

CLEANUP WORKPLAN

City of Chicopee

Workplan for CERCLA Section 104(k) Cleanup Cooperative Agreement

10/01/2015 – 09/30/2018

1. GOAL 3: Cleaning Up communities and Advancing Sustainable Development Objective 3.1 Promote Sustainable and Livable Communities

CFDA: 66.818 Assessment, Cleanup, and Revolving Loan Fund Grants

OBJECTIVE: The Small Business Liability Relief and Brownfields Revitalization Act (SBLRBRA) was signed into law on January 11, 2002. The Act amends the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, by adding Section 104(k). Section 104(k) authorizes the U.S. Environmental Protection Agency (EPA) to provide funding to eligible entities to inventory, characterize, assess, conduct planning related to, remediate, or capitalize revolving loan funds for, eligible brownfield sites. Entities are selected from proposals prepared in accordance with the “Proposal Guidelines for Brownfield Assessment, Revolving Loan Fund, and Cleanup Grants,” and submitted in a national competition. The City of Chicopee, Massachusetts, as a general purpose unit of local government, was selected for Cleanup funding in the FY 2015 competition.

The City of Chicopee’s West End neighborhood is one of the oldest industrial communities in the United States. Ideally situated near the confluence of the Chicopee and Connecticut Rivers, the area’s earliest factories were built before 1820. Around 1830, the Dwight Canal was completed, providing water power and barge access for rapidly expanding textile, munitions and shoe manufacturers. As the industrial base increased, a densely-built residential neighborhood grew towards the nearby Center Street corridor to serve the mill worker population. This blue-collar neighborhood of mostly Irish, French-Canadian and Polish immigrants thrived for over a century. However, during the past several decades, the demise of manufacturing, aging facilities and suburban competition have caused industrial establishments to abandon the mills – leaving behind large, vacant industrial structures and a community searching for environmental and economic solutions.

The former Racing Oil Service Station consists of a former gasoline fueling station located on approximately 0.28 acres of property at 181 Center Street. The property has remained undeveloped since December 2004 when the removal of an on-site kiosk, pump islands and three underground storage tanks (USTs) was completed. The Site is currently covered with pavement and the remnants of a concrete pad where the gasoline pumps were located.

The City completed tax foreclosure proceedings in late 2011 and applied for Targeted Brownfield Assessment (TBA) funds from EPA Region 1 in early 2012. The 2012 TBA determined that historical releases of petroleum hydrocarbons occurring because of former Site operations have resulted in soil and groundwater contamination at levels that could pose a risk to human health and the environment. The primary source of contamination is believed to be within the former UST area, where historical releases of gasoline reportedly occurred. Soil sampling data and field screening information collected during the TBA identified a zone of contaminated

soil within the former UST area that appears to be residual contamination from historical releases from the tanks.

The proposed cleanup plan includes soil excavation and off-site disposal with *in situ* groundwater remediation. This would include the excavation and off-site disposal of contaminated soil from the former UST area with active treatment of the groundwater plume.

Cooperative agreement funding will be used to cover the costs of activities at or in direct support of brownfields sites as defined under CERCLA 101(39). The overall coordination of the cooperative agreement will be carried out by Lee M. Pouliot ASLA, LEED Green Associate, Director of Planning for the City of Chicopee. Mr. Pouliot will be assisted by a Massachusetts licensed site professional (LSP) to be procured through a full and open competition in compliance with all local, state and federal procurement regulations. Additional assistance and oversight will be provided by the Massachusetts Department of Environmental Protection (MassDEP).

Describe your project and cleanup plan: The Former Racing Oil Service Station consists of a former gasoline fueling station located on approximately 0.28 acres of property at 181 Center Street. The property has remained undeveloped since December 2004 when the removal of an on-site kiosk, pump islands and three underground storage tanks (USTs) was completed. The Site is currently covered with pavement and the remnants of a concrete pad where the gasoline pumps were located. The Site was assessed most recently in 2012 through a Targeted Brownfield Assessment (TBA) from Region 1 of the U.S. EPA. The 2012 TBA determined that historical releases of petroleum hydrocarbons occurring because of former Site operations have resulted in soil and groundwater contamination at levels that could pose a risk to human health and the environment. Petroleum constituents released to the environment in the UST area migrated downward to the water table and dissolved into Site groundwater. Dissolved contaminants subsequently migrated horizontally with the flow of groundwater to create a contaminant plume extending to the northwest across Center Street. A portion of the VPH plume extends beneath a commercial building located at 178 Center Street.

The Site was identified and studied for redevelopment as part of the City's West End Brownfields Area-wide Plan (AWP) pilot project funded as part of the federal EPA-HUD-DOT Partnership for Sustainable Communities. The former Racing Oil Service Station is most closely associated with the Gateway Area - located just a few parcels away from the boundary of the Gateway. The property is defined in the AWP plan as an 'infill' site with potential reuse for small office, retail space or an electric car charging station/related transportation use or greenspace in support of the Gateway's reuse strategies, as the neighborhood's market demands shift with redevelopment of the larger priority areas. While these priority areas are tackled, the AWP suggests short term improvements to these infill sites including assessment, completion of any required clean-up activities and improving the aesthetics and marketability of these sites to showcase the City's commitment to redevelopment. This land banking strategy will provide a visible City commitment to the property until the market provides an appropriate redevelopment demand to move forward with the recommended reuse strategy.

The proposed cleanup plan includes soil excavation and off-site disposal with *in situ* groundwater remediation. This would include the excavation and off-site disposal of contaminated soil from the former UST area with active treatment of the groundwater plume. The project will include the following activities:

- Excavation and off-site disposal of approximately 1,200 cubic yards of contaminated soil;
- Dewatering of the excavation area and on-site treatment of contaminated groundwater;
- Collection of post-excavation soil samples for laboratory analysis;
- Backfilling of the excavation area with clean soil;
- Advancement of soil borings within the contaminant plume area (along the northern Site boundary and across Center Street) for the purpose of injecting treatment reagents;
- Injection of treatment reagents into the subsurface to promote *in situ* chemical oxidation (ISCO) or *in situ* bioremediation (ISB); and
- Post-injection monitoring of groundwater to evaluate progress toward cleanup.

Excavation and off-site disposal of contaminated soil will be an effective and permanent measure to eliminate potential future exposure to contamination. With respect to groundwater, additional data collection will be completed to evaluate which type of *in situ* treatment technology will be the most effective given the subsurface conditions at the Site. It is also likely that *in situ* treatment would enable a Permanent Solution to be achieved in a shorter timeframe than natural attenuation and could be used as a contingency in the event that monitored natural attenuation does not meet the objectives of the cleanup.

1. FUNDING: \$0 Hazardous Substances; \$200,000 Petroleum

2. BUDGET:

	Task I: <i>Cooperative Agreement Oversight</i>	Task II: <i>Cleanup Design & Procurement</i>	Task III: <i>Cleanup Activities</i>	Task 4: <i>Post- Cleanup Monitoring</i>	<i>Total</i>
Personnel					
Fringe Benefits					
Travel	\$2,500				\$2,500
Equipment*					
Supplies	\$500				\$500
Contractual		\$40,500	\$132,000	\$24,500	\$197,000
Other (specify)					
Total Federal Funding	\$3,000	\$40,500	\$132,000	\$24,500	\$200,000
Cost Share**			\$40,000		\$40,000
Total Budget	\$3,000	\$40,500	\$172,000	\$24,500	\$240,000

* EPA defines equipment as items that cost \$5,000 or more. Items costing less than \$5,000 are considered supplies.

**For each Task which includes an estimated cost share contribution, indicate how the estimate was calculated in a Budget Detail Attachment (Attachment 1).

3. WORKPLAN TASKS:

Task 1: Cooperative Agreement Oversight

Task 1 - Cooperative Agreement Oversight Subtasks (Commitments) Pre-Cleanup	Anticipated Outputs (projected activities, deliverables, reports) and Anticipated Outcomes (projected results, effects, improvements)	Anticipated Accomplishment Date(s) (Month/Year)	Actual Accomplishment Date(s)
Establish Information Repository	Outputs: <ul style="list-style-type: none"> • Digital and hard copy repositories of documents which allow the public to review site assessment and cleanup history/progress • Ongoing development of the City’s Brownfields Website: HEALChicopee Outcomes: <ul style="list-style-type: none"> • Educate the community regarding the planning process for assessment and cleanup activities • Allow ongoing community interaction with the City’s Brownfields Program 	Establish repository by 8/31/15; ongoing updates to repository and ongoing development of the HEALChicopee website	

<p>Reporting</p> <ul style="list-style-type: none"> • Prepare quarterly reports, M/WBE semi-annually and FFR form at the end of the reporting period • Enter site data in ACRES • Prepare final report and grant closeout materials 	<p>Outputs:</p> <ul style="list-style-type: none"> • Quarterly reports and other forms; updated ACRES database; final report and closeout forms <p>Outcomes:</p> <ul style="list-style-type: none"> • Ensures compliance with Terms & Conditions reporting requirements 	<p>Quarterly reports every quarter; MBE/WBE forms 3/30 & 9/30; ACRES updated when site activities occur</p>	
<p>Request for Reimbursements or Advances</p>	<p>Outputs:</p> <ul style="list-style-type: none"> • Forms submitted to Las Vegas for payment <p>Outcomes:</p> <ul style="list-style-type: none"> • Reduce unliquidated obligations 	<p>Ongoing</p>	
<p>Travel & Training</p> <ul style="list-style-type: none"> • Attend National Brownfields Conference • Attend alternative Brownfields training/conferences 	<p>Outputs:</p> <ul style="list-style-type: none"> • Attend meetings, conferences, training sessions <p>Outcomes:</p> <ul style="list-style-type: none"> • Increase knowledge of Brownfields issues and programs • Share Brownfields experiences in Chicopee with other communities 	<p>Ongoing</p>	
<p>Prepare Community Relations Plan</p> <ul style="list-style-type: none"> • Prepare plan to involve public in cleanup activities 	<p>Outputs:</p> <ul style="list-style-type: none"> • Plan for involving the community in cleanup activities <p>Outcomes:</p> <ul style="list-style-type: none"> • Improve understanding and participation in cleanup and redevelopment process 	<p>9/30/15</p>	
<p>Prepare Analysis Of Brownfields Cleanup Alternatives (ABCA)</p>	<p>Outputs:</p> <ul style="list-style-type: none"> • Approved ABCA documenting how and why cleanup alternative was selected • ABCA placed in information repository <p>Outcomes:</p> <ul style="list-style-type: none"> • Ensure proper cleanup alternative is selected and communicated to the public 	<p>11/30/15</p>	
<p>Implement 30-Day Public Comment Period on ABCA</p>	<p>Outputs:</p> <ul style="list-style-type: none"> • Allow for review and comment of cleanup related documents 	<p>12/1/2015</p>	

	<p>Outcomes:</p> <ul style="list-style-type: none"> • Allow for consensus on cleanup 		
Public Meetings	<p>Outputs:</p> <ul style="list-style-type: none"> • Meetings to inform the public of cleanup activities and provide a chance for input & comment <p>Outcomes:</p> <ul style="list-style-type: none"> • Improve understanding of cleanup and allows for potential modifications based on public input 	<p>One public meeting during ABCA Public Comment Period. Additionally, community input will be solicited through the HEALChicopee website</p>	
<p>Prepare Decision Document</p> <ul style="list-style-type: none"> • Document results of public comment period and public meeting to include comments received, public meeting attendance, response to relevant comments, selection of final cleanup remedy and any changes to the final cleanup remedy 	<p>Outputs:</p> <ul style="list-style-type: none"> • Memo or letter, with appropriate attachments <p>Outcomes:</p> <ul style="list-style-type: none"> • Ensure that public comment process is documented and final cleanup remedy is selected 	12/31/15	
<p>Historic Preservation</p> <ul style="list-style-type: none"> • Assist EPA Project Officer in collecting information and determining if Section 106 applies 	<p>Outputs:</p> <ul style="list-style-type: none"> • Information and reports required to comply with Section 106 historic preservation requirements <p>Outcomes:</p> <ul style="list-style-type: none"> • Compliance with Section 106 historic preservation requirements 	8/31/15	
Work with community partners to ensure commitments are implemented	<p>Outputs:</p> <ul style="list-style-type: none"> • Commitments that were identified in proposal are implemented <p>Outcomes:</p> <ul style="list-style-type: none"> • Increase coordination with neighborhood stakeholders 	Ongoing	

Task 2: Cleanup Design & Procurement

Task 2 – Cleanup Design & Procurement Subtasks (Commitments)	Anticipated Outputs (projected activities, deliverables, reports) and Anticipated Outcomes (projected results, effects, improvements)	Anticipated Accomplishment Date(s) (Month/Year)	Actual Accomplishment Date(s)
Obtain Licensed Site Professional (LSP) Services <ul style="list-style-type: none"> • Prepare Request For Proposals (RFP), evaluate applications, conduct interviews, hire LSP • Prepare scope of work, negotiate fees and execute Contract documents • Develop deliverables schedule & project timeline • Prioritize, track and evaluate contractor products • Conduct periodic project status meetings with contractor to discuss project issues and priorities 	Outputs: <ul style="list-style-type: none"> • High quality, professional work products that meet the City’s and EPA’s expectations • Confirmation in quarterly report that LSP selection was completed Outcomes: <ul style="list-style-type: none"> • Maintain effective work force to meet workplan commitments 	8/31/15	
Hold a kickoff meeting with State, EPA and LSP	Outputs: <ul style="list-style-type: none"> • Meeting, Agenda & Minutes Outcomes: <ul style="list-style-type: none"> • Ensure all agencies are in agreement with the cleanup plan 	1/31/15	
Prepare Site Specific Quality Assurance Project Plan and Health & Safety Plan <ul style="list-style-type: none"> • Prepare a SSQAPP for any environmental post cleanup sampling to be conducted on sites and submit to EPA for approval 	Outputs: <ul style="list-style-type: none"> • EPA approved SSQAPP • Place SSQAPP in information repository Outcomes: <ul style="list-style-type: none"> • Ensure proper confirmatory testing methods and analytical data results are achieved 	1/31/15	
Prepare Cleanup Design & Engineering Documents <ul style="list-style-type: none"> • Complete additional pre-cleanup assessment, if required • Development construction documents and technical specifications • Develop budget detailing use of EPA funds for cleanup and any additional funding that may be needed to support the project • Complete RFP/Bid package for project (including Davis-Bacon requirements) 	Outputs: <ul style="list-style-type: none"> • Approved cleanup plan, engineering/design documents and budget • Documents placed in information repository Outcomes: <ul style="list-style-type: none"> • Ensure cleanup will be done in compliance with state response program and EPA funds will be used only for eligible costs 	2/29/16	

<p>Project Bidding & Cleanup Contractor Selection</p> <ul style="list-style-type: none"> • Advertisement • Bid Reviews • Selection • Contract Execution 	<p>Outputs:</p> <ul style="list-style-type: none"> • RFP/ Bid Package • Selection of Cleanup Contractor <p>Outcomes:</p> <ul style="list-style-type: none"> • Ensure selected Cleanup Contractor is qualified and able to complete cleanup work as anticipated in Bid Documents 	3/31/16	
<p>Ensure Site is Enrolled in VCP</p> <ul style="list-style-type: none"> • Ensure the City has enrolled the site in the MA cleanup program 	<p>Outputs:</p> <ul style="list-style-type: none"> • Site is enrolled in the MA response program <p>Outcomes:</p> <ul style="list-style-type: none"> • Cleanup is in compliance with Massachusetts Contingency Plan (MCP) 	8/31/15	

Task 3: Cleanup Activities

Task 3 – Cleanup Activities Subtasks (Commitments)	Anticipated Outputs (projected activities, deliverables, reports) and Anticipated Outcomes (projected results, effects, improvements)	Anticipated Accomplishment Date(s) (Month/Year)	Actual Accomplishment Date(s)
<p>Project Status Meetings / LSP Oversight</p> <ul style="list-style-type: none"> • Conduct periodic project status meetings with LSP and Cleanup Contractor to discuss issues and priorities • LSP conducts site inspections during cleanup activities to ensure compliance with cleanup plans 	<p>Outputs:</p> <ul style="list-style-type: none"> • Hold Meetings • Minutes to document meeting discussions & decisions • LSP weekly inspections (as needed) • Site reports by LSP • Documents placed in information repository <p>Outcomes:</p> <ul style="list-style-type: none"> • Ensure all projects priorities are addressed by the LSP and Cleanup Contractor • Ensure cleanup is in compliance with all federal and MA regulations 	Ongoing; as required	
<p>Davis-Bacon Documentation</p> <ul style="list-style-type: none"> • Conduct site inspections to ensure proper wage rates and posters are available to workers on-site • Collect, review and maintain payrolls • Conduct on-site labor interviews 	<p>Outputs:</p> <ul style="list-style-type: none"> • Payrolls, labor interviews <p>Outcomes:</p> <ul style="list-style-type: none"> • Ensure compliance with Davis-Bacon requirements 	Ongoing; during cleanup activities	
<p>Cleanup Activities</p> <ul style="list-style-type: none"> • Complete cleanup activities per approved cleanup action and engineering/technical documents 	<p>Outputs:</p> <ul style="list-style-type: none"> • Cleanup and management of on-site debris, waste and contaminated soils <p>Outcomes:</p> <ul style="list-style-type: none"> • Prepare site for redevelopment • Protect health and environment of adjacent neighborhood 	Ongoing; anticipated to begin 4/1/16	
<p>Green and Sustainable Remediation (GSR)</p> <ul style="list-style-type: none"> • Incorporate green and sustainable remediation principles/techniques into the cleanup project • Address regional climate change and resiliency issues per ABCA analysis 	<p>Outputs:</p> <ul style="list-style-type: none"> • GSR language in ABCA and RFP • Track and report GSR in quarterly reports • Documentation of review of potential climate change impacts/project resiliency to cleanup project <p>Outcomes:</p> <ul style="list-style-type: none"> • Greener and more sustainable cleanup • Long-term viability of cleanup project in light of climate change impacts 	Before, during, and after cleanup activities	

<p>Cleanup Documentation</p> <ul style="list-style-type: none"> • Prepare and submit close-out documentation to MassDEP and EPA indicating that the cleanup is complete and protective to human health & the environment and identifies any institutional controls and long term monitoring 	<p>Outputs:</p> <ul style="list-style-type: none"> • Final cleanup reports documenting cleanup is complete • Place documents in repository <p>Outcomes:</p> <ul style="list-style-type: none"> • MassDEP approval of cleanup and ensure cleanup is protective of human health and the environment 	6/30/16	
<p>Cleanup Complete Documentation</p> <ul style="list-style-type: none"> • Receive final cleanup complete determination letter from LSP determination and submit to EPA 	<p>Outputs:</p> <ul style="list-style-type: none"> • Letter from LSP • Letter submitted to EPA • Placed letter or documentation in information repository, reported in ACRES and quarterly reports <p>Outcomes:</p> <ul style="list-style-type: none"> • Cleanup project completed • City advances Request for Design Proposals for site redevelopment 	9/30/16	

Task 4: Post-Cleanup Monitoring

Task 4 – Post-Cleanup Monitoring Subtasks (Commitments)	Anticipated Outputs (projected activities, deliverables, reports) and Anticipated Outcomes (projected results, effects, improvements)	Anticipated Accomplishment Date(s) (Month/Year)	Actual Accomplishment Date(s)
Collection of post-cleanup samples	Outputs: <ul style="list-style-type: none"> • Development of sampling plan and timeline for sampling • Collection of samples and analytical results Outcomes: <ul style="list-style-type: none"> • Ensure cleanup has met MCP cleanup levels 	Following completion of cleanup activities; anticipated to begin on 6/30/16	

5. QUALITY ASSURANCE

Prior to undertaking confirmatory sampling, the City of Chicopee, through its LSP, will prepare and submit a Quality Assurance Project Plan (QAPP) which meets with the approval of the U.S. EPA Region I Brownfields Program. The QAPP will describe the sampling and analytical strategies, methods and procedures approved by EPA.

6. PRE-AWARD COSTS

The City of Chicopee requests the approval of pre-award costs for this Cooperative Agreement. It is estimated we will need \$45,000 to do the following activities:

- Register and attend the National Brownfields Conference; and
- Complete LSP procurement & contract execution.

7. ATTACHMENT 1

Please see Attachment 1, Budget Details for Tasks I, II, III & IV.

Task 1: Cooperative Agreement Oversight

Position/Title	Estimate Time (Hours)	Hourly Wage	Total
Personnel	0	0	0
Total Personnel	0	0	0
Fringe	0	0	0
Travel	/	/	\$2,500.00
Supplies	/	/	\$500.00
Contractual	0	/	0
Total Federal Funding	/	/	\$3,000.00
Cost Share (Cleanup & RLF only)	0	/	0
Total Budget			\$3,000.00

Explanation of Costs

Travel:

- Brownfields 2015: Chicago, IL – Two (2) City Representatives
 - Registration (2 people x \$200.00/person) = \$400.00
 - Hotel (2 rooms x 4 nights x \$200.00/night) = \$1,600.00
 - Meals (2 people x 4 days x \$50.00/day) = \$400.00
 - Local Transportation (i.e. tax, metro, etc.) = \$100.00

**Airfare will be covered through funding budgeted in a separate Brownfields Cleanup Work Plan already approved by the City and EPA.*

Supplies:

- Public Meeting Advertisements (1 x \$150.00/ad) = \$150.00
- Copying & Postage \$150.00
- Ongoing development of HEALChicopee Website = \$200.00

Task II: Cleanup Design & Procurement

Position/Title	Estimate Time (Hours)	Hourly Wage	Total
Personnel	0	0	0
Total Personnel	0	0	0
Fringe	0	0	0
Travel	/	/	0
Supplies	/	/	0
Contractual	/	/	\$40,500.00
Total Federal Funding	/	/	\$40,500.00
Cost Share (Cleanup & RLF only)	/	/	0
Total Budget			\$40,500.00

Explanation of Costs

Contractual:

- Contractual Costs include the procurement of a Licensed Site Professional (LSP) by the City to provide professional environmental services, cleanup project design & bidding and cleanup oversight of the project.

Task III: Cleanup Activities

Position/Title	Estimate Time (Hours)	Hourly Wage	Total
Personnel	0	0	0
Total Personnel	0	0	0
Fringe	0	0	0
Travel	/	/	0
Supplies	/	/	0
Contractual	/	/	\$132,000.00
Total Federal Funding	/	/	\$132,000.00
Cost Share (Cleanup & RLF only)	/	/	\$40,000.00
Total Budget			\$172,000.00

Explanation of Costs

Contractual:

- Contractual Costs include the procurement of Cleanup Contractor to complete the cleanup project designed for the site. Please refer to Subtasks in Task III: Cleanup Activities in the Workplan.

Cost Share:

- The City of Chicopee will meet the 20% cost share under Task III with Community Development Block Grant (CDBG) funds. All \$40,000.00 of the Cost Share will be directed towards cleanup activities and the contractual agreement with the Cleanup Contractor.

Task IV: Post-Cleanup Monitoring

Position/Title	Estimate Time (Hours)	Hourly Wage	Total
Personnel	0	0	0
Total Personnel	0	0	0
Fringe	0	0	0
Travel	/	/	0
Supplies	/	/	0
Contractual	/	/	\$24,500.00
Total Federal Funding	/	/	\$24,500.00
Cost Share (Cleanup & RLF only)	/	/	0
Total Budget			\$24,500.00

Explanation of Costs

Contractual:

- Contractual Costs include costs associated with any required long term post-cleanup monitoring that may be required following completion of cleanup activities. This Task may be included in the City's procurement of a Licensed Site Professional (LSP).