
USEPA Brownfields Cleanup Grant - Narrative Proposal
Trillium Central Site
City of Saint Paul; FY 2012

I. THRESHOLD CRITERIA

1. Applicant Eligibility

a. Eligible Entity

The City of Saint Paul is a general purpose unit of Local Government, and is thereby eligible to apply for these funds.

b. Site Ownership

The City of Saint Paul owns the Trillium Central Property. The City is the sole owner of the property, having purchased the property from Frattalone Excavating in December 2001. The City holds the property through fee simple title.

2. Letter from State Environmental Authority

A letter from the Minnesota Pollution Control Agency (MPCA) is included as Attachment 1. This letter states that the MPCA has been informed of the City's application for a FY2012 U.S. EPA Cleanup Grant for the Trillium Central Site and supports the application. The letter also includes the State's Petroleum Brownfield Eligibility Determination for the Site.

3. Site Eligibility and Property Ownership Information

Note: The eligibility information was submitted to the MPCA on October 13, 2011. The MPCA issued their positive Eligibility Determination in a letter dated October XX, 2011 included in Attachment 1.

a. Basic Site Information: *Note, a Site location map and Nature Sanctuary Master Plan are provided in Attachment 2.*

(a) *Site name:* Trillium Central (b) *Site address:* 179 East Maryland Avenue, St. Paul, MN 55117. PIDs: 302922120077; 302922120005, 302922120005, 302922120040; 302922120044. (c) *Current owner of the Site:* The City of Saint Paul. (d) N/A.

b. Status and History of Contamination at the Site:

(a) *Contaminant type:* Petroleum. (b) *Site operational history/current uses:* The Site was developed as a portion of a rail yard in the late 1800s. The rail yard included extensive track, several storage structures and storage areas. This use continued into the 1970s. Apparently, Burlington Northern Railroad owned the Site until the mid 1990s. From the mid 1990s until 2001, an excavation contractor used the Site for storage of fill materials. The Site is currently vacant; there are no structures on the Site. Fill soils and debris piles are present. (c) *Site environmental concerns:* The Phase II Environmental Site Assessments referenced in (e), below, document that the Site soils are contaminated with petroleum compounds. Arsenic was also detected in two locations. Sampling indicates that petroleum contamination is present intermittently across the Site. Given the heterogeneity of the fill and the amount of soil disturbance that has occurred over time, it is fully expected that the petroleum contamination is present beyond where it has been detected. The petroleum contamination is present above action levels in locations that will be excavated in the course of the extensive earthwork that will be conducted to

create the water features and storm water management structures.

(d) How the Site became contaminated: The Site likely became contaminated due to petroleum storage, handling and transfer operations during its tenure as a rail yard. The Site investigation identified three hot spots that will be excavated, stockpiled, sampled and managed in accordance with the response action plan guidelines. It appears that petroleum contamination is present intermittently across the Site at levels ranging from below screening levels to exceeding petroleum action limits. It is almost certain that additional contamination will be identified during the Site redevelopment, due to the Site's long history as a rail yard and the heterogeneity of the fill. For this reason, the Response Action Plan includes a construction contingency plan component. The redevelopment plan for the park requires that large volumes of soil will be excavated, moved, and consolidated during the creation of the trails, renovated creek bed and associated flood plain, surface water features and storm water management features. The presence of petroleum in soils limits how and whether the soil can be reused on-site. Soils will need to be screened constantly during site work for the presence of contamination and management options will be determined depending upon the results.

c. Site is NOT Ineligible for Funding

To the City's knowledge, the Site is not listed or proposed for listing on the National Priority List (NPL), nor is it subject to unilateral administrative orders, court orders, administrative orders on consent, or judicial consent decrees issued to or entered into by parties under federal Superfund (CERCLA). The Site is not subject to the jurisdiction, custody, or control of the United States government.

d. Sites Requiring a Property-Specific Determination

The Site does not fall into any of the categories in Appendix 1, Section 1.5 of the Grant Guidelines, and therefore, does not require a property-specific determination.

e. Environmental Assessment Required for Cleanup Proposals:

The Site is enrolled in the Minnesota Pollution Control Agency's Voluntary Investigation and Cleanup (VIC) and Petroleum Brownfield Programs. The Phase I and Phase II Reports (listed below) were conducted for the Saint Paul Port Authority on behalf of the City of Saint Paul, and were funded by the Port Authority's EPA Pilot Brownfield Assessment Grant. The Phase II Environmental Site Assessment included soil borings and test pits performed to obtain soil samples for visual inspection, on-site monitoring and laboratory chemical analysis. The Response Action Plan was approved by the MPCA on February 4, 2004. The 1990 Phase II Assessment was completed for Glacier Park Company. The following reports have been completed for the Site:

Phase II Environmental Assessment, Glacier Park Company, St. Paul, Minnesota.
Warzyn Engineering. 1990.

Phase I Environmental Site Assessment, Trillium Site. Prepared for the Saint Paul Port Authority. Braun Intertec Corporation. March 13, 2003.

Phase II Environmental Site Assessment, Trillium Site. Prepared for the Saint Paul Port Authority, Minnesota. Braun Intertec Corporation. January 13, 2004.

Response Action Plan and Construction Contingency Plan. Northern Portion of Trillium Site. Braun Intertec Corporation. January 13, 2004.

f. through h. These items are not necessary for Petroleum Cleanup Grant Applications.

i. Petroleum Sites:

- i) The current owner is the City of Saint Paul; the immediate past owner is the Frattalone Excavating.
- ii) The City purchased the Site in December of 2001 through negotiated purchase.
- iii) Neither the applicant nor the immediate past owner are responsible parties for petroleum contamination at the Site. 1) Neither dispensed or disposed of petroleum or petroleum product or exacerbated existing petroleum contamination at the Site; and 2) both took reasonable steps with regard to the contamination at the Site.
- iv) The cleanup will be conducted by a Person Not Potentially Liable. The applicant did NOT dispense or dispose of petroleum or petroleum product. They did not exacerbate the existing petroleum contamination at the Site. The applicant has been preparing for cleanup by assessing the Site and preparing response action plans.
- v) The Site is relatively low risk compared to other petroleum contaminated sites in Minnesota. Furthermore, the Site is not receiving or using Leaking Underground Storage Tank (LUST) trust fund monies.
- vi) To our knowledge, no responsible party (including the applicant) has been identified for the Site, either through a) judgment rendered in a court of law or an administrative order requiring assessment or cleanup; b) an enforcement action by federal or state authorities against any party that would require any person to assess, investigate or cleanup up the site; or c) through a citizen suit, contribution action, or other third party claim brought against the applicant or immediate past owner that would, if successful, require the assessment or cleanup of the Site.
- vii) The site is not subject to any order under section 9003(h) of the Solid Waste Disposal Act.
- viii) Since neither the current (applicant) nor immediate past owner of the Site is a responsible party, they have no financial obligations to satisfy under federal or state law.

4. Cleanup Authority and Oversight Structure

a. Cleanup Oversight:

The City has enrolled the Site in both the MPCA Voluntary Investigation and Cleanup and Petroleum Brownfields Programs. The cleanup will be conducted under the oversight of these MPCA voluntary cleanup programs.

b. Plans for Access of Neighboring Properties:

The entire soil cleanup area can be accessed from land owned by the City and/or from public rights of way and there is thus no need to access any privately owned neighboring property to complete the cleanup.

5. Cost Share

a. Cost Share:

The estimated cleanup cost for the Site is \$240,000. The EPA Cleanup Grant is intended to provide \$200,000 toward this total. The remaining amount, which includes the cost share requirement of \$40,000, will be comprised of City Capital Improvement Budget Funds.

b. Hardship Waiver

The City is NOT seeking a hardship waiver.

6. Community Notification

The City provided the affected community with a notice of its intent to apply for an EPA cleanup grant and an opportunity to submit comments. A public notice was published in the Saint Paul Pioneer Press on October 21, 2011, and in the City's Early Notification System on October 19, 2011. A public meeting was held at the North Dale Recreation Center on Tuesday October 25, 2011. A copy of a draft of this proposal was made available to the public at the District 6 Planning Council offices from Friday October 21 through Tuesday November 8. The following items, documenting the public notice, the public meeting, and the resultant public comment are attached in Attachment 3:

- A copy of the public notice which appeared in the Saint Paul Pioneer Press (October 21, 2011) and in the City's Early Notification System (October 19, 2011).
- The Agenda, sign-in sheet, and meeting notes from the public meeting, which was held on October 25, 2011 in conjunction with routine "District 6 Planning Council Land Use Task Force" Meeting at the North Dale Recreation Center.
- A summary of the comments received from the public at the public meeting and during the review period.
- The City's response to the public comments.

II. RANKING CRITERIA FOR CLEANUP GRANTS

1. Community Need (15)

a) Health, Welfare, and the Environment (8)

The Trillium Central Site represents 8.7 acres of the City's proposed 45-acre Trillium Nature Sanctuary, located at the nexus of the North End (District 6) neighborhood and the Payne-Phalen (District 5) neighborhood on Saint Paul's northeast side. The Trillium Nature Sanctuary will restore a former railroad yard into pre-settlement ecological communities and will involve the daylighting of a portion of historic Trout Brook through the site. The site will include nature trails, wetland, forest, and natural grass areas. The Trout Brook Regional Trail will run through Trillium on an abandoned rail corridor along the western edge. (Trillium Site-Trout Brook Greenway Natural Resource Management Plan, City of Saint Paul, 2004).

While the Proposed Trillium Nature Sanctuary will provide ready access to recreational and natural amenities for the immediate neighborhood, it is also important to area-wide plans for the City and the County. The Trillium Sanctuary is an integral part of the City's Proposed Trout Brook Regional Trail Master Plan. The Regional Trail will provide important linkages within the City's and the County's Regional Park Systems (City of Saint Paul, 2009).

The City of Saint Paul is a fully built City. Any development within the City requires re-development of formerly used property. For many years, the City's Comprehensive Plan (2000, 2004) estimated that there were approximately 1000 acres of brownfield sites in Saint Paul. However, it is clear that this number greatly underestimates the problem. The current Comprehensive Plan (February 2010) places an even greater importance of the redevelopment of brownfield properties to the health of the City, acknowledging that approximately 1,000 acres have already been assessed, cleaned up and redeveloped by the City and the Saint Paul Port Authority. Notably, the Comprehensive Plan calls for a newly created Brownfields Redevelopment Group to conduct an inventory of brownfield

sites to further characterize the extent and distribution of brownfields in order to help formulate a strategic area-wide plan for most effective use of brownfield sites. The Comprehensive Plan also cites the cleanup and redevelopment of brownfield sites as an important component of its Land Use Plan and recognizes that regional, state and federal assistance is necessary to accomplish this important task. (Saint Paul Comprehensive Plan, 2010)

Within Saint Paul, brownfield sites range in size from less than an acre to dozens of acres. These are strongly concentrated along transportation corridors, including the Great Northern (1 mile southwest of the Site), Rice Street (3/4 mile west of the Site), and Phalen Corridors (3/4 mile southeast of the Site), where large, industrial job centers were formerly located. These job centers employed thousands of neighborhood residents and unified their communities. Job losses due to the closing of 3M, Whirlpool, Maxson Steel, Stroh Brewery and others altered the economic and cultural landscape. Jobs left the core city, and residents with disposable incomes followed. As a result, commercial corridors slipped from thriving prosperity to blighted decline, which has in turn depressed property values in adjacent neighborhoods.

The MPCA's "What's In My Neighborhood" Database of contaminated and potentially contaminated sites lists 10 leak sites and 20 Voluntary Investigation and Cleanup Program sites within one mile of the Trillium Site. The City has sought cleanup grants for two Sites located approximately 1 mile southeast of the Trillium Site. Sites of note include the Adams Parcel, located adjacent to the Site; this is a former plating facility which was partially remediated and is now a parking lot. The Mississippi and Cayuga Facility, located 0.28 miles southeast of the Site, is identified as an orphan site which was formerly a recycling and salvage facility. Approximately 0.3 mile south of the Site is a former manufactured coal gas site; no further information is available regarding this site.

The effects of brownfields on the health, welfare and environment of the community are many. In general, brownfields disrupt the community fabric, representing a lost opportunity for jobs, housing, and parkland. Whereas Saint Paul strives to build a livable city where residents can enjoy park amenities and walk, ride, or bus to work, brownfield sites break the connectivity that is crucial to the livable city model.

The City's experience with brownfield sites indicates that the following contaminant types are commonly present at brownfield projects: poly-nuclear aromatic hydrocarbons (PAHs), chlorinated and non-chlorinated volatile organic compounds (VOCs), light and heavy fraction petroleum compounds, including petroleum-related VOCs, and metals, most commonly lead, arsenic, and chromium. At the Trillium Central Site, the contaminants of concern include petroleum hydrocarbons measured as diesel range organics and gasoline range organics, and arsenic.

The health effects of these contaminants are well documented in the Minnesota Department of Health's supporting literature for their Health Risk Limits (HRLs) (<http://www.health.state.mn.us/divs/eh/groundwater/data/index.cfm>) and the Minnesota Pollution Control Agency's supporting literature (<http://www.pca.state.mn.us/cleanup/riskbasedoc.html#pathway>) for their soil leaching values (SLVs) and soil reference values (SRVs). Much of the supporting documentation relies heavily upon studies compiled by the Agency for Toxic Substances and Disease

Registry (ATSDR). This information is too lengthy to summarize here in a meaningful way. Less well documented are the health risks of *mixtures* of chemicals that are present at brownfield properties.

The Trillium Central Site is currently vacant and located next to a residential neighborhood. It is attractive to transients and to children and youth seeking outdoor space for adventure. The primary exposure routes for neighborhood residents include ingestion and inhalation of fugitive dust. For people who spend time on the Site, exposure routes are expanded to include dermal contact, and incidental ingestion of dirt. Surface water run-off from the Site eventually ends up in the Mississippi River.

The Trillium Site represents an opportunity to connect and fill gaps in the City's open space system. The community has worked since the late 1990s to get the Site redeveloped as a park and natural area. The City seeks the current grant to realize the community's vision.

Sensitive Populations

The project area population displays great ethnic and cultural diversity. The communities most directly affected by the Trillium Nature Sanctuary Project are the North End and Payne/Phalen Neighborhoods. These neighborhoods have become increasingly diverse over the past 20 years. Unfortunately, ACS data are not available on census tract or block group basis, and so our most reliable information still come from the Census 2000 data. From 1990 to 2000, the white population dropped from 75% to 55% in the North End Neighborhood and from 82% to 49% in the Payne Phalen Neighborhood. Blacks comprise between 11% and 15% percent, Asian (predominantly Hmong) between 18% and 24% of surrounding neighborhood populations and Hispanics up to 11% of the project neighborhood population. Approximately 75% of public school children in this neighborhood are children of color (2000 Census). The community has a rich immigrant population as well: 26-35% of all residents and between 44 and 51% of the public school children speak a language other than English as their primary language at home with Asian languages and Spanish the most common. Furthermore, the area displays a greater of poverty than on average for either the City or the Twin Cities Metropolitan Region (see Item b, below). Two Family Public Housing Developments (Mount Airy and McDonough Homes), comprising a total of 879 family units, are located within a mile radius of the Nature Sanctuary; additional Public Housing Scattered Sites are located within this same radius.

The Trillium Central Site is intimately connected with its host neighborhoods. This means that the vulnerable populations described here are disproportionately exposed to the contaminants present at the Site. In general, populations in poverty and minority populations have compromised access to health care because of limited financial resources and transportation, communication and employment issues. Diagnosis and treatment of any health effects associated with exposure to brownfield contaminants in the immediate neighborhood could be delayed and/or non-existent.

The proposed grant funds will reduce or eliminate the human health risks associated with the contaminants at Trillium Central Site. The MPCA health-risk-based guidelines will be used to set the cleanup goal for the property and are protective of vulnerable populations.

b) Financial Need (7)

The neighborhoods most immediately affected by this grant proposal (North End and Payne Phalen) are more impoverished than the Saint Paul average. Twenty two percent of the individuals in the North End neighborhood and 19% of individuals in the Payne Phalen neighborhood had incomes below the poverty line in 2009. For context, 7% of the Twin Cities metropolitan area population and 16% of Saint Paul residents had incomes below the poverty line in 2000. With the current economic downturn, the number of people in poverty in Saint Paul has increased significantly (from 16% in 2000 to 22.7% in 2009, according to ACS 2009 estimates). This trend is likely true for the Project Area neighborhoods as well. Up to 78% of the public school children in the affected neighborhoods qualified for free or reduced-fee lunch in 2000 (Wilder Foundation Community Data Works, based on the 2000 Census).

Unemployment rates in the Project Area neighborhoods are also elevated above those for Saint Paul on average. The Census 2000 data indicate that unemployment for the non-disabled, civilian work force aged 21 to 64 was as high as 8.8% for the Project Area neighborhoods; the City's average unemployment rate was 3.9% in 2000 (Census 2000 data). Unemployment figures for St. Paul have increased significantly in the current economic downturn (from 3.9% in 2000 to 7.7% in 2009, based on ACS 2009 estimates), and the neighborhoods affected by this project can be expected to have experienced similar increases in unemployment rates. Unemployment figures for 2009 are more sobering for people of color in Saint Paul, with unemployment of blacks at 26.6%, Asians at 12.5 and Hispanics at 21.2 percent City-wide (ACS 2009 estimates). The median income for individuals throughout Saint Paul was \$38,774 in 2000 while the host neighborhoods lagged slightly, with median incomes of \$32,164 and \$35,475. Twelve percent of the households received public assistance in 2000 (Wilder Foundation Community Data Works, based on the 2000 Census)

The City of Saint Paul does not have the resources to fully fund the project without USEPA support. Saint Paul is a large urban center with numerous concerns (crime, education, housing, infrastructure) that compete for resources. The City is facing a challenging time with regards to its fiscal condition; there is an anticipated budget shortfall in 2011 and 2012. Furthermore, State and Regional brownfield cleanup grants prioritize end uses that create jobs and increase tax base. Parks and non-profit end-uses do not complete successfully for these funds.

The City of Saint Paul does have existing EPA cleanup grants, the first is dedicated to the cleanup of the Bruce Vento Interpretive Center, which lies within the Trout Brook Regional Trail corridor and the second is for the Trillium South Site which was awarded in FY2011. We need additional funding to address cleanup issues in the Central Site due to the extent of excavation necessary for the stormwater ponds and stream channel to restore the area to a natural wildlife corridor and greenway.

As stated in the threshold criteria, the estimated cleanup cost for the Site, based upon our Response Action Plan, is \$356,000. If we are awarded this Cleanup Grant, we will still have a gap of \$156,000, which we intend, at this point, to pay out of CIB funds.

Demographic Information

| | District 6 (North End) Neighborhood | City of Saint Paul | State of Minnesota | National |
|-----------------------|---|-----------------------|------------------------|-------------|
| Population: | 24,210 ¹ | 281,262 ¹ | 5,303,952 ¹ | 308,745,538 |
| Unemployment: | 11.3% ² | 7.8% ⁶ | 7.2% ⁶ | 9.6% |
| Poverty Rate: | 22.48% ³ | 22.6% ⁷ | 10.9% ⁴ | 14.3% |
| Percent Minority: | 48% ³ | 27.6% ¹ | 14.7% ¹ | 26.7% |
| Per Capita Income: | \$20,727 ² | \$24,702 ¹ | \$29,431 ⁵ | \$26,530 |
| Other: | | | | |

¹Data is from the 2010 U.S. Census data www.census.gov

²Data is from Esri Demographic, August 2010

³Data is from the District 6 Strategic Plan, An Addendum to the Saint Paul Comprehensive Plan

⁴Data is from the 2009 American Community Survey

⁵Minnesota Management and Budget <http://www.house.leg.state.mn.us/hrd/databook/percapinc.htm>

⁶Data from Positively Minnesota <http://www.positivelyminnesota.com/apps/lmi/laus/CurrentStats.aspx>

⁷Data from City-Data. com <http://www.city-data.com/poverty/poverty-St.-Paul-Minnesota.html>

2. PROJECT DESCRIPTION AND FEASIBILITY OF SUCCESS (50)

a. Project Description (10)

i) Existing Conditions

The proposed Cleanup Grant will be used to fund the soil cleanup at the Trillium Central Site. The City is also applying for a companion Cleanup Grant for the Trillium South Site (located immediately south of Trillium Central). The City's partner, the Saint Paul Port Authority, conducted a thorough assessment of the Trillium Sanctuary Site under the oversight of the MPCA voluntary cleanup programs (VIC and Petroleum Brownfields). The Port Authority conducted this work on behalf of the City in 2003 and 2004 using their EPA Brownfield Assessment Grant Funds. The Response Action Plan was prepared in 2004.

The City intends to use the proposed Cleanup Grant funds to complete cleanup planning and conduct the cleanup of the Site under the review and oversight of the MPCA. The MPCA uses a risk-based approach to determine appropriate cleanup levels that are protective of identified receptors and has developed extensive guidance documents describing this approach. The City will require its consultants to coordinate closely with the MPCA staff assigned to their projects.

Based on the findings of the Phase I Assessment, earlier (1990) Phase II Assessment, and 2003 Phase II Assessment, fill soils of approximately 1 to 16 feet in depth are present at the Site. Concrete, cinders, brick and wood are mixed with the fill soils. Ground water is present at depths ranging from 17 to 30 feet below ground. Fuel oil (1990 assessment) and petroleum measured as diesel range organics and gasoline range organics (2003 assessment) have been detected at various locations in the fill at the Site. The DRO concentrations detected ranged from 13 mg/Kg to 2,200 mg/Kg. Arsenic was detected in three locations at concentrations that may be associated with background concentrations.

The Site investigation identified three hot spots that will be excavated, stockpiled, sampled and managed in accordance with the response action plan guidelines. It appears that petroleum contamination is present intermittently across the Site at levels ranging from below screening levels to exceeding petroleum action limits (generally 50 ppm in coarse grained soils). It is almost certain that additional contamination will be identified during the Site redevelopment, due to the Site's long history as a rail yard and the heterogeneity of the fill. For this reason, the Response Action Plan includes a construction contingency plan component. The redevelopment plan for the park requires that large volumes of soil will be excavated, moved, and consolidated during the creation of the trails, daylighted creek and associated flood plain, surface water features and storm water management features. The presence of petroleum in soils limits how and whether the soil can be reused on-site. Soils will need to be screened constantly during site work for the presence of contamination and managed in accordance with the guidelines presented in the RAP, depending upon contaminant presence and concentrations.

Subsequently, the Site will be redeveloped as a Nature Sanctuary as further described in criterion 4.

The Cleanup Grant will fill the existing gap in the cleanup funding for the property. The total estimated cost for the proposed cleanup is **\$356,000**.

ii) Proposed Cleanup Plan:

The cleanup is being conducted to support the construction of the Nature Sanctuary. The construction will include the recreation of Trout Brook on the property. The park will also re-establish several plant communities, including prairie, woods and oak opening ecosystems. A paved trail will run north-south on the western side of the site, and a series of ponds will be created to collect storm water runoff. A soft surface walking path will be constructed as well. Water for Trout Brook will come from a series of underground channels that will collect storm water runoff from the west side of the site and infiltrate water into ponds located on the site. Final grading plans for the park are not yet developed. The Trout Brook creek, the ponds, the underground channels, and the floodplain accompanying Trout Brook will all require excavation. A fence or berm will be placed on the east side of the Site. Excavated soil, if sufficiently clean, will be used to balance the grade and to fill in areas where erosion from overland flow of storm water has occurred on the west side of the Site.

The MPCA approved Response Action Plan proposes the following components:

a) Complete Response Action Planning for the Site. This includes updating the 2004 Response Action Plan – Construction Contingency Plan to adapt it to final Park Plans. Cleanup planning also involves preparing bid specifications, and refining volume estimates. Cleanup goals for the Site are based on health risk based Recreational Soil Reference Values (SRVs) and Soil Leaching Values (SLVs) established by the MPCA in conjunction with the Minnesota Department of Health and on petroleum action limits established by the PCA. Different goals are established for areas beneath pavement, stormwater management features, and in accessible green spaces.

b) Excavate known contaminated soils and remove debris-piles (petroleum measured as DRO and GRO, some arsenic). Excavation bottoms and sidewalls will be sampled to

verify that impacted areas have been removed to meet cleanup goals. Excavated soils will be stockpiled. Stockpiled soils will be sampled to determine proper management options. Soils contaminated above cleanup goals will be disposed of at a licensed facility. Soils below cleanup goals will be reused on site, if feasible. All debris and waste materials will be disposed of off-site. Vapor monitoring will be conducted throughout remedial activities.

c) Construction Contingency Plan (CCP): During implementation of the RAP and during Site earthwork needed for redevelopment activities, soils will be screened for the presence of visual and olfactory signs of contamination. In addition, samples will be collected for headspace analysis using a photoionization detector; a minimum of one sample will be collected for every 20 yards of soil removed. Screening results will be documented. Potentially contaminated soils identified through screening will be stockpiled and sampled in accordance to guidelines in the CCP. Laboratory analysis will be conducted and soils will be managed in accordance to guidelines in the CCP. If encountered, buried waste will be appropriately handled in accordance with guidelines in the CCP. In total, the City has estimated that as much as 2200 cubic yards of contaminated soil may be excavated from the Trillium Central Site.

d) Importation and placement of excavation backfill materials. If off-site soils are needed to bring the Site to the planned grades, soils will be sampled and will be required to meet standards established in the RAP prior to importation.

e) RAP Implementation/Engineering oversight and Final Report Preparation: Includes reporting and MPCA program fees.

b. Budget for EPA Funding and Leveraging of Other Resources (20)

i) Budget Table and Explanation

Proposed Budget – Trillium Central Cleanup Grant

| Budget Categories | Project Tasks | | | | Total (\$) |
|-------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------|
| | Task 1 ¹ (\$) | Task 2 ² (\$) | Task 3 ³ (\$) | Task 4 ⁴ (\$) | |
| Personnel | 0 | 0 | 0 | 0 | 0 |
| Fringe Benefits | 0 | 0 | 0 | 0 | 0 |
| Travel | 0 | 0 | 0 | 1,445 | 1,445 |
| Equipment | 0 | 0 | 0 | 0 | 0 |
| Supplies | 0 | 0 | 0 | 0 | 0 |
| Contractual | 10,000 | 0 | 223,555 | 0 | 233,555 |
| Other (specify) | 0 | 0 | 5,000 | 0 | 5,000 |
| Total | 10,000 | 0 | 228,555 | 1,445 | 240,000 |
| Cost Share | 0 | 0 | 40,000 | 0 | 40,000 |

¹ - **Task 1 = Hire Consultant to Conduct Cleanup:** The City will use their required procurement process (consistent with competitive procurement provisions of 40 CFR31.36) to hire a consultant to conduct the work under this grant. Other City funds will be used to pay for this task.

² - **Task 2 = On-going Community Involvement** Community involvement in the final cleanup decision will be achieved through public meetings and public announcements.

Translation services will be provided as needed. The City will pay for this task with CIB funds.

³-**Task 3 = Conduct Site Cleanup:** The consultant will conduct the petroleum cleanup in accordance with guidelines maintained by the MPCA VIC and Petroleum Brownfields Program. The Cost Share line item represents City Capital Improvement Budget funds that the City will provide toward meeting the anticipated cleanup costs. . The “Other” line item represents the user fees associated with MPCA VIC Program oversight of the cleanup. The MPCA VIC Program is a fee-for service program which charges \$150/hour for staff time spent on the project. We have estimated that the MPCA will spend 33 hours on the project. $\$150/\text{hour} \times 33 \text{ hours} = \$4,950$, which rounds up to \$5,000.

⁴**Task 4 = Eligible Programmatic Costs:** This task includes coordination with EPA and meeting requirements of the cooperative agreement, including reporting. The City will use other funds to pay for these oversight costs.

ii) Tracking and Measuring Progress

The City intends to continue their current methods of tracking progress, by completing the quarterly reports and associated ACRES system reporting. Specifically, the City will track the following outputs for this grant: acres cleaned up, development dollars leveraged (local, state and federal), and number of community meetings. These outputs will lead to the following outcomes, which will also be tracked (but may extend beyond the project period of this grant): acres of greenspace created, estimated volume of storm water managed by on-site systems, estimates of park and trail traffic, and number of educational events conducted at the completed park. Finally, the City will track the number of community meetings held in association with the planned cleanup.

iii) Leveraging (5)

The City has dedicated \$156,000 in Capital Improvement Budget (CIB) funds for a portion of the cleanup of the Site, should the EPA grant funds be awarded; these funds are designated as the matching funds for the grant. The City may also seek a Ramsey County Environmental Response Fund grant to make up the match, which would allow the CIB funds to be redirected to other aspects of the Trout Brook Greenway project. Excluding acquisition (which is completed), the total Trillium Nature Sanctuary Development cost is estimated to be \$2.5 Million. To date, the City has committed \$1.5M in CIB funds. A \$575,000 Federal SAFET-LU grant is dedicated to the redevelopment of the park. Finally, the Capitol Region Watershed District pledged to partner with the City to provide storm water studies, engineering and further testing at a cost of \$150,000. The remaining gap of \$275,000 is expected to come from Capital Improvement Budget.

c. Programmatic Capability and Past Performance (20)

i) Programmatic Capability (12)

The City staff who will be in charge of managing this grant is Ms. Kathleen Anglo. The City Department of Parks and Recreation has a professional staff of eleven Landscape Architects with many years of experience in managing and implementing state and

federal grants. The staff Landscape Architects, including Ms. Kathleen Anglo, have extensive experience with grant management, project planning, project design and construction implementation. When necessary, the City hires outside consultants to help with these tasks; when this is required, the consultants are hired and managed by in-house staff. Staff accountants manage all compliance reporting and track funds expenditures.

The City hires environmental, excavation, construction, engineering and landscape consultants regularly. The City uses an open procurement process consistent with 40 CFR31.36 to select and retain consulting services.

The City is very experienced at managing federal grants to obtain maximal results and is likewise experienced with the associated reporting requirements. The City's 2010 budget includes many federal grants from many agencies. Since this grant will be managed by the City Department of Parks and Recreation (with a FY2010 budget of \$53M), the following list of selected relevant recent federal grants is limited to those managed by that department:

| | |
|---|-------------|
| 2009 EPA Brownfields Cleanup Grant | \$200,000 |
| 2008 Great River Road Scenic Byways | \$125,000 |
| 2008 TEA-21 grant - Harriet Island Phase II | \$1,070,000 |
| 2005 TEA-21 grant – Lower Phalen Creek Trail | \$1,500,000 |
| 2009 TEA-21 Riverfront Revetment, Rip Rap, and Overlook | \$2,500,000 |
| 2010 ARRA Stimulus Sam Morgan Regional Trail Renovation | \$1,300,000 |
| 2010 Community Development Block Grant, Weida Play Area | \$400,000 |
| 2011 TEA-21 Cherokee Regional Trail | \$1,100,000 |

ii) Adverse Audits (2)

The State conducts an annual financial audit of the City's entire operation, including local, state, and federal grants. The results have included no adverse findings regarding the federal grants.

iii) Past Performance (6)

The City has successfully delivered on the project objectives of four existing and previous EPA Brownfield Grants. Two Brownfield Cleanup grants of \$200,000 each (one for hazardous substances and one for petroleum) were awarded in 2003 for properties associated with the Bruce Vento Nature Sanctuary. In 2009, the City was awarded a hazardous substances cleanup grant for the adjacent Bruce Vento Interpretive Center. Also in 2009, the City and two coalition partners were awarded a \$1 M Coalition Assessment Grant focused on the Proposed Central LRT Corridor which runs from downtown Minneapolis to downtown Saint Paul. The City is the designated administrative lead for the Coalition Grant. The City was awarded an EPA Brownfield Cleanup Grant for the Trillium South Site in FY 2011.

The first two Cleanup Grants were used to cleanup a 27-acre brownfield site which was formerly the site of a railyard and adjacent industrial uses. The resulting redevelopment is an urban nature sanctuary adjacent to Saint Paul. The Sanctuary includes an area of restored greenspace with walking and bicycling paths and three spring-fed wetlands. Notably, this was the first EPA grant used in Minnesota which resulted in the creation of recreational or greenspace. The restoration of the Bruce Vento Nature Sanctuary has brought together a corps of community volunteers and young people, who work as paid interns on the site and gain valuable experience in natural resource restoration and interpretation. Most of the young interns are from low-income Hmong immigrant families. The unique resources provided by the sanctuary coupled with its amazing community partnership have garnered numerous state and national awards, including a 2008 HGTV “Change the World, Start at Home” contest, and a 2005 “Take Pride in America” award for public/private partnerships. All funds were expended.

The cleanup funded by the FY2009 Bruce Vento Interpretive Center Cleanup Grant is completed. All funds have been expended or obligated. The neighborhood is now ready to begin the conversion of the existing building into an educational Interpretive Center that will complement the adjacent Nature Sanctuary.

The work of the FY2009 Central LRT Corridor Coalition Assessment Grant is well underway. The Coalition has developed its priorities for site selection and has completed their procurement process for environmental consulting firms. The consultants are currently working on their QAPPs. The Coalition intends to begin assessment activities this fall and projects that their grant funds will be exhausted by spring of 2012. The City has only just begun fund expenditures.

The FY 2011EPA Grant for the Trillium South Site will be underway in the spring of 2012. No funds have been expended to date.

For all grants, the City has met all reporting requirements and has been timely in the submission of reports. The City has met all requirements of their Work Plans and has stayed in compliance with the terms of the Cooperative Agreements. The City has reported accomplishments via the Property Profile Forms and ACRES, depending upon the grant.

3. COMMUNITY ENGAGEMENT AND PARTNERSHIPS (15)

a. Plan for Involving Affected Community (5)

The City has actively engaged the community in the planning for the Trout Brook Regional Trail and for the Trillium Nature Sanctuary Project since the late 1990s, when a series of meetings was held in conjunction with the planning of the existing trail and production of the Trout Brook Greenway Small Area Plan. The resulting Trout Brook-Lower Phalen Greenway Plan was incorporated into the Saint Paul Land Use Plan in 1999.

In early 2000 the city received a planning grant from the MnDNR to prepare a Master Plan for the Trout Brook Greenway. In September 2000, the St. Paul Planning Commission established a Task Force to assist in the development of the Master Plan, representing affected parties and community interests. Eleven groups sent a delegate to

participate in the Task Force: the Capitol Region Watershed District, the Tri Area Block Club, the District 6 Planning Council, Friends of Swede Hollow, the Dayton's Bluff District 4 Community Council, the Payne Phalen District 5 Planning Council, Diamond Products, the Lowertown Depot, Ramsey County Parks, Saint Paul Parks and Recreation Commission, and the DNR Metro Greenways Division. In addition to the Task Force, a Technical Advisory Committee advised this work. A Public Hearing for this plan was held on September 7, 2001.

Specific to the Trillium Nature Sanctuary Project, a Community Task Force was created during the Preliminary Design phase of the park. Meetings were held from April 2005 through February 2006. Trout Brook Regional Trail routes, amenities, connections and impacts were a large focus of the Trillium planning process. The 2009 Master Plan for the park resulted from that process. Since that time, the City has continued to meet with District 6 Planning Council in regards to Park Plans.

The following plans are already in-place for involving the public in cleanup and land-use decisions for the Trillium Central Site: The City will publish a public notice of the plan to cleanup and redevelop the site and invite the public to review the plans; the public repository of information will likely be maintained at the District 6 Planning Council offices. The City will hold a thirty-day public comment period on the cleanup plans and will respond to all substantive comments.

Regular updates will be provided to community members via the District Council websites and community partners' e-mail networks. Translation of communication materials into Hmong, Spanish and Somali may take place in cooperation with the East Side Neighborhood Development Company, the area community development corporation.

b. Efforts or Plans to Develop Partnerships (5)

The Department of Parks and Recreation's mission is to help make Saint Paul the most livable city in America, and to facilitate the creation of active lifestyles, vibrant places, and a vital environment. To accomplish this mission, the Department must and does work with all manner of City Departments, community development agencies, community groups, District Planning Councils, environmental and conservancy groups and economic development interests.

For the subject project, the City will or has involved partners in the following ways. The Parks and Recreation staff already attends meetings with the District Councils to gain input into the community's vision for, and concerns with, the Trillium Nature Sanctuary cleanup and reuse. The City will keep the community informed of progress on the cleanup through District 5 and 6 Planning Council public meetings. The Department of Parks and Recreation has coordinated with the City's Planning and Economic Development Department and the Saint Paul Public Housing Agency to ensure that residential areas and affordable housing venues are well served by the park. The City's Department of Public Works has been consulted to ensure that the proposed access points and trails complement the existing traffic patterns in the neighborhood. St. Paul Public Schools will use the Nature Sanctuary as an educational tool during field trips and outdoor classroom exercises as a way to reconnect children of the area with the natural environment.

The Minnesota Department of Transportation (MNDOT) owns the southern portion of the proposed park and the redevelopment of the entire Nature Sanctuary is being coordinated with MNDOT's construction of the new highway interchange at Interstate 35E and Cayuga Street. The Capitol Watershed District is involved in the Site plans since the wetlands and ponds on the Nature Sanctuary will serve as important storm water management features to clean stormwater from the surrounding neighborhoods and the proposed interstate interchange to meet NURP (National Urban Runoff Program) standards. These water features will remove sediments, nutrients such as phosphorus, and other pollutants from neighborhood stormwater runoff before it enters the Trout Brook Storm Sewer and flows to the Mississippi River.

The Site is already enrolled in the Minnesota Pollution Control Agency's VIC and Petroleum Brownfield Programs for technical review and oversight of the assessment and cleanup of the property. The MPCA works with the Minnesota Department of Health to establish health risk limits for contaminants at Brownfield Sites.

c. Description of, And Role of, Key Community-Based Organizations (5)

The City of Saint Paul has worked with the following Community Based Organizations in planning the Trillium Nature Sanctuary, and the Trout Brook Greenway and its connection with other Regional Trails and parks. They will be active partners in the implementation of the proposed grant activities. Letters of support from these Community Partners are provided in Attachment 4. It is notable that at the public meeting where this grant was discussed, the community's greatest concern was that the project get started soon.

- **District 6 Planning Council:** Kerry Antrim @ 651.488.4485
This is the official, city-sponsored community planning group for the North-End neighborhood, where the Trillium Project is located. **Role:** The D6 Planning Council has been active in advising the City on the reuse and cleanup plans for the Site and for the Trillium Nature Sanctuary in general. The City will work with District 6 to host public meetings in order to gather community input to cleanup decisions and provide a venue for the public to view documents, such as proposed cleanup plans.
- **District 5 Planning Council.** Leslie McMurray, 651-774-5234.
This is the official, city-sponsored community planning group for the Payne-Phalen neighborhood, immediately east of the Trillium Project. **Role:** The D5 Planning Council has been active in planning the Trillium Nature Sanctuary, and has been a participant in the discussion regarding cleanup and reuse plans. District 5 will help the City to involve the Payne-Phalen Community in the public meetings and to affect public outreach regarding the results of the cleanup.
- **Lower Phalen Creek Project (LPCP).** Sarah Clark, 651- 290-0002.
The Lower Phalen Creek Project is a multi-faceted effort to improve local water quality and revitalize Saint Paul's East Side neighborhoods by enhancing their ecological health and connections to the Mississippi River. Lead by a community-based Steering Committee, LPCP is a public/private partnership involving more than 25 organizations. LCPC worked with the City in an advisory role on the planning for the Trillium Nature Sanctuary and its connections to area parks. **Role:** LCPC will continue to be involved in future planning for the Trillium Sanctuary.
- **Tri Area Block Club.** Linda Jungwirth - 651.489.2923

The Tri-Area Block club is a neighborhood group bordered by Park St. on the west, Magnolia on the south, Jackson to the east and Maryland on the north (14 square blocks). It was formed in 1989 to improve the quality of life in the community. Role: the Tri-Area Block Club has been the driving force behind the Trout Brook Greenway Plan and the Trillium Nature Sanctuary Development. They brought it to the attention of the City that the Trillium parcel was for sale and to acquire the land for future use as a core piece to development of the Trout Brook Greenway. They will continue to involve the neighborhoods of the Tri-Area Block Club in the planning for the Site and will help with informing that citizenry regarding cleanup results.

4. PROJECT BENEFITS (20)

a. Welfare and/or Public Health (10)

The cleanup supported by this grant will contribute to a healthy community because it will: 1) cleanup a known contaminated site, thereby removing the related health and safety risks faced by the local population; 2) allow for the redevelopment of the Site as a Nature Sanctuary and Regional Park, providing environmental education opportunities and recreational opportunities for the surrounding neighborhood; and 3) allow for the extension of a Regional Trail linked to other City, County and State trail networks, thereby encouraging bicycling, hiking and other green transportation options as well as providing connectivity to the Parks System. All of these features serve to increase the quality of community life.

Creation of Nature Sanctuary and Extension of Regional Trail System

The cleanup will allow for the redevelopment of the Trillium Nature Sanctuary, as further described in item (b) below. The Park and its trails will serve to connect open space throughout the City and provide green space and natural areas in a part of the City that has been lacking this type of access previously. The Park and its trail system will provide opportunity to community experience healthy lifestyles. The Park will also serve as an educational facility which will coordinate with the St. Paul Public School System to offer programs to youth and children.

Reduction of Human Health Risk

The proposed cleanup will remove environmental threats at the Site. Site soils are contaminated with petroleum hydrocarbons and arsenic. The main exposure scenarios posed by the identified contamination at the Site are human contact with contaminated soils and possible leaching into the proposed water features and storm water management facilities. The proposed Response Action Plan will disrupt or eliminate the possible exposure routes relative to the soil contamination and will remove the majority of the source of contamination to ground water.

Exposure Control During Cleanup

The Site will be cleaned up under the oversight of the MPCA, which requires measures to protect surrounding communities from exposure to Site contaminants during cleanup. In order to ensure that nearby residents are protected from exposure to contaminants during cleanup work, the following measures will be taken:

- Sediment and run-off controls will be instituted and will include silt fencing around the entire site and construction of berms where necessary.

- Exposed soil surfaces will be monitored for dust creation and will be kept wetted if necessary while heavy equipment is operating to suppress dust creation from the site and limit air particulate matter (and associated contaminant) concentrations in the immediate vicinity.
- Air quality monitoring will be conducted at the site perimeters, with special focus on the downwind boundary, during cleanup hours. Action limits will be established and observed.
- Soil piles will be covered with plastic until they are removed in order to prevent dust creation and surface-water run-off into surrounding areas.

b. Economic Benefits and/or Greensapce (5)

ii) Other non-economic Benefits

The subject Site is 8.7 acres of the proposed 45-acre Trillium Nature Sanctuary. A companion grant application for the Trillium South Site represents an additional 11.6 acres of the proposed Nature Sanctuary. The remaining components include the Trillium North Property to the north of Maryland Avenue and the MNDOT-owned property immediately south of the Trillium Site. The City owns the Trillium North, Central and South Sites. MNDOT will retain ownership of their property. These properties are being redeveloped together to create the Trillium Nature Sanctuary and the associated extension of the Trout Brook Regional Trail.

An important part of the Nature Sanctuary Master Plan is the restoration of degraded and lost plant communities, including lowland hardwood, oak savanna, maple/basswood, mesic prairie, wet prairie, lowland forest and open woodland. These plant communities will be indicated with interpretative signage and will be accessible by hiking trails.

Historic Trout Brook will be daylighted throughout the park and a crushed limestone nature trail will be constructed alongside the stream bed and will include three bridge crossings. The water will daylight on the Trillium North property in a small wetland. The water will be collected, in part from localized storm water harvesting (which will drastically reduce the amount of water entering the local Jackson Storm Sewer System), and in part from a lift station that pumps water up from the Trout Brook Storm Sewer. From here, the water will flow in a series of pools and riffles through the Trillium Central and Trillium South properties to the existing Sims-Agate pond located on MNDOT's property. There will also be a series of small storm water collection ponds as the stream meanders through the site. Each pond will collect localized storm water from the adjacent Jackson storm sewer system. The stream will drop 23 feet as it travels in a meandering path from the north end of the Site to the existing level of the Sims-Agate Pond. This will allow for several small cascades as it travels through the park, and a larger waterfall as it enters the pond. A wide buffer of native vegetation will be added along the entire length of the creek channel, to prevent erosion and improve creek habitat.

The formal entrance to Trillium is proposed for the Trillium North property, and will include parking, bus drop-off, informational kiosk, restroom, and a picnic area. The entire park will be enhanced by strategically placed interpretive signage. In addition, several pedestrian access points are available from the neighborhood to the west throughout the Trillium Central and Trillium South portions of the Park.

The Park will include a soft surface walking path that will cross Trout Brook via up to three pedestrian bridges. A paved trail, a segment of the Trout Brook Regional Trail, will run north-south on the western side of the site (see item c, below for detail on the Regional Trail segment).

c. Environmental Benefits from Infrastructure Reuse/Sustainable Reuse (5)

The planned redevelopment offers many environmental benefits associated with sustainable reuse of the Site. First, the water resources plan for the Site creates a green storm water management system, consisting of series of stepped and landscaped ponds and constructed wetlands. The City intends that this will be a stormwater management demonstration project. This system captures some of the increased flow that will result from the reconfiguration of Interstate 35E to the south, and also captures flows from 147 acres of watershed to the immediate west of the Park, greatly reducing the load on the City's Jackson Storm Water Management System.

The redevelopment also daylights historic Trout Brook, which was channelized and routed into an underground storm sewer pipe during a time that the area was becoming increasingly industrialized (1880s – 1950). The Park Master Plan includes the re-creation of several degraded and lost Plant Communities (explained in item b, above), expanding local biodiversity.

The Master Plan also provides for the construction of a segment of the Trout Brook Regional Bike Trail through the Trillium Nature Sanctuary. The completion of this trail section will link the existing Trout Brook Trail, which runs north to Roseville to the proposed Gateway Trail Extension. Ultimately, this will provide links to the Mississippi River and downtown St. Paul, and to more than 85 miles of existing trails, including the Sam Morgan Regional Trail, the Bruce Vento Regional Trail, and the Gateway State Trail.

The Metropolitan Council's 2007 User Survey indicated that the existing Trout Brook Trail had 40,200 annual visits, with walking and bicycling being the top two uses. The Metropolitan Council projected its use to increase dramatically, once the trail corridor is complete, as connections are made to downtown St. Paul, the Mississippi River, the Sam Morgan Regional Trail (69,100 annual visits) and the Bruce Vento Regional Trail (84,100 annual visits).

ATTACHMENT 1

LETTER FROM MINNESOTA POLLUTION CONTROL AGENCY
INCLUDES PETROLEUM BROWNFIELDS ELIGIBILITY
DETERMINATION
(Threshold Criterion 2)

ATTACHMENT 2

SITE MAPS

Site Location Map
Trillium Nature Sanctuary Master Plan

ATTACHMENT 3

DOCUMENTATION FOR COMMUNITY NOTIFICATION OF GRANT

- Copy of Public Notice - Saint Paul Pioneer Press
- Agenda and sign-in sheet from 10/25/11 public meeting,
- A summary of the comments received from the public meeting and in response to the community's review of the grant, and the City's response to the public comments

Summary of Comments from Public Meeting

ATTACHMENT 4

LETTERS OF SUPPORT FROM COMMUNITY PARTNERS