

**Narrative Proposal for Site Specific Petroleum Cleanup Grant
Land Reutilization Authority of the City of St. Louis
(c/o St. Louis Development Corporation)**



**Former Norman Corporation
5908-5926 North Broadway
Saint Louis, Missouri 63147
Submitted February 2012**

Ranking Criteria for Multi-Purpose Pilot Assessment & Cleanup Grant

1. Community Need

a. Health, Welfare and Environment

i) The City of St. Louis is overburdened with abandoned properties. **The City's Land Reutilization Authority (LRA) currently holds title to more than 10,950 parcels, most of which come under agency control through the tax foreclosure process.** This "owner of last resort" system creates a tremendous challenge for the City and its related agencies. There is no way to accurately predict specific properties that will enter the City's inventory in this manner, but the current inventory of sites needing attention speaks volumes to the need.

As an older urban core community that has suffered from rapid population loss and suburban sprawl, St. Louis has an abundance of vacant land -- over 21,766 parcels, accounting for 5,518 acres (representing approximately 18.5% of the land area of the City). Our inventory of known publicly-owned Brownfields currently stands at 110 sites; however, using a conservative estimate of five percent of all vacant land and abandoned buildings, the number of Brownfields in the City could eventually grow as high as 1,200 sites, which present a significant blight on residential neighborhoods and can give even the most livable neighborhoods an air of decline and dilapidation.

The health and environmental impacts from contaminated petroleum sites can be extensive. At the Former Spotless Car Wash Site, there are multiple underground storage tanks which were used to store thousands of gallons of gasoline. These tanks are made of steel, which corrode and leak over time, polluting both soil and groundwater.¹ **In the City of St. Louis, this polluted groundwater eventually makes its way into the Mississippi River, further polluting the river that is the heart of the Midwest.** Contaminants left behind by petroleum include benzene, toluene, and naphthalene, among others. Benzene is a known carcinogen (cancer-causing substance), and the others are possible carcinogens. **St. Louis is ranked 24th among the 115 counties in Missouri for its cancer incidence rate.**² **African-Americans have higher incidence and mortality rates of cancer than all other races.**³ The population of St. Louis is 49.2% African-American, which may explain why cancer rates

¹ EPA Office of Underground Storage Tanks www.epa.gov/OUST/overview.htm

² National Cancer Institute State Cancer Profiles www.statecancerprofiles.cancer.gov/index.html

³ SEER Cancer Statistics Review, 2004-2008, National Cancer Institute.



within the City are above the national average for many types of cancer. Fortunately, the cancer rate disparity among Caucasians and African-Americans is decreasing in the State of Missouri.⁴ Adverse health effects from petroleum contaminants are further detailed below.

Petroleum Substance	Possible Health Hazards⁵
Benzene	anemia, leukemia
Toluene	memory loss, nausea
Ethyl benzene	dizziness, eyes burning
Xylenes	kidney & liver damage
Total Petroleum Hydrocarbons	nerve disorder
Naphthalene	anemia, cataracts, lung damage

Cleanup of the Former Spotless Car Wash Site will result in removal of threats to human health and the environment. This Brownfield is characterized by probable soil and groundwater impacts from leaking tanks and piping; as noted below, the human health hazards of petroleum contamination are both numerous and dangerous. In addition to the aforementioned human health effects, petroleum contaminants can be harmful to non-human organisms. Once benzene enters the groundwater, it cannot readily evaporate or degrade because it is underground. Naphthalene bio-accumulates: concentrations increase rapidly in organisms which live in naphthalene-contaminated environments. In the urban atmosphere of the City of St. Louis, toluene helps to form ozone and therefore contributes to air pollution and photochemical smog; xylenes also contribute to smog.

The City of St. Louis received grades of “F” from the American Lung Association for both high levels of ozone and particulate pollution.⁶ According to the same report, in the U.S., the City is ranked 17th Most Polluted with Year-Round Particle Pollution. The City of St. Louis has the highest number of at-risk groups for lung diseases in all of the State of Missouri

By removing contaminated soil and determining that no further groundwater pollution will occur (through groundwater monitoring), the threats to human health and environment can be reduced or eliminated. Ninety-nine percent of the funds will be used to identify and reduce threats to human health and the environment, through contracts for cleanup. Although the specifics of site reuse are unknown at this time, for the most part we endeavor to redevelop former petroleum Brownfields for non-residential uses; whatever the end use may be, we are capable and willing to shepherd this site through extensive cleanup, to ensure human health and the environment are afforded maximum protection.

⁴ Missouri Department of Health and Human Services Cancer Disparity Report www.dhss.mo.gov/CancerinMissouri/CancerDisparityReport.pdf

⁵ Agency for Toxic Substances and Disease Registry, Department of Health and Human Services www.astdr.cdc.gov

⁶ American Lung Association State of the Air Report www.stateoftheair.org/2009



The health and welfare of the African-American population in the City of St. Louis are drastically worse than that of the Caucasian population. **African-Americans in St. Louis have a mortality rate 21% higher than that of Caucasians.**⁷ The rate of emergency room visits for Caucasians is 188 visits per year per 1000 residents; for African-Americans it is 593. **The rate of emergency room visits due to asthma is over four times higher for African-Americans than for Caucasians. Twice as many African-American babies have low birth weights.** While not all of these disparities can be attributed solely to environmental issues, it is clear that African-Americans in the City of St. Louis are disproportionately impacted by environmental problems.

The health and welfare of African-American children in St. Louis are also notably poorer than that of Caucasians. Forty-five percent of African-American children participate in the WIC Program (USDA Special Supplemental Nutrition Program for Women, Infants, and Children), compared to twenty-two percent of Caucasian children. African-American children visit the ER for asthma at over nine times the rate of Caucasian children. Children in the City of St. Louis are also impacted by lead poisoning. **St. Louis City is ranked number two among all counties in Missouri for the percent of children tested who had elevated blood lead levels.**⁸ Lead poisoning is prevalent in St. Louis for multiple reasons. Lead-based paint was banned in 1978, and over 90% of the housing stock in St. Louis was built prior to the ban.⁹ St. Louis also was home to lead smelters and other industries that produced particulates which ended up in the soil.

Also, the poverty rates for children and the elderly in the City of St. Louis are much higher than for the same populations in the US, the State of Missouri, and in St. Louis County. Impoverished residents are much less likely to have health insurance, and are therefore more impacted by environmental problems if they do not have the ability to seek health care for treatment. Statistics demonstrating the welfare of sensitive populations in St. Louis are noted below:

Selected Demographics¹⁰	U.S.	Missouri	St. Louis County	City of St. Louis¹¹
Poverty Rate for Children Under 18	21.6%	20.9%	14.4%	41.8%
Poverty Rate for People Over 65	9.0%	9.1%	7.3%	18.9%
Percent of Households Receiving Food Stamp Benefits	11.9%	13.3%	9.6%	26.3%
Percent of Households with Single Mothers	7.2%	7.1%	7.7%	10.5%
Percent of Population With No Health	15.5%	13.2%	9.6%	19.0%

⁷ All data in this paragraph from Missouri Department of Health and Human Services, 2009 data, health.mo.gov

⁸ Department of Health & Human Services, Centers for Disease Control & Prevention., www.cdc.gov/nceh/lead/surv/stats.htm

⁹ US Census Bureau, American Community Survey 2010 1-year Estimates www.census.gov/acs/www/index.html

¹⁰ Ibid

¹¹ In Missouri, the City of St. Louis is legally an independent county, and demographic statistics are calculated separately from those of St. Louis County.



Insurance Coverage ¹²				
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Welfare of residents is also impacted by crime, and in 2009 the murder rate in the City was ranked 11 out of 108 large U.S. Cities.¹³ Certainly the struggling economy has had some causal effect on crime in the City; fortunately, year-to-date, the 2011 murder rate is trending to be lower than the 2010 rate.¹⁴

b. Financial Need

i) The economic impact of abandoned gas stations is staggering, as the cost of even the simplest of cleanups can easily outstrip the economic value of a given property. Many times, parcel sizes are too small to attract contemporary redevelopment, necessitating land assembly. EPA cleanup funds will go a long way in restoring the economic value of the subject property, be protective of human health within an at-risk population, and clean the environment to a level safe for commercial or industrial use.

The project will benefit the residents of the City of St. Louis, legally viewed as a separate county in Missouri; the City has experienced one of the sharpest population loss and property abandonment phenomena in the United States. **The City as a whole has lost 63% of its population since 1950, whereas adjacent counties have seen their populations increase by up to 27% from 2000 to 2010.**^{15,16} This urban flight has created vast areas of abandoned and underutilized land within the City limits. The City's Land Reutilization Authority, the owner of last resort in the tax foreclosure process, currently holds title to nearly 11,000 abandoned and often contaminated parcels

In the City, this year has brought the continuation of a stagnant, struggling economy. The City of St. Louis has been impacted by **significant economic disruptions leading to large-scale layoffs and company closures; since 2008, the notifications received by the State of Missouri have identified 4,814 layoffs due to the recession.**^{17[1]} This figure highlights just a small number of actual business layoffs and closures, as only some types of businesses are required to submit this information to the State.

It is important to note that many impoverished and unemployed St. Louisans live in areas where the market has been suffering not just this year, but for many years – even for decades. Most Brownfields accumulate in areas where the cost of development cannot be justified from the anticipated return; most of these areas are economically depressed. It is in these

¹² Specifically, percent of civilian non-institutionalized population
¹³ U.S. Census Bureau, Crime Rates by Type—Selected Large Cities: 2009, http://www.census.gov/compendia/statab/cats/law_enforcement_courts_prisons/crimes_and_crime_rates.html
¹⁴ St. Louis Metropolitan Police Department, Crime Statistics http://www.slmpd.org/crime_stats.html
¹⁵ Illinois State Museum, Physical Growth of the City of St. Louis, <http://www.museum.state.il.us/RiverWeb/landings/Ambot/Archives/History69/index.html#20th>
¹⁶ US Census Bureau, American Community Survey 2010 1-Year estimates www.census.gov/acs/www/index.html
^{17[1]} Worker Readjustment and Retraining Notification Act reports, 2008-2011 <http://rapidresponse.ded.mo.gov/warn.html>



areas where abandoned Brownfields permeate the neighborhoods and environmental contamination affects the most vulnerable residents. In 2010 the City had an estimated 1,305 homeless people, and it is possible that they are taking residence in abandoned, environmentally unsafe buildings.¹⁸ As noted in the table below, **the City of St. Louis has high unemployment and poverty rates –higher than the U.S., Missouri, and St. Louis County averages.**

Selected Demographics ¹⁹	City of St. Louis	St. Louis County	Missouri	National
Population	319,294	998,954	5,998,927	308,745,538
Unemployment Rate ²⁰	11.7%	8.8%	8.8%	9.1%
Poverty Rate	27.8%	10.6%	15.3%	15.3%
Percent Non-White	56.1%	29.7%	17.2%	27.6%
Per Capita Income	\$21,069	\$32,249	\$23,920	\$26,059
Percent High School Graduate or Higher	81.5%	91.5%	86.9%	85.6%
Percent Renter-Occupied Housing	54.6%	27.9%	31.2%	34.9%
Percent Vacant Housing Units	19.3%	7.6%	12.4%	11.4%

The City’s current infrastructure was built for a population more than twice its current tally; St. Louis suffered a mass exodus of residents beginning in the 1950s. The City is attempting to maintain roads, sewers, schools, and other public utilities that were built to support a population of over 800,000; with a current population of just over 350,000, the tax base has decreased dramatically. Now the City is struggling to provide residents’ basic municipal needs and, unfortunately, cleaning up all of the environmentally abandoned sites is impossible given the current economic state. As consumer spending and housing prices decline, and job losses increase, the tax base for the City continues to shrink.

Adding to the difficulty of redeveloping Brownfields is the slumping economy. The current credit crisis is hitting hard in the St. Louis area; development is lagging due to the lack of available credit owing to tightened credit standards. **In 2011, total building permits were down 20.8% compared to 2010.**²¹ Also, compared with the same period in 2010, year-to-date housing prices were down by 3.4%. The recession’s impact on Missouri’s personal income has been stronger and the recovery weaker compared with national numbers. Current estimates indicate that economic activity in Missouri is at 89.8% of its pre-recession level, compared to 95.5% in the U.S.

¹⁸ City of St. Louis Department of Human Services/Homeless Services Division, <http://stlouis-mo.gov/human-services/homeless-services/>

¹⁹ Data in table from US Census Bureau, 2010. www.census.gov/acs/www/index.html, unless otherwise noted.

²⁰ US Bureau of Labor & Statistics, August 2011 data.

²¹ All data in this paragraph is from the Current Economic Conditions in the Eighth Federal Reserve District, St. Louis Zone, 9-30-11, Prepared by the Center for Regional Economics—8th District, Federal Reserve Bank of St. Louis. www.research.stlouisfed.org/regecon/district.html



The mortgage crisis has also affected the welfare of residents; **in October 2011, the foreclosure rate in St. Louis City ranked second out of Missouri's 115 counties**, with one in every 653 housing units receiving a foreclosure filing during the month, which is 1.7 times the state average.²²

The EPA Assessment Grants we were awarded on October 1, 2010 are for environmental site assessments on sites throughout the city where both hazardous substances and petroleum are a concern. If additional testing is necessary on the Former Spotless Car Wash Site, we will be able to use funds from the Petroleum Assessment Grant. However, none of our grant funds are eligible to use for cleanup on this site, so this Brownfield Cleanup Grant is necessary to ensure remediation of the site.

2. Project Description & Feasibility of Success

a. Project Description

i) The Former Spotless Car Wash Site is an abandoned gasoline filling station comprised of just 0.17 acres, but at least seven and as many as nine underground tanks may be present. With EPA Cleanup Grant funds we plan to remove and properly dispose underground storage tanks and grossly contaminated soil. This is necessary in order to prepare the site for productive commercial reuse. The LRA has taken the following steps to-date: completed ASTM equivalent Phase I and II Environmental Site Assessments, property acquisition from absentee owner.

ii) Once grant funds are awarded, we will have one of our pre-qualified consultants draft a specification suitable for bidding, and we will solicit competitive bids to remove (and properly dispose) tanks and impacted soil. Upon completion of remedial activities, it is likely that any remaining contaminants will be managed through a risk-based corrective action approach. All of the above-described activities will be conducted with extensive consultation with the Missouri Department of Natural Resources. At present, the plan is to clean the property to a level that is safe for its intended use, which is commercial development, and will likely include a combination of engineering controls (such as soil capping and vapor barriers), non-residential deed restrictions, and environmental covenants.

b. Budget for EPA Funding and Leveraging Other Resources

i) **Eighty-three percent of the proposed grant activities are budgeted directly for contractual services related to cleanup.** Budget Categories and Project Tasks are described in detail in the narrative following the chart below:

²² RealtyTrac Missouri Real Estate Trends, <http://www.realtytrac.com/trendcenter/mo-trend.html>



BUDGET CATEGORIES	Task 1: Cleanup Management	Task 2: Cleanup Contracting	Task 3: Community Outreach	TOTAL
Personnel	5,150	30,800	50	36,000
Fringe Benefits				
Travel	500	500		1,000
Equipment				
Supplies	250		250	500
Contractual	30,000	148,500		178,500
Other (specify)				
Total	35,900	179,800	300	216,000
Cost Share	5,150	30,800	50	36,000

Task 1: Cleanup Management: We anticipate entering into a contractual relationship with one of our pre-qualified environmental consultants, who will be chosen based upon a Qualifications-Based Selection (QBS) process. The selected consultant will directly manage cleanup through the following tasks: write the cleanup specification for MDNR review and approval, assist LRA with producing request for proposals and procuring cleanup bids, provide contract oversight during the term of the cleanup, collect and submit for laboratory analysis cleanup confirmation samples, prepare and submit a site closure report to the MDNR. Contractual costs are based upon our direct experience managing cleanup at other similar sites. The Supplies category will be used to defray copying costs related to producing bidding and contract documents. The Travel category will be used to defray travel costs associated with meetings with MDNR.

Task 2: Cleanup Contracting: We anticipate awarding a cleanup contract to the low responsive bidder for the following activities: removal and proper disposal of up to nine underground tanks and associated piping, excavation, transportation and disposal of up to 500 cubic yards of contaminated soil, backfill excavation with clean granular material. Cost assumptions for estimation purposes are as follows: excavation, \$10/ton; transportation, \$16/ton; disposal, \$15/ton; backfill, \$10/ton. Also factored into the budget is a 20 percent contingency for unanticipated conditions, which is a standard consideration for such work. The Travel category will be used to defray travel costs associated with meetings with MDNR.

Task 3: Community Outreach: The Community Outreach task will enable staff to effectively communicate the challenges and results of our work under the grant to the affected neighborhoods. We will actively keep the community informed through meeting with the involved community groups and through development and distribution of informational brochures. The \$250 budget represents anticipated hard costs for producing informational handouts and conducting neighborhood-level outreach meetings.



ii) The anticipated final outcome of the project is the complete remediation of the Former Spotless Car Wash Site. Intermediate outcomes for this Cleanup Grant are as follows: 1) removal of up to nine underground storage tanks; 2) removal of grossly impacted soil; 3) risk assessment activities necessary to obtain No Further Action letter from MDNR. In order to measure progress, a schedule of activities will be produced as part of the work plan, and staff will compare the schedule with current events at least quarterly, when progress reports are generated. Progress will be tracked based upon status of executed contracts with the cleanup and oversight firms. Timely updates to the ACRES database are another way of tracking and measuring progress. Additionally, and as we have done in the past, we will frequently communicate with our Region 7 Project Officer, to ensure that outputs are delivered on time and that outcomes are tracked going forward. Finally, measures of success will be tracked and distributed to the community through the use of informational brochures and community meetings, thereby involving stakeholders in the decision making process.

iii) **Leveraging:** SLDC/LRA currently employs one full-time Certified Hazardous Materials Manager (CHMM) and an Assistant Major Projects manager who together are responsible for environmental contracting and all EPA grants; salary and fringes come from a variety of federal, state, and local sources. Once properties are sold, our development agreements typically prescribe roles and responsibilities with respect to remaining cleanup; SLDC/LRA typically requires that environmental cleanup occurs, resulting in a “No Further Action” letter from the state. When possible, the burden of this expense is placed upon the developer, who often applies for and receives Brownfield Remediation Tax Credits from the Missouri Department of Economic Development. Other resources leveraged to accomplish cleanup goals include: the St. Louis Brownfields Cleanup Fund (capitalized by a 2003 EPA Brownfields Revolving Loan Fund grant), in-kind services provided by EPA and MDNR emergency response personnel when uncontrolled hazardous wastes are discovered, Brownfields Targeted Assessments performed under contract to the MDNR and/or EPA, cleanup of abandoned gas station sites by MDNR using USTfields and ARRA grant funds provided by EPA (nine sites in 2010-2011), and various other cleanup funding sources such as EDA Economic Adjustment Grants (most recently, \$950,000 for demolition and asbestos abatement at former St. Louis Army Ammunition Plant), HUD Community Development Block Grants, and SLDC Corporate Funds. The specifics of each site are unique, and staff works diligently to identify and fill any funding gaps that emerge through the process.

Another source of support is the Missouri Petroleum Storage Tank Insurance Fund (PSTIF), which is managed by a third-party administrator in conjunction with cleanup standards administered by MDNR; PSTIF funds can be used to clean up contamination left behind once underground storage tanks are removed and after the applicant has satisfied a \$10,000 deductible. The Former Spotless Car Wash site is not eligible for assistance from this program. In any event, staff stands ready to assemble whatever resources are available to ensure a project’s success.



c. Programmatic Capability and Past Performance

i) **Programmatic Capability:** SLDC has a proven track record of successful federal grants management. SLDC's Engineer Project Manager, Chad Howell, has 15 years experience managing EPA assessment, cleanup, and revolving loan fund grants totaling \$5.5 million and has worked as an environmental professional for 20 years. He has been a registered Environmental Property Assessor with the National Registry of Environmental Professionals since 1998 and achieved certification as a Certified Hazardous Materials Manager (CHMM) in 2010. Mr. Howell has personally performed more than 300 Phase I and II Environmental Property Assessments.

SLDC has in-place a "short list" process for securing the services of environmental engineering firms based on the federal Qualifications Based Selection (QBS) process and currently has in-place standing contracts for environmental services with seven firms, who currently adequately address our need for environmental contracting. This process was repeated and streamlined in summer 2008 and is scheduled for another revision in December 2011. SLDC/LRA also employs a full-time assistant project manager who assists with EPA grants through fiscal tracking and fulfilling EPA reporting requirements. She has participated in ACRES training and provides updates to the system quarterly.

ii) **Adverse Audits:** The LRA has not been subject to any adverse audit findings or other grant administration problems whatsoever. SLDC conducts the equivalent of a Circular A-133 Audit on an annual basis, using an outside accounting firm. No adverse audit findings have resulted and no adverse audit findings have been issued by any local, state, or federal inspector general or similar organization.

iii) **Past Performance:** Since 2008, LRA has received five cleanup grants and two have been successfully completed. In 2008, LRA received cleanup grants for 121 Dock Street, 2848 N. Kingshighway, and Delmar & Whittier and another two in 2009 for Porter Oil and the Former ATCOM Site. In every case, compliance with grant requirements has been absolute: work plans have been executed as scheduled, quarterly progress reports submitted on time, and ACRES updates completed quarterly. A brief summary of each grant is included below.

121 Dock Street: This \$100,200 Hazardous Substance cleanup grant involves an abandoned ½ acre junkyard. Grant resources were successfully utilized to fence the site, remove and properly dispose of unregulated junk and debris, and to complete landfill profiling of impacted soil proposed for disposal. Unfortunately, although the site had been previously adequately characterized, we detected levels of polychlorinated biphenyls in soil at levels greater than those subject to the Toxic Substances Control Act (TSCA). We have since had to suspend cleanup activities while we discuss the pending cleanup with Region 7's RCRA Compliance Assistance and Permitting Branch. Because of this wrinkle, LRA is adding matching funds to make up for the resulting cost increase, and we will likely close the grant with a match of approximately 40 percent. Otherwise, all key grant measures are in order,



and the grant expiration has been extended until March 31, 2012. We are also discussing a sale of the land with a neighboring recycling business which may result in them accepting responsibility for remaining cleanup. If this ends up being the case, we will close the grant before remaining funds (\$67,802.24) are expended.

2848 N. Kingshighway: The petroleum cleanup grant for 2848 N. Kingshighway involved the removal of underground tanks and impacted soil from an abandoned Clark Oil gas station. Once removal work commenced, what was thought to be three underground tanks turned into eight. The \$97,800 cleanup project quickly ballooned to \$142,700, but LRA was able to program CDBG funds to cover the difference (leveraged match of 31.5%). The grant was closed out in July of 2010 (one year ahead of schedule) and the site, together with adjoining lots also owned by LRA, has been sold to a developer who has begun development of a \$2 million grocery, commercial, and fuel center.

Delmar and Whittier: This \$135,360 petroleum cleanup grant was intended to address a former gas station situated in the midst of a residential area. Previous assessments indicated the presence of significant soil impact and the goal was to remove impacted soil and achieve a cleanup consistent with residential standards. During excavation activities, five previously unknown underground tanks and an oil/water separator were discovered and properly removed and disposed. This caused cleanup costs to balloon to \$173,984, but LRA was able to program CDBG funds to cover the difference (leveraged match of 22.3%). The grant was closed out on time with \$113 in unexpended funds.

Porter Oil: This bulk petroleum storage and hazardous waste blending facility reverted to LRA ownership over a period of years. We used a \$200,000 petroleum cleanup grant to remove risks posed by regulated above and below ground storage tanks, as well as an abandoned warehouse whose basement was partially filled with an oil/water mix. The cleanup project is substantially complete, with only risk assessment reporting (about \$8,800.00) remaining. At present, leveraged match funds equal 28.6 percent.

Former ATCOM Site: This Aviation and Troop Command underground firing range portion of the former St. Louis Ordnance Plant was sold by the federal government to investors who eventually abandoned the property, which in turn reverted to LRA ownership. We received a \$200,000 hazardous substance cleanup grant to help deal with the tremendous volume of friable asbestos that is throughout the facility. The initial consultant we hired to develop a bid specification was terminated due to non-performance and we have recently taken delivery of a complete package from a new consultant. Bids for the cleanup should be received by the end of the year, and the specification has been designed to allow the project to move forward in stages, as current assembled grant and match funds are only sufficient to complete 20-25 percent of the cleanup. Although \$183,300 remains unexpended, our goal remains to have grant activities completed by the end of September 2012, the grant's original expiration date.



3. Community Engagement and Partnerships

a. Plan for involving the affected community: As an agent for the LRA, SLDC has undertaken a multi-faceted strategy to notify the public of this grant opportunity. We convened a public meeting on February 4, 2012 to allow for review and comment before submitting this application. The meeting was held in the SLDC boardroom, which is commonly known to the community at large as a place for public meetings; not only do the City's various economic development authorities hold monthly board meetings in the venue, but it is also typically used for public meetings related to city planning, community development, and historical preservation functions. A notice of the meeting was published in the St. Louis American; we also posted the meeting notice on the City's Public Meetings Calendar and on SLDC's website. Additionally, e-mails were sent to specific community organizations involved in the project, as well as other stakeholders. The notice included a clear description of the meeting's purpose, along with driving directions and parking suggestions. All of these meeting notifications occurred at least two weeks prior to the submittal date for this application. Additionally, we began notifying people about the meeting up to a month beforehand. Interested parties had the opportunity to provide comments at the meeting and via email or phone. Copies of the draft applications were posted on our website and at SLDC's public information repository.

In addition to the process above, we discussed the proposed grant with community leaders in the neighborhood, many of whom provided the attached letters of support. We will regularly update our contacts within these partner organizations to provide updates.

Community involvement in cleanup and reuse planning also comes from partnerships formed both at the state and neighborhood level. Cleanup planning is largely a function of the Missouri Department of Natural Resources (MDNR); the level of environmental remediation required to make a site safe for its intended reuse is prescribed by the Missouri Brownfields/Voluntary Cleanup Program (for hazardous substances) and the Storage Tank Division (for petroleum) through implementation of the Missouri Risk Based Corrective Action standard. This cutting-edge cleanup program was designed and is continually improved through extensive consultation with the Missouri Department of Health and Senior Services. Every step of design and implementation was and is conducted with opportunity for community input. Since SLDC's use of grant funds is normally confined to properties that are publicly owned, SLDC staff ensures that the affected properties are enrolled in the appropriate MDNR cleanup oversight program.

Staff already has a system in place for reaching out to the community when making cleanup decisions, which was developed through our revolving loan fund program. An administrative manual will be prepared for the subject property, and will contain relevant information such as all environmental assessment information, agency resolutions, MDNR/BVCP correspondence, a community relations plan, and an Analysis of Brownfields Cleanup Alternatives (ABCA). Essentially, once a draft ABCA is prepared, staff will advertise and convene a community meeting to solicit input before the ABCA is finalized.



Prior to sale of public property, other opportunities exist to involve stakeholders at every level. For example, Brownfields land owned by the City's Land Reutilization Authority is only sold when specific developments are proposed that are already in compliance with the City's 2005 Comprehensive Plan, ensuring that new development is consistent with plans developed after extensive consultation with neighborhood stakeholders. Additionally, all publicly-owned Brownfields transactions are recommended, deliberated, and approved in a public setting, at the appropriate agency monthly board meeting.

The neighborhood in which the cleanup is proposed is not home to large populations of non-English speaking residents; therefore we did not advertise in any foreign language newspapers. However, if this changes in the future, we will make every effort to communicate with non-English speaking residents.

b. Efforts/plans to develop partnerships with environmental, health, and other governmental agencies: We do not routinely work with the local Health Department because they focus on air quality and defer other environmental cleanup issues to the state. Public health issues related to Brownfields assessment and cleanup are addressed by enrolling sites (where appropriate) in the MDNR's Brownfields/Voluntary Cleanup Program (BVCP), and/or complying with rules administered by MDNR's Tanks Section, and thus conforming with the state's Risk-Based Corrective Action approach to remediation. As with many states, this program aims to establish minimum guidelines for cleaning sites to the level appropriate for their reuse, using a variety of engineering and institutional controls. All of MDNR's cleanup programs were developed with heavy involvement of the Missouri Department of Health and Senior Services (DHSS), to ensure that cleanup decisions are protective of human health. Not only was the DHSS an important stakeholder during program development, but they continue to play important roles in program administration: DHSS review is required of any Tier III risk analysis submitted for MDNR concurrence; any deviation from standard approaches requires DHSS concurrence; an updated health assessment is prepared by DHSS for any site listed in Missouri's Registry of Confirmed Abandoned or Uncontrolled Hazardous Waste Disposal Sites.

SLDC frequently enrolls sites in the MDNR's BVCP, and is intimately familiar with its requirements and regulatory personnel. Environmental information is shared freely between SLDC, its consultants, and state regulators; science-based cleanup decisions are reached mutually. Staff will continue to work with partners at the Missouri Department of Natural Resources to ensure that petroleum sites are addressed according to current Tank's Section policy, in compliance with the Missouri Risk-Based Corrective Action program and are protective of human health and the environment. This will ensure that cleanup is effective and contaminated soil and materials are properly managed and disposed.

Mr. Howell also routinely participates in the Regional Chamber & Growth Association's Environmental Council and its Brownfields Subcommittee and sits on the Brownfields Job Training Grant Advisory Committee at St. Louis Community College. While we know of no specific job opportunities related to the cleanup discussed in this proposal, we routinely discuss connections between our assessment and cleanup contractors and the other members of the



advisory committee. In 2010, 34 of the 40 program graduates found employment. For 2011 (as of July 8, 2011) 20 of 38 graduates had found employment.

c. Description and role of key community organizations involved in project: By partnering with local organizations we ensure that City development goals are inclusive of the community’s goals, so that the needs of both groups are met. The Benton Park Neighborhood Association and the Benton Park Community Housing Corporation will be integral in helping SLDC communicate cleanup alternatives to the community once we receive the grant. The City of St. Louis Community Development Administration is prepared to program CDBG funds to meet any grant local match shortfall, should the cleanup be extensive. Additionally, these groups will be partners in any development discussions that occur once cleanup is complete. Letters and Emails of Support are attached.

4. Project Benefits

a. Welfare and/or Public Health: Many environmental and social benefits are anticipated from the redevelopment of the Former Spotless Car Wash Site. As discussed in Section 1.a.i., the negative effects from environmental contamination are many. Through cleanup we can ensure the direct elimination of hazards to human health and the environment. The first step will be to protect the population from contaminants by installing a six-foot chain link fence to prevent trespassing, illegal dumping, and the likelihood of injury from such activities. The cleanup will entail removal of specific contaminants found at the site, as detailed in the table below, which were detected at concentrations above what is considered safe for non-residential use. Remediation of these contaminants will have a direct and positive impact on the safety of the employees of surrounding businesses.

Contaminants found at Former Porter Oil Site	Possible Human Health Effects²³
Benzene	anemia, leukemia
Ethyl benzene	dizziness, eyes burning
Naphthalene	anemia, cataracts, lung damage
Toluene	memory loss, nausea
Xylenes	kidney & liver damage
Total Petroleum Hydrocarbons	nerve disorder

SLDC’s success in using a variety of tools to ensure redeveloped uses are environmentally and socially sensitive is a matter of record, and our redeveloped abandoned petroleum sites are more environmentally-friendly today than in their past. At 5200 Delmar Boulevard, an abandoned

²³ Agency for Toxic Substances and Disease Registry, Department of Health and Human Services. www.astdr.cdc.gov



1930s service station was remediated and renovated and is now an 8,000-square-foot public-access glass art education center; the adjacent lot underwent remediation and is being turned into a sculpture garden for the center. Down the street at 5162 Delmar Boulevard, a former gas station has been cleaned up and the former garage may be reused for office space. At 4001 McRee Avenue, four tanks were removed and new housing has been built. At 4189 Washington Avenue, five new townhouses have been constructed on a former petroleum site. At 3204 St. Louis Avenue, a former auto repair shop was purchased by Habitat for Humanity to construct new affordable single-family homes.

b. Economic Benefits and/or Greenspace:

i) Cleanup grant funds will promote economic benefits in lower income neighborhoods through increased tax base and job growth. Cleanup will help restore neighborhood pride by eliminating blight. Because LRA focuses its redevelopment efforts on abandoned and underutilized properties, and because we sell such lands for the purpose of expanding the tax base and creating quality jobs, this grant will have a direct impact on promoting a healthier economic environment. By cleaning the subject property, LRA can plan for positive changes, thereby eradicating blight and improving both property values and neighborhood pride. The LRA recognizes the economic reality that given their history, urban sites are often more prone to environmental contamination and are therefore at a distinct economic disadvantage in the competition with suburban greenfields. Cleanup funds help level the playing field by making the subject property safe for redevelopment.

ii) **Not Applicable, as the site will not be used for greenspace or other not-for-profit activities.**

c. Environmental Benefits from Infrastructure Reuse/Sustainable Reuse: In the St. Louis region, suburban sprawl is an ongoing problem as properties are left underutilized within the City, and green space outside of the City is turned into hardscape. **The City as a whole has lost 63 percent of its population since 1950, whereas adjacent counties have seen their populations increase by up to 27 percent from 2000 to 2010.** Soaring highway and infrastructure costs, increased racial segregation, loss of farmland, and reduction in air quality due to long commutes are just a few of the consequences of unchecked sprawl. There are no regulations in place to control the area's historic sprawl, which is evident when traversing the counties adjacent to the City. Part of the sprawl problem is the number of highways in the St. Louis area -- the area's extensive highway system has enabled sprawl to encroach further into outlying counties.

We hope that cleanup accomplished through this grant will lead to redevelopment of the Spotless Car Wash Site. When we demonstrate the viability of site reuse, we reduce resource consumption through Brownfields prevention, infrastructure reuse, and a local government commitment to achieving green building standards. When former Brownfields are sold for redevelopment, the St. Louis City Land Reutilization Authority (which is the owner of last resort through the tax foreclosure process) prevents future Brownfields by ensuring that the reuse is consistent with the City's comprehensive plan, and the developers are bona fide and financially able to complete the



project as planned; this minimizes the likelihood that property will revert back to public ownership. In most cases, we preserve the ability to “claw back” incentives and even property ownership should the developer fail to achieve key goals. Cleanup activities will help us create a climate in which development can once again occur in our urban core and help to reduce sprawl and encourage increased urban density. **For every acre redeveloped in the urban core, we are preventing at least that much space from being developed in sprawl communities, and it helps prevent pollution and reduce resource consumption by encouraging the redevelopment of property where people already live and where the necessary roads, sewers, water lines, and public transportation already exist.** Using infrastructure that is already in place is a more environmentally conscious alternative than constantly expanding infrastructure, at taxpayer expense, into the hinterland. Additionally, according to the EPA, up to one-third of environmental assessments reveal that no cleanup is required; this enables property owners to secure financing and move forward with development.

St. Louis has an established commitment to promoting green building standards. In March of 2007, St. Louis hosted the National Association of Homebuilder’s National Green Building Conference, with William McDonough as a keynote speaker. Later in 2007, City Ordinance 67414 was adopted, directing the Board of Public Service to adopt the Leadership in Energy and Environmental Design (LEED) Green Building rating system for all newly constructed and renovated city-owned facilities. Going forward, we will actively coordinate with the St. Louis Chapter of the U.S. Green Building Council to promote green building concepts in new developments. Additionally, City Ordinance 67803 was adopted in 2008, adopting an energy efficiency and greenhouse gas reduction policy for municipal building projects; bid packages for new buildings, building additions, or major remodels will require energy consumption estimates and proposed energy efficiency measures.

There are many EPA initiatives that support sustainable reuse of brownfields. We support the Green Remediation Goals as defined by the EPA and will work to ensure we accomplish as many as possible. Some of these goals will be accomplished directly with the cleanup, including the following: 1) Achieve remedial action goals; 2) Support use and reuse of remediated parcels; 3) Reduce total pollutant and waste burdens on the environment; 4) Minimize impacts to water quality and water cycles.