers, shops, churches, schools and mass transit

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Midvale Slag	UT	Lead and Copper Smelting	Metals	Cap, Physical Barriers, Water Treatment, Excavation, Disposal, Deed Restrictions	2006	Mixed Use	Residential homes and condos, commercial office space, retail space, riverfront park, Utah Transit Authority Light Rail Station
Monticello Mill Tailings	UT	Vanadium Mill (Uranium Production)	Metals	Excavation	1999	Commercial	Golf Course
Murray Smelter	UT	Lead Smelting	Metals	Cap, Consolidation, Disposal, Water Treatment, Natural Attenuation	2011	Mixed Use	Utah Transit Authority Light rail station, parking lot, connector road, Inter-Mountain Medical Center, Office Space, Shopping Areas
Ogden Rail Yard	UT	Railway Operations	??	??	2011	Mixed Use	Utah Transit Authority FrontRunner Commuter Rail, Water Skiing Park, Fishing Area, Commercial Development
Pallas Yard	UT	Rail Yard	Inorganics, Metals	Capped Berms	2002	Public Service	Utah Transit Authority Light rail station
Tooele Army Depot	UT	Army Base	Inorganics, Metals, PCB's, VOC	Excavation, Disposal, Water Treatment	1999	Mixed Use	Army Ammunition Storage, Private Industrial (Detroit Diesel)
Aidex Corporation	IA	Pesticide Manufacturing	Pesticides, Metals, Inorganics, Persistant Organic Pollutants	Excavation, Disposal, Slope Stabilizatio, Decontamination, Revegetation, Extraction, Water Treatment	1992	Commercial	Aidex Corporation Slow Moving Vehicles Company storage facility for hardware and merchandise
Electro-Coatings Inc.	IA	Metal Plating	VOC, Metals	Ground Water Treatment, Excavation, Disposal	2000	Commercial	Electro-Coating Inc. still owns and operates the land and facilities
John Deere (Ottumwa Works Landfill)	IA	Farm Implement Manufacturing	VOC, PAH, Inorganics, Metals	Ground Water Treatment and monitoring, Physical Barriers, Deed Restrictions	1993	Commercial	John Deere still owns and operates the land and facilities
Labounty	IA	Veterinary Pharmaceutical Manufacturing	Organics	Cap, Water Treatment, Ground Water Diversion Wall, Access Restriction, Revegetation	1991	Commercial	Allied Construction (equipment storage)
Peoples Natural Gas Co.	IA	Natural Gas Substitute (Coal)	VOC, Inorganics, Metals	Excavation, Incinceration, Water Treatment, Extraction	2004	Public Service	City property storage
Shaw Avenue Dump	IA	Municipal Waste Dump - Disposed of Waste created by Labounty (see above)	VOC, Pesticides, Metals, Inorganics	Cap, Revegetation, Excavation, Disposal	1994	Public Service	Charles City, Iowa continues to own and operate a municipal landfill at the site
Arkansas City Dump	KS	Gas Station - Oil Refinery - Warehouses - Construction	Inorganics	Cap, Revegetation	1993	Commercial	Restaurant, Inudstrial Park
Big River Sand Company	KS	Sand and Gravel Mining - Paint related waste dump	Metals	Excavation, Disposal	1992	Commercial	Sand Quarry, Junk Yard
Cherokee County	KS	Mining	Metals	Cap, Excavation, Consolidation, Disposal (burial of contaminated soils in abandoned mine shafts), Water Diversion, Revegetation, Deed Restriction, Slope Stabilization	2011	Green Space	Wildlife Habitat
Strother Field Industrial Park	KS	Military Facility	VOC	Cap, Water Treatment, Natural Attenuation, Access Restriction, Deed Restriction, Excavation, Extraction, Aeration	2008	Mixed Use	Industrial and Commercial Businesses, Undeveloped Land
Ellisville Site	MO	3 Facilities - Transportation and Disposal of waste oil products, industrial wastes and chemical wastes; Solid Waste disposal; Drummed liquid and solid wastes disposal	VOC, Pesticides, Metals, Organics, PCB's	Excavation, Disposal, Water Treatment, Access Restriction, Incineration, Revegetation, Thermal Treatment	1996	Mixed Use	Residential, Mid-America Arena
Fulbright Landfill	MO	Landfill	??	Excavation, Disposal, Deed Notices, Monitoring	1991	Mixed Use	Wastewater Treatment Plant
Minker/Stout/Romaine Creek	MO	Horse Arena	Dioxins/Dibenzofurans	Excavation, Disposal, Access Restriction, Incineration, Revegetation, Thermal Treatment	1996	Residential	Private Residence
Oronogo-Duenweg Mining Belt	MO	Mining, Milling and Smelting of Lead	Metals	Cap, Alternate Drinking Water, Permanent Replacement, Demolition, Excavation, Composting, Disposal, Health Advisory, Zoning Regulations	2009	Mixed Use	Scrap Metal Recycling, Highway Bypass, Restored Residential Neighborhoods

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Name	State	Prior Land Use	Contaminents of Concern	Remediation Type	Date	Reconstruction Type	Project Specifics
Shenandoah Stables	MO	Horse Arena	Dioxins/Dibenzofurans	Excavation, Disposal	1996	Mixed Use	Residential, Horse Arena
Times Beach Site	MO	Municipality (sprayed oil to control dust)	Dioxins/Dibenzofurans, Organics	Permanent Resident Relocation, Complete demolition of the entire town, Disposal	1997	Mixed Use	The town is rebuilding and repopulating the area
Valley Park TCE	MO	??	VOC, Metals	Ground Water Treatment, Air Monitoring	2008	Mixed Use	Commercial and Residential
Wheeling Disposal Service Company Landfill	MO	Landfill	VOC, Metals	Cap, Water Treatment	1994	Green Space	Private Wildlife Reserve
10th Street	NE	Dry Cleaning Services	VOC, Metals	Ground Water Treatment	2004	Commercial	Dry Cleaning (EPA Approved) and a Recycling Center
Hastings Groundwater Contamination	NE	Municipality	VOC, Pesticides, Metals, Dioxins/Dibenzofurans, Nitroaromatics, PAH	Alternate Drinking Water, Direct Mailings, Extraction, Monitoring, Natural Attenuation, In-Situ Chemical Oxidation, Bioremediation	2011	Mixed Use	Municipality
Lindsay Manufacturing Company	NE	Irrigation Sprinkler Equipment Manufacturing	VOC, Inorganics, Metals	Access Restriction, Alternate Drinking Water, Containment, Carbon Absorption	1995	Industrial	Lindsay Manufacturing Company continues own and operate the land and facilities
Sherwood Medical Co.	NE	Disposable Medical Supplies Manufacturing	VOC	Excavation, In-Situ Vapor Extraction, Water Treatment, Alternate Drinking Water, Disposal	2000	Industrial	Sherwood Medical Co. continues own and operate the land and facilities
Jacksonville Municipal Landfill	AR	Landfill	VOC, Pesticides, Metals, Base Neutral Acids, Dioxins/Dibenzofurans	Cap, Containment, Incineration, Access Restriction, Deed Restrictions, Excavation	1994	Public Service	Landfill and City Tree Farm
Mountain Pine Pressure Treating	AR	Wood Treatment Facility	Base Neutral Acids, Metals	Cap, Solidification/Stabilization, Decontamination, Disposal, Revegetation	2004	Industrial	Steel Construction Plant
Vertac, Inc.	AR	Various Chemical Manufacturers	VOC, Pesticides, Inorganics, Base Neutral Acids, Dioxins/Dibenzofurans	Cap, Carbon Absorption, Deed Notices, Filtration, Consolidation, Disposal, Excavation, Incineration	1998	Public Service	Drive-Thru Recycling Center, Fire Training Facility and Police Firing Range
Bayou Bonfouca	LA	Wood Preservatives Manufacturer	VOC, Dioxins/Dibenzofurans, pesticides, PAH's	Dredging, On-Site Incineration, Water Treatment, Revegetation, Sheet Piling	1995	Vacant (not in u	Looking at alternative energy options to power the water treatment system on-site
PAB Oil & Chemical Services, Inc.	LA	Disposal Facility for Oil-Based Drilling Mud and other Waste	VOC, Metals, PAH	Cap, Access Restriction, Drainage Ditch, Filtration, Solidification/Stabilization	1998	Commercial	Golf Driving Range
Molycorp, Inc.	NM	Mining	??	TBD	TBD	Commercial	Concentrating Photovoltaic (CPV) Solar Array Farm
Double Eagle Refinery Co.	OK	Re-Refining of Motor Oils	VOC, Pesticides, Metals, PCB's, PAH	Deed Notices, Containment, Water Treatment, Demolition, Excavation, Neurtalization, Solidification/Stabilization	2006	Commercial	Actively Marketed as a part of the city redevelopment initiative
Fourth Street Abandoned Refinery	OK	Waste Oil Reclamation Facility	VOC, Pesticides, Metals, PCB's, Inorganics	Natural Attenuation, Neutralization, Solidification/Stabilization, Physical/Chemical Treatment, Disposal	2006	Industrial	??
Crystal City Airport	TX	Military Airport - Aerial Pesticide Application Companies	Metals, Pesticides, Persistant Organic Pollutants	Cap, Consolidate, Residuals Disposal	1991	Commercial	Airport
Palmer Barge Line	TX	Landfill	VOC, Pesticides, PAH, PCB's, Metals, Persistant Organic Pollutants, Base Neutral Acids	Excavation, Decontamination, Disposal, Recycling	2007	Commercial	Barge and Marine Vessel Maintenance, Metal Salvage Yard, Marine Equipment Construction Business
RSR Corp. (Murph Metals)	TX	Lead Smelting - Battery Material and Slag Disposal	VOC, Metals	Cap, Excavation, Consolidation, Off-Site Disposal and/or Recycling	2005	Mixed Use	Residential community with local businesses
South Cavaclade Street	TX	Wood Treatment Facility	VOC, Metals, PAH	Cap, Access Restriction	2011	Commercial	3 Trucking Companies
State Marine of Port Arthur	TX	Landfill	Metals, PCB's	Disposal, Excavation, water treatment	2001	Industrial	Metal Scrapping
Tex Tin	TX	Copper and Tin Smelting	VOC, Inorganics, Metals, Radioactives	Cap, Decontamination, Disposal, Recycling	2001	Commercial	Warehouse Distribution, Freight Forwarding, Container Storage, Truck-Stop
United Creosoting Company	TX	Wood Treatment Facility	PAH, Dioxins/Dibenzofurans, Base Neutral Acids	Cap, Excavation, Natural Attenuation	1998	Mixed Use	Residential, Light Industrial

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Circle Smelting	IL	Zinc Smelter	Metals	Cap, Ground Water Treatment	1996	Commercial	Trucking Parking Lot
Dupage County Landfill/Blackwell Forest Preserve	IL	Landfill	VOC, Semi-VOC, Metals, Organics, Inorganics, Landfill Gases	Cap, Deed Restriction, Gas Collection/Treatment, Recovery Wells, Impermeable Barrier, Leachate Control, Natural Attenuation	2011	Green Space	Camping Trails, with picnic areas, a lake and sledding in the winter months
HOD Landfill	IL	Landfill	Base Neutral Acids, Metals, Dioxins/Dibenzofurans, Inorganics, PAH, Pesticides, VOC	Cap, Access Restriction-Fencing, Air Monitoring, Deed Restriction, Natural Attenuation, Water Supply Use Restriction/Monitoring	2005	Mixed Use	Community sports facility, Wetlands, Methane gas extraction to power the High School next door (saves the school $100,000 annualy)
Kerr-McGee (Reed-Keppler Park)	IL	Community Park, Landfill	Radioactives (Uranium)	Excavation, Disposal, Monitoring	2002	Public Service	Recreational Park
Matthiessen and Hegeler Zinc Company	IL	Zinc Smelting, Ammonium Sulfate Fertilizer Plant, Sulfuric Acid Production, On-Site Coal Mining, Potassium Permanganate Production	Metals, Asbestos, Cyanide,	TBD	TBD	Commercial	One portion of the land is still occupied by The Carus Chemical Company with produces the Potassium Permanganate and employees 100 People
NL Industries/ Tara Corp Lead Smelter	IL	Lead Smelting	Metals (Lead)	Cap, Access Restriction-Fencing, Disposal, Excavation, Solidification/Stabilization	2000	Mixed Use	Intermodal Terminal
Peterson Sand and Gravel	IL	Gravel Quarry (used for dumping solvents and paint)	Inorganics, Organics, Pesticides, PCB, Metals,	Excavation, Disposal,	2001	Mixed Use	Grove Forest Preserve (boating, swimming, beaches, education center, amphitheater, gift shop)
Woodstock Municipal Landfill	IL	Landfill (private then public)	VOC, Base Neutral Acids, Dioxins/Dibenzoflurans, metals, Inorganics, Nitroaromatics, PAH, Pesticides	Excavatio, Cap, Monitoring	2007	Mixed Use	Soccor Complex, Parking lot
Augustus Hook Property	IN	Disposal Area for a Porcelain Enamel Manufacturer	Lead	Excavation, Disposal, Ground Water Treatment	1997	Vacant (not in use)	
Columbus Old Municipal Landfill #1	IN	Landfill	VOC, Inorganics, Metals, PAH	Access Restriction - Fencing, Landfill cover maintenance program, Water monitoring, Deed Restrictions	1999	Public Service	Highway Expansion
Continental Steel Corporation	IN	Steele Mill	Metals, PAH, PCB's, VOC	Cap, Decontamination, Disposal, Dust Suppression, Consolidation, Excavation, Ground Water Treatment and monitoring, Slop Stabilization, Soil Cover	2011	Commercial	Expansion of Just-a-Wee Flower shop into a site warehouse, Mohr Construction - equipment storage, Further demolition and disposal will allow for more of the property to be uses for other Commercial businesses
Jacobsville Neighborhood Soil Contamination	IN	Manufacturing and then Residential	Metals	Excavation, Disposal, Listing on State Hazardous Waste Registry, Recycling	2009	Residential	Removal of contaminated soil from current residents' property, construction of a new apartment complex
Neal's Dump	IN	Dump site for industrial wastes	PCB's	Excavation, Disposal, Incineration, Monitoring, Cap, Carbon Absorption, Revegetation, Solidification/Stablization	2003	Residential	Private Properties
Poer Farm	IN	Solvent and Paint Resin Drum Storage	Metals, PAH, VOC	Excavation, Disposal, Revegetation	1991	Green Space	Agricultural land used to produce hayfeed for livestock
Prestolite Battery	IN	Battery Production	Metals, VOC	Alternate Drinking Water, Natural Attenuation, Water Supply Use Restriction	2001	Commercial	Home Improvement Center, Banks, Gas Station, Convenience Store
Southside Sanitary Landfill	IN	Landfill	Metals	Slurry Wall, Monitoring, Cover and Grading Requirements, Operating Procedures, Leachate Control	1997	Mixed Use	Landfill is still in use, A Gas-to-Energy on-site system produces energy used by local surrounding businesses, a portion of the reclaimed land was also donated to the Indianapolis School Board for outside environmental education
Wedzeb Enterprise, Inc.	IN	Electrical Equipment Resale Facility	PCB's, Dioxins/Dibenzoflurans	Excavation, Dredging, Disposal, Monitoring	1991	Commercial	Storage and Staging Purposes

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Whiteford Sales and Service Inc.	IN	Truck Washing & Degreasing Facility	Metals, PAH, VOC	??	1996	Public Service	Storm Water Retention Basin
Allied Paper, Inc. / Portage Creek / Kalamazoo River	MI	Paper Mills	Base Neutral Acids, PAH, PCB's, VOC	Cap, Consolidate, Dike/Berm, Disposal, Excavation, Monitoring, Slope Stabilization	2011	Commercial	TBD
Anderson Development Company	MI	Specialty Organic Chemical Production	Base Neutral Acids, Metals, Organics, VOC	Access Restriction - Fencing, Excavation, Monitoring, Residuals Disposal, Thermal Treatment, Dredging, Gas Collection/Treatment, Low Temp Thermal Desorption, Vitrification, Air monitoring	1995	Commercial	Anderson Development Company (ADC) still operates on the property and employees 110 people
Bendix	MI	Automotive Plant	Chlorinated Solvents	Deed Restrictions, Water monitoring, Soil Vapor Extraction System, Natural Attenuation	1999	Mixed Use	Residential, Industrial, and Commercial as well as the continuation of the Bosch automotive plant.
Butterworth Landfill	MI	Landfill	Inorganics, Metals, PAH, PCB's, Pesticides, VOC	Cap, Disposal, Gas Collection/Treatment, Revegetation, Ground Water Monitoring	2000	Public Service	Public Park with multiple recreational facilities / complexes
Folkertsma Refuse	MI	Waste Refuse, Wood Pallet Business	Metals, PAH, PCB's, VOC	Cap, Excavation, Solidification/Stabilization, Deed Notices, Gas Collection/Treatment, Water restrictions, Revegetation, Surface Drainage Control	1994	Mixed Use	Wood Pallet Company relocated on-site, North of the Landfill and is still in operation
H&K Sales	MI	Warehouse Building	Radioactives	Disposal, Decontamination	1998	Commercial	Warehouse Space
H. Brown Company	MI	Nonferrous Metal Reclimation	Base Neutral Acids, Inorganics, Metals, PAH, PCB's, Persistant Organic Pollutants, Pesticides, VOC	Air Sparaging, Cap, Decontamination, Discharge, Disposal, Filtration, Ion Exchange, Liquid Phase Carbon Adsorption, Pump and Treat, Solidification/Stabilization, Access Restriction - Fencing, Cap, Deed Restriction, Land Use Restriction, Revegetation, Cap, Impermeable Barrier, Gas Collection/Treatment	2011	Mixed Use	Commercial and Light Industrial
Hedblum Industries	MI	Automotive Parts Manufacturing	PAH, VOC	Carbon Adsorption, Discharge, Extraction, Monitoring, Pump and Treat, Air Sparaging, Air Stripping, Soil Vapor Extraction, Vapor Extraction	1985	Commercial	Aircraft Tool Company
Lower Ecorse Creek Dump	MI	Wetlands (filled for development purposes), Residential	Inorganics, Metals, PAH	Excavation, Disposal, Deed Notices, Easement, Groundwater use/well regulation, monitoring	2007	Residential	Private Residences
Rose Township	MI	Illegal Dumping Ground	Base Neutral Acids, Metals, Organics, PAH, PCB's, Pesticides, VOC	Air Stripping, Coagulation, Discharge, Disposal, Excavation, Incinceration, Liquid Phase Carbon Adsorption, Precipitation, Pump and Treat, Soil Vapor Extraction, Thermal Treatment, Access Restriction - Fencing, Guards, Aeration, Residual Disposal	2006	Alternative Ener	Agricultural Land used to produce soybeans for biodiesel production
Tar lake	MI	Industrial Waste Dump	Base Neutral Acids, Metals, PAH, VOC	Consolidate, Containment, Dewatering, Excavation, Groundwater use/well drilling regulation, Leachate Control, Monitoring	2009	Mixed Use	Biomass Alternative Energy Facility, Commercial business, Municipal Wood Waste Storage Area, Residential
Torch Lake	MI	Mine Waste Dump	Metals, Inorganics, PAH	Cap, Disposal	2011	Mixed Use	Residential, Commercial, Ecological, Recreational
Wurtsmith Air Force Base	MI	Air Force Base	Metals, PAH, VOC	Pump and Treat, Water Supply Use Restriction, Disposal, Extraction	2001	Mixed Use	Private Residences, Small Cargo Airport, Medical Center, Community College, Museum, Condos
Boise Cascade/Onan Corp./Medtronics, Inc.	MN	Wood and Paper Processing	Base Neutral Acids, Dioxins/Dibenzofurans, PAH, Pesticides	Cap, Access Restriction - Fencing, Excavation, Pump and Treat, Monitoring, Slurry Wall, Seal Well, Surface Drainage Control	1995	Mixed Use	Still owned and operated by the Onan Corp. and Medtronics
FMC Corporation	MN	Industrial Waste Dump	VOC	Discharge, Extraction, Groundwater use/well drilling regulation, monitoring, Pump and Treat	1992	Mixed Use	Commercial development, interim Aeromodeling flight club
General Mills / Henkel	MN	General Mills Research Facility, now a business incubator enterprise development program	VOC	Groundwater Treatment and Monitoring, Soil treatment TBD	1990	Mixed Use	BBD Holdings currently runs their business incubator program and has over 100 start-up business tenants
Joslyn Manufacturing & Supply Co.	MN	Wood Treatment now a business park	Baes Neutral Acids, PAH	Disposal Excavation, Landfarming, Monitoring, Oil Water Separation	1999	Commercial	Wickes Furniture, Minnesota Toro Inc., Baker Furniture, Caribou Coffee
Koch Refining Company / N-Ren Corp.	MN	Oil Refinery	Base Neutral Acids, Metals, PAH, Pesticides, Petroleum Hydrocarbon, VOC	Centralized Waste Treatment Facility, Discharge, Disposal, Extraction, Free Product Recovery, Soil Vapor Extraction and Treatment	1995	Industrial	Still in operation as an active oil refinery
Koppers Coke	MN	Foundry Coke Production	Base Neutral Acids, Inorganics, Metals, PAH, VOC	Biological Treatment, Air Sparging, Bioremediation, Discharge, Monitoring, Pump and Treat	1994	Mixed Use	High-tech Industrial Park includes manufacturers, commercial and office space, housing, Midway Stadium, Dakota Bar & Grill, US Bank

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Name	State	Prior Land Use	Contaminents of Concern	Remediation Type	Date	Reconstruction Type	Project Specifics
MacGillis & Gibbs Co. / Bell Lumber & Pole Co.	MN	Wood Treatment Facility	Base Neutral Acids, Dioxins/Dibenzoflurans, Metals, Persistant Organic Pollutants, Pesticides, VOC	Cap, Deed Restriction, Land Use Restriction, Access Restriction, Biological Treatment, Decontamination, Discharge, Extraction, Carbon Adsorpotion, Excavation, Incineration, Ion Exchange, Recycling, Residuals Disposal, Reverse Osmosis, Soil Washing, Solidification/Stabilization, Monitoring	2003	Mixed Use	Bell Lumber & Pole continues to operate as a wood treatment facility, New Brighton Corporate Park III replaced the MacGillis & Gibbs Co. land
National Lead/Taracorp/Golden Auto	MN	Lead Smelter	Metals	Cap and Monitoring	1998	Commercial	Hospital parking lot
Olmstead County Sanitary Landfill	MN	Landfill	VOC, Metal	Cap, Leachate Control System	2008	Commercial	Used by a local model aeronautics club to fly model airplanes
Perham Arsenic	MN	Pesticide Manufacturing	Metals	Alternate Drinking Water, Discharge, Filtration, Water Supply Use Restriction, Pump and Treat	1999	Commercial	Hammers Construction Company, County Fair Grounds
Pine Bend	MN	Landfill	Metals, VOC	Alternate Drinking Water, Permanent Replacement, Extend piping to existing water main, seal well, gas extraction	1998	Mixed Use	Lanfill, Gas - to- Energy Plant
Reilly Tar & Chemical Corp. (St. Louis Park Plant)	MN	Coal Tar Distillation and Wood Preserving	Base Neutral Acids, PAH	Carbon Adsorption, Extraction, Cap, Deed Notices, Disposal, Excavation, Monitoring, Pump and Treat, Zoning Regulation, Alternate Drinking Water, Hydraulic Control,	2002	Mixed Use	Condos, Townhomes, a restaurant, bowling alley, office building, recreational park, athletic fields, walking paths, pond, playground, and parking log
Union Scrap Iron and Metal Company	MN	Battery Recycling Facility	Metals	Excavation, Disposal, Decontamination	1991	Commercial	Parking lot
Waite Park Wells	MN	Railroad Car Maintenance Facility - Electric Machinery Company - Waite Park City municipal well field and water treatment plant	Metals, PAH, PCB's, VOC	Ground and soil vapor extraction, monitoring, Excavation, disposal	1999	Mixed Use	Water Treatment Plants (2), Baseball and Softball Fields, Batting Cages, Ice Hockey, Figure Skating, Picnic Areas, Concession Stands, Fishing Access, Warehouse, Restaurant, Business Park
Waste Disposal Engineering	MN	Waste Disposal	Bae Neutral Acids, VOC	Air Stripping, Cap, Carbon Adsorption, Deed Notices, Discharge, Excavation, Gas Collection/Treatment, Monitoring, Slurry Wall, Wetlands Replacement, Pump and Treat, Access Restriction - Fencing	2007	Industrial	Gas -to - Energy Plant
Whittaker Corporateion	MN	Oil and Antifreeze Storage, Industrial Coatings Manufacturing, Resin Production, Steel Distribution	Metals, VOC	Removing Drums and Drum Remnants, Excavation, Pump and Treat	1992	Mixed Use	Office Space, Commercial and Light Industrial Companies
Allied Chemical & Ironton Coke	OH	Coking Facility	Base Neutral Acids, Inorganics, Metals, PAH, PCB's, VOC	Cap, Slurry Wall, Ground Water Treatment, Excavation, Recycling, Incineration, Wetlands Replacement, Access Restriction - Fencing, Guards, Alternate Drinking Water, Bioremediation	2010	Mixed Use	County Garage for highway maintenance activities, Office space for the County Manager and Staff, Wetlands
Bowers Landfill	OH	Gravel Quarry - Lanfill	Base Neutral Acids, Metals, PAH, PCB's, Persistant Organic Pollutants, Pesticides, VOC	Cap, Deed Notices, Dewatering, Groundwater use/well drilling regulation, monitoring, Access restriction - Fencing, Excavation	1997	Green Space	Haven for birds, plants, fish and animals
South Point Plant	OH	Explosive, Industrial Chemical and Fuel Production	Inorganics, Metals, PAH, VOC	Access Restriction - Fencing, Cap, Consolidate, Containment, Discharge, Disposal, Excavation, Monitoring	2001	Commercial	To date 10 businesses, a satellite training center for Ohio University. Future plans include more tenants, expanded facilities, an intermodal facility
TRW, Inc. (Minerva Plant)	OH	Aircraft Component Manufacturing	VOC, PCB's	Access Restriction, Guards, Alternate Drinking Water, Permanent Replacement, Cap, Solidification/Stabilization, Air Stripping, Discharge, Pump and Treat	1994	Mixed Use	Metal Casting
Murray Machinery, Inc.	WI	Gray Iron Castings Foundry	??	Soil Vapor Extraction, Ground Water Treatment, Cap, Monitoring	1994	Industrial	Non-Metallic Mining, Sand-and-Gravel Operation, Wood Truss Manufacturing Facility
Northern Engraving Company	WI	??	Inorganics, Metals, VOC	Cap, Monitoring, Solidification/Stabilization	1997	Mixed Use	Manufactures metal name plates, dials, and decorative trim for the automotive industry
Omega Hills North Landfill	WI	Landfill (hazardous wastes)	VOC	Soil Cover, Gas Collection/Treatment	1985	Commercial	Methane-to-Electricity Project

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Sauk County Landfill	WI	Municipal Landfill	Metals, PAH	Cap, Deed Restrictions, Access Restriction, Gas Collection/Treatment, Monitoring	2003	Commercial	Methane-to-Electricity Project
Tomah Armory	WI	Landfill - Wastewater Treatment Plant - Telephone Museum	??	Excavation, Disposal, Monitoring	2002	Mixed Use	Municipal Wastewater Treatment Plant and a Telephone Museum
Tomah Fairgrounds	WI	Waste Disposal	Metals, VOC	Soil Cover, Revegetation, Monitoring	2001	Green Space	Grass covered open field used for parking during fairground events
Capitol City Ground Water Plume	AL	Mixed land use within the western downtown area of Montgomery	TCE, PCE (others to be determined)	TBD	TBD	Mixed Use	
Alpha Chemical Corporation	FL	Polyester Resin Manufacturing	Base Neutral Acids, VOC	Cap, Disposal, Monitoring, Access Restriction - Fencing, Dike/Berm, Surface Drainage Control, Deed Restriction	1995	Industrial	Resin Manufacturing Plant and Parking Facilities
Anaconda Aluminum Co. / Milgo Electronics Corp	FL	Electrochemical Processing, Electroplating, Cabinet Construction	Metals, PCB's, Persistant Organic Pollutants, Pesticides, VOC	Excavation, Disposal, Ground Water Treatment, Monitoring	1998	Mixed Use	Commercial Warehouse Space, Boat Manufacturing Operations, Model Airplane Park
Beulah Landfill	FL	Waste Disposal	Base Neutral Acids, Metals, PCB's, Persistant Organic Pollutants, Pesticides	Cap, Monitoring	2005	Green Space	Aeromodeling Park
Cascade Park	FL	Manufactured Gas Plant	??	Impermeable Liner, Excavation, Ground Water Treatment, Monitoring	2006	Green Space	Recreation and Open Space
Cecil Field Naval Air Station	FL	Landfills, Lagoons, Waste Piles, Burn Areas, Spill Areas	Base Neutral Acids, Inorganics, Metals, PAH, PCB's, Persistant Organic Pollutants, Pesticides, Petroleum Hydrocarbon, VOC	Disposal, Excavation, Incineration, Sampling, Thermal Treatment, Bioremediation, Extraction, Groundwater use/well drilling regulation, Zoning reqgulation, Air Sparging, Low Temperature Thermal Desorption, Natural Attenuation, Air Stripping, Residuals Disposal, Deed Notices, Revegetation, Vapor Extraction, Carbon Adsorption, Flocculation, Containment, Listing on Local Hazardous Waste Registry, Building Demolition, Easement, Solidification/Stabilization, Wetlands Replacement	2011	Mixed Use	Civilian Airport, Recreation, Agriculture, Defense Contractor Operations
Chemform Inc.	FL	Precision Machine Shop for the Aerospace Industry	Metals	Excavation, Ground Water Treatment and Monitoring	2000	Commercial	Wholesale Building Materials Operation
City Industries, Inc.	FL	Hazardous Waste Recycling and Transfer Facility	VOC	Air Stripping, Carbon Adsorption, Clarification, Deed Notices, Discharge, Easement, Equalization, Monitoring, Recovery Wells, Pump and Treat	1994	Commercial	Landscaping and Lawn Maintenance Company, Pest Control Company Offices, Parking and Storage areas
Davie Landfill	FL	Landfill	Inorganics, Metals, VOC	Disposal, Solidification/Stabilization, Electrokinetics, Encapsulation, Monitoring, Natural Attenuation	2003	Green Space	Open Space Park
Former Spellman Engineering	FL	Parts cleaning facility	???	Electrical resistance heating, In-situ chemcial oxidation, in-situ enhanced bioremediation, monitoring, natural attenuation	2008	Public Service	Sports and School property
Harris Corporation (Palm Bay Plant)	FL	Electronics Manufacturing	Inorganics, Metals, PAH, VOC	Air Stripping, Flocculation, Monitoring, Pump and Treat, Reinjection, Extraction, Seal Well	2009	Mixed Use	Intersil semiconductor manufacturing, Educational Research for the University of Central Florida
Miami Drum Services	FL	Drum Recycling - Dade County Maintenance facility and repair yard for its public rail lines	Base Neutral Acides, Metals, Organics, PAH, PCB's, Persistant Organic Pollutants, Pesticides, VOC	Air Stripping, Discharge, Pump and Treat	1993	Public Service	Dade County's newly built Maintenance and Repair Yard for public rail lines`
Normandy Park Apartments	FL	Battery Recycling Facility	Metals	Excavation, Disposal, Ground Water Treatment and Monitoring, Natural Attenuation, Pavement Maintenance (act like caps)	2001	Residential	Apartment Complex that was built in 1970 continues to operate
Northwest 58th Street Landfill	FL	Landfill	Base Neutral Acids, Metals, Pesticides, VOC	Alternate Drinking Water, Permanent Replacement, Cap, Leachate Control, Discharge, Pump and Treat	1996	Green Space	Wildlife Refuge
Parramore Suprlus	FL	Hazardous Waste Storage	Metals, PAH, PCB's, VOC	Removal of drums of waste, excavation and treatment of contaminated soil, ground water monitoring	1989	Commercial	Still operates as a storage facility
Pepper Steel & Alloys	FL	Battery, Pre-Case Concrete and Fiberglass Boat Production as well as Repair and Service of trucks and heavy equipment and Electircal Transformer Recycling	Metals, PCB's	Dispoal, Solidification/Stablization, Access Restriction- Fencing, Disposal, Incineration, Storage - Temporary	2002	Mixed Use	Trucking/Transportaion, Pre-Cast Concrete Production, Land-Sea Container Storage, Truck Staging Area

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Name	State	Prior Land Use	Contaminents of Concern	Remediation Type	Date	Reconstruction Type	Project Specifics
Piper Aircraft Corp.	FL	Plane Manufacturer	VOC	Air Stripping, Discharge, Extraction, Monitoring, Access Restriction, Groundwater use/well drilling regulations, in-situ Well Aeration, Reinjection	1998	Mixed Use	Still owned and operated by Piper Aircraft Corp.
Solitron Devices	FL	Electronics Manufacturing	??	Extraction, Reinjection	2004	Mixed Use	All Air Conditioned Self Storage facility
Solitron Microwave	FL	Film Resistor and Connector Plating and Manufacturing	Metals, VOC	Alternate Drinking Water, Permanent Replacement, Building demolition, excavation, Deed notices, Disposal, Dust Supression, Groundwater use/well drilling regulation, Monitoring, Natural Attenuation, Oxidation, Revegetation	2004	Mixed Use	Industrial Park space for warehouses, office and commercial retail land, wetland area, upland preserve for native plant habitat, 50-foot natural buffer between the site and surrounding residential area and a surface water retention basin for storm water management.
Southern Solvents	FL	Dry Cleaning Solvents Distribution Facility	Base Neutral Acids, VOC	Chemical Reduction/Oxidation, Disposal, Excavaation, Monitoring, Water Supply Use Restriction	2001	Industrial	AAA Diversified Services (Commercial Painting Business)
Stauffer Chemical	FL	Phosphorus Production	Inorganics, Metals, PAH, Radioactives	Access Restriction, Guards, Cap, Consolidate, Deed Restriction, Engineering Control, Excavation, Institutional Controls, Land Use Restriction, Monitoring, Physical Separation, Solidification/Stabilization, Water Supply Use Restriction, Impermeable Barrier	2011	Commercial	18 Hole Golf Course
Taylor Road Landfill	FL	Landfill	Base Neutral Acids, Metals, VOC	Alternate Drinking Water, Permanent Replacement, Covenant, Groundwater use/well drilling regulation, Monitoring, Natural Attenuation, Pump and Treat	1999	Mixed Use	Model Airplane Club, DOE Methane Gas to Energy Pilot Study, Solar Panel Placement
Tri-City Oil Conservation	FL	??	??	??	1988	Commercial	Auto Repair Garage
Varsol Spill	FL	Miami International Airport	Base Neutral Acides, Metals, Organics, PAH, PCB's, Persistant Organic Pollutants, Pesticides, VOC	Air Stripping, Discharge, Pump and Treat	1993	Commercial	Miami International Airport
Woodbury Chemical Co. (Princeton Plant)	FL	Fertilizer and Pesticide Manufacturing/Distribution	??	Excavate, monitoring	1995	Mixed Use	Salvage Yard, Private Residence, Vehicle Maintenance/Repair shot
Camilla Wood Treating	GA	Wood Treatment Facility	Base Neutral Acids, Dioxins/Dibenzoflurans, Metals, PAH, Pesticides, VOC	Chemical Reduction/Oxidation, Engineering Control, Institutional Controls, Monitoring, Solidification/Stabilization	2001	Mixed Use	Recreational Park, Soccer Complex, Fire and Rescue Training Area, Stormwater Management Area, and Ecological Areas
Luminous Processors	GA	Glow-In-the-Dark Watch and Clock Dial Producer	Radioactives	Containment, Excavation, Fencing,	1982	Mixed Use	McDonald's with PlayLand
Marzone, Inc.	GA	Pesticide Manufacturing	Dioxins/Dibenzoflurans, Inorganics, Metals, Persistant Organic Pollutants, Pesticides, VOC	Access Restriction - Fencing, Disposal, Extraction, Filtration, Low Temp Thermal Desorption, Monitoring, Pump and Treat, Recycling, Reinjection, Physical/Chemical Treatment, Passive Treatment Walls, Natural Attenuation, Carbon Adsorption, Impermeable Barrier	2007	Commercial	Distribution and Storage Company
Monsanto Corporation	GA	Phosphoric Acid Production	Metals	Discharge, Extraction, Monitoring	1998	Industrial	Monsanto Corp. continues to own and operate the land
Woolfolk Chemical Works, Inc.	GA	??	Base Neutral Acids, Dioxins/Dibenzoflurans, Halogenated SVOC's, Metals, PAH, PCB's, Persistant Organic Pollutants, Pesticides, VOC	Carbon Adsorption, Deed Notices, Discharge, Extraction, Filtration, Flocculation, Groundwater use/well drilling regulation, Monitoring, Air Monitoring, Cap, Consolidate, Decontamination, Demolition, Disposal, Repair, Land Use Restriction, Dust Supression, Electrokinetics, Encapsulation, Recycling, Residuals Disposal and Treatment, Solidification/Stabilization, Revegetation	2011	Mixed Use	Office Space, Welcome Center, Public Library
Flowood Site	MS	Corrugated Box and Stoneware Cooking Pots/Ceramic Tile Production	Metals	Disposal, Solidification/Stabilization, Deed Restriction	1996	Mixed Use	Corrugated Box and Stoneware Cooking Pots/Ceramic Tile Production
Aberdeen Pesticides	NC	Pesticide Formulation	Base Neutral Acids, Inorganics, Metals, PAH, Persistant Organic Pollutants, Pesitcides, VOC	Excavation, Incinceration, Residucals Disposal, Thermal Treatment, Carbon Adsorption, Disposal, Solidification/Stabilization, Air Stripping, Coagulation, discharge, Equalization, Flocculation, Hydraulic Control, Monitoring, Neutralization, Reinjection, Pump and Treat, Access Restriction - Fencing, Guards, Revegetation, Alternate Drinking Water, Natural Attenuation, Permananet Replacement,	1998	Commercial	Caribou Coffee Roaster, Plumbing and Construction Retail Store

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Name	State	Prior Land Use	Contaminents of Concern	Remediation Type	Date	Reconstruction Type	Project Specifics
Army Creek Landfill	DE	Landfill	Base neutral acids, Metals, PAH, VOC	Cap, Discharge, Extraction, Flocculation, Hydraulic Control, Monitoring, Aeration, Filtration, Discharge, Monitoring, Precipitation, Recovery Wells, Sedimentation, Residuals Disposal, Equalization,	1994	Green Space	Wildlife Area
Delaware Sand & Gravel	DE	Landfill	Base Neutral Acids, Metals, PAH, PCB's, Petroleum Hydrocarbon, VOC	Cap, Discharge, Disposal, Incineration, Pump and Treat, Bioremediation, Consolidate, Deed Restriction, Excavation, Slurry Wall, Soil Cover, Soil Vapor Extraction, Bioventing	2003	Commercial	Heavey Equipment Storage Lot
Delaware City PVC Plant	DE	Polyvinyl Chloride (PVC) Manufacturing	VOC	Air Stripping, Containment, Disposal, Recycling, Engineering Control, Cap, Discharge, Pump and Treat, Alternate Drinking Water, Permanent Replacement	2004	Industrial	PVC Manufacturing
Dover Gas Light Company	DE	Coal Processing	Metals, PAH, VOC	Discharge, Disposal, Excavation, Flocculation, Hydraulic Control, Impermeable Barrier, Institutional Controls, Monitoring, Natural Attenuation, Pump and Treat, Thermal Treatment, Cap, Incineration, Soil Vapor Extraction, Land Use Restriction, Solidification/Stabilization, Recycling,	2003	Commercial	Muesum parking lot
E.I. DuPont Newport	DE	Pigment Manufacturing Facility and on-site landfills (2)	Base Neutral Acids, Inorganics, Metals, VOC	Access Restriction - Fencing, Alternate Drinking Water, Permanent Replacement, Cap, Consolidate, Dewatering, Disposal, Excavation, Institutional Controls, Monitoring, Revegetation, Slop Stabilization, Wetlands Replacement, Land Use Restriction, Physcial/Chemical Treatment, Pump and Treat, Subsurface Vertical Barrier, Hot Water or Steam Flushing/Stripping, Drilling Restriction, Access Restriction - Guards, Deed Notices, Easement, Passive Treatment Walls, Slurry Wall, Recovery Wells, Sheet Piling, Impermeable Barrier, Reactive Wall	2002	Mixed Use	Chromium Dioxide (pigment) Manufacturing, Highway Construction, Wetlands
Halby Chemical Co.	DE	Sulfur-based Chemical Manufacturing	Inorganics, Metals, PAH, VOC	Cap, Consolidate, Deed Restriction, Disposal, Excavation, Solidification/Stabilization, Drilling Restriction, Gas Collection/Treatment, Impermeable Barrier, Revegetation, Surface Drainage Control, Wetlands Replacement	2005	Mixed Use	Office Space and Warehouses along with Wetlands
Harvey & Knott Drum, Inc	DE	Landfill	Metals, PAH, PCB's, Petroleum Hydrocarbon, VOC	Cap, Disposal, Excavation, Monitoring, Pump and Treatment, Containment, Electrokinetics, Encapsulation, Deed Restriction, Sampling, Engineering Controls	1997	Commercial	Recreational paint ball war game facility
NCR Corp. (Millsboro Plant)	DE	Cash Register and Electronic Device Manufacturing	Metals, VOC	Air Stripping, Carbon Adsorption, Coagulation, Deed Restriction, Discharge, Extraction, Filtration, Infiltration basin/trench, Monitoring, Air Sparging, Vapor Extraction, Pump and Treat,	1997	Commercial	First Omni Bank credit card processing facility
New Castle Spill	DE	Plastic Foam Material Production	PCB's, VOC, Inorganics	Groundwater use/well drilling regulation, Monitoring, Natural Attenuation, Pump and Treat, Alternative Water Supply	1996	Public Service	New Castle Public Works Department office space
Sealand Limited	DE	Creosote Manufacturing	PAH, Inorganics	Excavation, Disposal, Cap	1997	Commercial	Warehouse Facility
Tybouts Corner Landfill Superfund Site	DE	Quarry - Landfill	Metals, Organics, VOC	Discharge, Pump and Treat, Recovery Wells, Slurry Wall, Alternate Drinking Water, Cap, Containment, Disposal, Excavation, Active Gas Collection System	2000	Green Space	Nature Habitat
Tyler Refrigeration Pit	DE	Refrigerator Manufacturing Plant	Persistant Organic Pollutants, Pesticides, VOC	Monitoring, Water Supply Use Restriction	2004	Industrial	Harris Manufacturing Company - produces chemical protective clothing, personal cooling systems, and civilian and emergency response protective gear
Wildcat Landfill	DE	Landfill	Metals, PAH, PCB's	Building demolition, Excavation regulation, Cap, Containment, Disposal, , Groundwater use/well drilling regulation, Incineration, Monitoring	1992	Mixed Use	County Conservation Area, Greenway, Museum
Chemical Metals Industries	MD	Chemical Manufacturing Center and Waste Dump	??	Cap, Excavation, Disposal	1998	Public Service	Emergency Response Field Office
Kane and Lombard Street Drums	MD	Landfill	Metals, PAH, PCB's, Persistant Organic Pollutants, Pesticides, VOC	Cap, Discharge, Disposal, Excavation, Flocculation, Monitoring, Recovery Wells, Repair, Subsurface Vertical Barrier, Surface Drainage Control, Air Stripping, Containment, Slurry Wall	2010	Commercial	Golf Course, Taxi-Cab Dispatch Facility
Mid-Atlantic Wood Preservers	MD	Wood Treatment Facility	Metals	Cap, Consolidate, Deed Restriction, Excavation, Leachate Control, Solidification/Stabilization	1994	Commercial	Truck Maintenance Garage and Filling Station
Middletown Road Dump	MD	Landfill	Metals, Inorganics, VOC	Excavation, Disposal, Groundwater Treatment, Monitoring	1988	Mixed Use	Private Residence and a Firewood Supply Business

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Ordnance Products, Inc.	MD	Ordnance Product Manufacturing	Inorganics, Metals, Oxidizers, VOC	Alternate Drinking Water, Permanent Replacement, Building Demolition, Excavation, Carbon Adsorption, Carbon At Tap, Discharge, Disposal, Explosive/Unexplosive Ordinance, Filtration, Groundwater use/well drilling regulation, Ion Exchange, Monitoring, Pump and Treat, Revegetation, Zoning Regulation	2011	Commercial	Mechanics Valley Trade Center leases land to several business tenants
Southern Maryland Wood Treating	MD	Wood Treatment Facility	Acids, Base Neutral Acids, Dioxins/Dibenzoflurans, Metals, PAH, VOC	Carbon Adsorption, Decontamination, Dewatering, Discharge, Disposal, Dredging, Dust Suppression, Enhanced In-Situ Bioremediation, Peroxide Addition, Excavation, Extraction, Incineration, Monitoring, Residuals Disposal, Revegetation, Slurry Wall, Surface Drainage Control, UV Oxidation, Access Restriction, Low Temp Thermal Desorption, Pump and Treat, Water Supply Use Restriction, Liquid Phase Carbon Adsorption, Oil Water Separation, Sedimentation	2005	Vacant (not in u	TBD
Woodlawn County Landfill	MD	Quarry - Landfill	Base Neutral Acids, Persistant Organic Pollutants, Pesticides, VOC	Air Stripping, Alternate Drinking Water, Permanent Replacement, Cap, Carbon Adsorption, Deed Restriction, Discharge, Disposal, Excavation, Flocculation, Monitoring, Precipitation, Pump and Treat, Residuals Disposal, Access Restriction, Wetlands Replacement	2005	Green Space	Woodlawn Wildlife Habitat Area
A.I.W. Frank/Mid-County Mustang	PA	Styrofoam Manufacturer - Refrigerator/Freezer/Warming Cabinets Manufacturer	VOC	Air Stripping, Alternate Drinking Water, Permanent Replacement, Carbon Adsorption, Carbon At Tap, Deed Restriction, Dishcarge, Disposal, Monitoring, Pump and Treat, Revegetation, Slope Stabilization	2000	Mixed Use	Vacant lots, Auto Garage, Parking Lot, Two Rental Homes, Small Lawn Area
American Street Tannery	PA	Tanneries	PCB's, Inorganics	??	1995	Public Service	Public Park with year-round activities
Austin Avenue Radiatin Site	PA	Radium Processing	Radioactives	Deed Restriction, Disposal, Excavation, Population Relocation, Revegetation, Access Restriction - Fencing, Permanent Population Relocation	1998	Residential	Private Residence
Avco Lycoming	PA	Aircraft Engine Production - Varsol Reclimation	Metals, VOC	Air Stripping, Discharge, Pump and Treat, Air Sparging, Monitoring, Precipitation, Vapor Extraction, Flocculation, Bioremediation, Physical/Chemical Treatment, Reduction	2004	Industrial	Aircraft Engine Production and Repair
Bally Ground Water Contamination	PA	Insulated Panel Manufacturing for Refrigeration on-site	VOC	Air Stripping, Groundwater use/well drilling regulations, Liquid Phase Carbon Adsorption, Monitoring, Pump and Treat, UV Oxidation, Alternate Drinking Water - Temporary Replacement, Waterline Replacement	2011	Mixed Use	Light Industrial, Commercial, Shipping/Receiving
Berkley Products Co. Dump	PA	Landfill	Inorganics, VOC, Leachate, Metals	Access Restriction - Fencing, Cap, Consolidate, Deed Restriction, Monitoring, Water Supply Use Restriction	2007	Residential	Private Residence
Berks Landfill	PA	Landfill	VOC, Metal	Access Restriction, Cap, Deed Restriction, Flocculation, Impermeable Barrier, Leachate Control, Monitoring, Natural Attenuation, Revegetation, Water Supply Use Restriction	2008	Mixed Use	Local Business Office, Large equipment storage, open green space
Berks Sand Pit	PA	Unknown	VOC	Air Stripping, Alternate Drinking Water - Permanent Replacement, Disposal, Excavation, Groundwater use/well drilling regulation, Incineration, Monitoring, Discharge, Liquid Carbon Adsorption, Chemical Oxidation	2006	Residential	Private Residence
Boarhead Farms	PA	Horse Breeding - Heavy Equipment Repair and Storage	Base Neutral Acids, Metals, PAH, VOC	Aeration, Air Stripping, Carbon At Tap, Excavation, Extraction, Monitoring, Phytoremediation, Pump and Treat, Disposal	2003	Mixed Use	Residential and Commercial
Boyle Galvanizing	PA	Steel Galvanizing Factory	Metals	Excavation, Disposal	1998	Mixed Use	Urban Garden - includes plant nursery, farm stand, Community Supported Agriculture [CSA] program, vegetable oil recycling, solar panel farm
Brodhead Creek	PA	Coal Gasification Plant	Base Neutral Acids, Dioxins/Dibenzoflurans, Inorganics, Metals, PAH, VOC	Access Restriction - Fencing, Deed Restriction, Extraction, Free Product Recovery, Hot Water or Steam Flushing/Stripping, Incineration, Monitoring, Oil Water Separation, Reinjection, Carbon Adsorption, Thermal Treatment	2001	Commercial	Sewage Treatment Plant, Stroudsburg Gas Company
Brown's Battery Breaking	PA	Battery Recycling Facility	Metals	Access Restriction - Fencing, Deed Restriction, Permanent Population Relocation, Discharge, Disposal, Excavation, Monitoring, Pump and Treat, Solidification/Stabilization, Thermal Treatment, Ion Exchange, Physical/Chemical Treatment	2003	Commercial	Auto and Truck Service and Repair Facility
Butler Mine Tunnel	PA	Mine Drainage Collection and Discharge Point	Base Neutral Acids, Inorganics, Oil & Grease, PAH, VOC	Containment, Disposal, Monitoring	2008	Commercial	Highway Auto Repair and Service Center

EPA Superfund Redevelopment Analysis

Name	State	Prior Land Use	Contaminents of Concern	Remediation Type	Date	Reconstruction Type	Project Specifics
Butz Landfill	PA	Landfill	PAH, PCB's, Pesticides, VOC	Permanent Drinking Water Replacement, Air Stripping, Carbon Adsorption, Discharge, Liquid Phase Carbon Adsorption, Precipitation, Covenant, Easement, Groundwater use/well drilling regulation	2011	Commercial	Farming and Timber Logging
C&D Recycling	PA	Metal Reclamation Plant	Metals, PAH	Decontamination, Disposal, Excavation, Monitoring, Recycling, Residuals Disposal, Solidification/Stabilization, Physical/Chemical Treatment, Revegetation, Deed Restriction	2001	Mixed Use	Commercial Use, Nature Conservancy
Centre County Kepone	PA	Chemical Manufacturing Facility	Base Neutral Acids, Halogenated SVOC's, Persistant Organic Pollutants, Pesticides, VOC	Carbon Adsorption, Deed Notices, Discharge, Disposal, Drainage Ditch, Excavation, Extraction, Flocculation, Groundwater use/well drilling regulation, Monitored Natural Attenuation, Monitoring, Sampling, Access Restriction, Air Stripping, Fishing Restriction, Liquid Phase Carbon Adsorption, Pump and Treat, Revegetation, Soil Cover, Zoning Regulation, Cap, Covenant, Easement	1998	Commercial	Storm Drainage System, Sidewalk and Vehicle Access Lane for an adjacent Shopping Mall - Corporate Administration Building
Commodore Semiconductor Group	PA	Semiconductor Manufacturer	Base Neutral Acids, VOC	Air Stripping, Discharge, Liquid Phase Carbon Adsorption, Permanent Drinking Water Replacement, Ion Exchange, Monitoring, Pump and Treat, Osmosis, Deed Notices, Easement, Groundwater use/well drilling regulation	1994	Industrial	Marketed for Industrial Reuse
Craig Farm Drum	PA	Waste Disposal Site	Base Neutral Acids, Metals, VOC	Disposal, Excavation, Monitoring, Solidification/Stabilization, Pump and Treat, Cap, Deed Restriction, Surface Drainage Control, Water Table Adjustment	2010	Green Space	Wetlands
Crater Resources Inc./Keystone Coke Co./Alan Wood Steel Co.	PA	Quarry - Landfill	Base Neutral Acids, Dioxins/Dibenzoflurans, Inorganics, Metals, PAH, VOC	Access Restriction, Cap, Excavation, Natural Attenuation, Discharge	2006	Mixed Use	Light Industrial and Commercial Office Park
Crossley Farm	PA	Dairy Farm - Waste Disposal	Metals, PAH, PCB's, VOC	Carbon Adsorption, Filtration, Monitoring, Temporary Well Head Treatment, Air Stripping, Easement, Extraction, Groundwater use/well drilling, Discharge, Pump and Treat, Reinjection, Chemical Reduction/Oxidation, Component Separation, Disposal, Infiltration basin/trench	2005	Commercial	Farming and Agricultural Use
Croydon TCE	PA	Industrial Complexes	Persistant Organic Pollutants, Pesticides, VOC	Permanent Replacement of Drinking Water, Monitoring, Air Stripping, Discharge, Groundwater use/well drilling regulation, Liquid Phase Carbon Adsorption, Recovery Wells, Pump and Treat	TBD	Mixed Use	Residential, Commercial, and Industrial Purposes
Cryochem, Inc.	PA	Metals Fabrication Facility	VOC	Permanent Replacement of Drinking Water, Carbon At Tap, Liquid Phase Carbon Adsorption, UV Oxidation, Air Stripping, Discharge, Hydraulic Control, Monitoring, Recovery Wells, Soil Vapor Extraction, Flocculation, Pump and Treat	1998	Industrial	Metal Fabrication
Dorney Road Landfill	PA	Open-Pit Iron Mine -- Landfill	Base Neutral Acids, Metals, PAH, PCB's, Persistant Organic Pollutants, Pesticides, VOC	Cap, Disposal, Gas Collection/Treatment, Monitoring, Pump and Treat, Surface Drainage Control, Carbon Adsorption, Well Head Treatment, Access Restriction - Fencing, Deed Restriction, Revegetation, Wetlands Replacement	2000	Green Space	Wetlands
Douglassville Disposal	PA	Waste Oil Recycling Facility	Metals, PAH, PCB's, Persistant Organic Pollutants, Pesticides, VOC	Cap, Deed Notices, Disposal, Groundwater use/well drilling, Incineration, Thermal Treatment, Recycling, Excavation, Physcial/Chemical Treatment, Solidification/Stabilization	1999	Green Space	Recreational area widely used for hiking, biking and hunting
Drake Chemical	PA	Chemical Plant	Base Neutral Acids, Inorganics, Metals, PAH, VOC	Cap, Disposal, Drainage Ditch, Excavation, Leachate Control, Surface Drainage Control, Surface Water Control, Demolition, Carbon Adsorption, Clarification, Discharge, Filtration, Incineration, Monitoring, Residuals Disposal, Pump and Treat, Air Stripping	2000	Mixed Use	Commercial Storage, Two little league fields, vacant lots
Dublin TCE Site	PA	Several Manufacturing Operations	Metals, VOC	Air Stripping, Discharge, Liquid Phase Carbon Adsorption, Monitoring, Permanent Drinking Water Replacement, Chemical Reduction/Oxidation, Deed Notices, Extraction, Groundwater use/well drilling regulation, Hydraulic Control, Physcial/Chemical Treatment, Pump and Treat	2008	Commercial	Antique car storage and repair, forklift repair company, Attorney's at Law office space
Enterprise Avenue	PA	Landfill	Metals, VOC	Disposal, Revegetation, Cap, Deed Restrictions, Monitoring	1999	Commercial	5,000 ft commuter runway for the Philadelphia International Airport
Fischer & Porter Co.	PA	Flowmeter and Proces Control Equipment Production	VOC	Air Stripping, Discharge, Flocculation, Discharge, Pump and Treat	1998	Commercial	Commercial Property Leases

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Foote Mineral Co.	PA	Lithium Meta, Lithium Chemicals and Inorganic Flux Production for the Metals Industry	Inorganics, Metals, VOC	Bioremediation, Cap, Consolidate, Covenant, Deed Notices, Disposal, Oxygen Addition, Excavation, Free Product Recovery, Groundwater use/well drilling regulation, Monitoring, Oil Water Separation, Solidification/Stabilization, Zoning Regulation	2011	Residential	Residential Community
Havertown PCP	PA	Wood Treatment Facility	Base Neutral Acids, Dioxins/Dibenzoflurans, Inorganics, Metals, PAH, PCB's, Persistant Organic Pollutants, Pesticides, VOC	Disposal, Oil Water Separation, Carbon Adsorption, Discharge, Liquid Phase Carbon Adsorption, Monitoring, Pump and Treat, UV Oxidation, Recovery Wells, Subsurface Drain, Surface Drainage Control, Covenant, Easement, Excavation, Groundwater use/well drilling regulation, Zoning Regulation	1995	Mixed Use	Light Industrial Use, Restaurant, Drive-Thru Convenience Store, YMCA
Heleva Landfill	PA	Open-Pit Iron Mine -- Landfill	VOC	Active Gas Collection System, Air Emissions/Off-Gas Treatment, Air Stripping, Permanent Drinking Water Replacement, Cap, Discharge, Monitoring, Surface Water Control and Treatment, Containment, Pump and Treat, Recovery Wells	2011	Mixed Use	Landscape Equipment Storage, Forest, Farm Land
Hellertown Manufacturing Company	PA	Spark Plug Manufacturing	Inorganics, Metals, PAH, Petroleum Hydrocarbon, VOC	Air Stripping, Cap, Deed Restriction, Discharge, Filtration, Monitoring, Pump and Treat, Surface Drainage Control	2005	Commercial	Warehouse Facility
Henderson Road	PA	Waste Storage/Recycling, Vehicle Maintenance and Parking, Office Facilities	Base Neutral Acids, Metals, Organics, PAH, PCB's, Persistant Organic Pollutants, Pesticides, VOC	Air Stripping, Discharge, Excavation, Extraction, Monitoring, Cap, Consolidate, Deed Notices, Easement, Hydraulic Control, Pump and Treat, Recovery Wells	1998	Commercial	Trash Truck Repair Facility
Jacks Creek/Sitkin Smelting & Refining, Inc.	PA	Smelting and Precious Metals Reclamation Facility	Dioxins/Dibenzoflurans, Metals, PCB's	Access Restriction - Fencing, Cap, Consolidate, Decontamination, Deed Restriction, Disposal, Excavation, Fishing Restriction, Monitoring, Solidification/Stabilization, Wetlands Replacement, Disposal, Physical Separation	2004	Commercial	Metal Scrap Yard, Aluminum Recycling Facility
Keystone Sanitation Landfill	PA	Landfill	Base Neutral Acids, Inorganics, Metals, PAH, PCB's, Persistant Organic Pollutants, Pesticides, VOC	Active Gas Collection System, Air Stripping, Cap, Combustion, Consolidate, Deed Restriction, Discharge, Equalization, Excavation, Extraction, Filtration, Flocculation, Ion Exchange, Monitoring, Surface Drainage Control, Temporary Well Head Treatment, Access Restriction - Fencing, Natural Attenuation, Pump and Treat, Revegetation, Bioventing, Flame Flare, Soil Cover	2010	Mixed Use	Private Residence, Vacant Lots