

A. COVER LETTER

(Attached)

B. APPLICANT INFORMATION

Title: East Cornerstone/Downtown Redevelopment Project

Grant Type: Cleanup of hazardous substances.

Dollar Amount: \$170,000 - hazardous substance

Applicant: City of Yankton, South Dakota

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Location: Yankton, Yankton County, South Dakota

Population: 13,528 (City of Yankton)
816 (project target area)

Special considerations: The City qualifies for special small and rural city consideration based on the fact that its population is less than 100,000. Also, Yankton County was designated a federal disaster area in 2002 and 2004. The proximity of the Missouri River to the proposed Brownfields cleanup site is also noteworthy, as the section of the river flowing past Yankton has been designated a National Recreational River.

CLEAN-UP GRANT THRESHOLD CRITERIA

A. APPLICANT ELIGIBILITY

The applicant is the City of Yankton. The property proposed for cleanup is the former Jensen Scrap Yard, which was assessed as part of an EPA Brownfields Assessment Demonstration Pilot (EPA Pilot, Cooperative Agreement #BP-9887010-0). The City of Yankton has no responsibility for any of the environmental pollution that has occurred on the property.

B. COMMUNITY NOTIFICATION¹

Information about the City's Brownfield activities has been made available to the citizens of Yankton ever since the initial assessment began in 2002. The public is aware that the City will be applying for cleanup funding. Public information and input activities include:

- Recent city commission discussion on August 9th, August 23rd, September 13th, October 11th, and October 25th.
- A prominent, front-page article in the *Yankton Press and Dakotan* on November 2, 2004.
- The City of Yankton's website "cityofyankton.org", which has a considerable amount of information about the City's Brownfield experience.
- A letter from the City to about 200 households in the Brownfields area.

A copy of this application has been made available for public review at the Yankton City Hall and on the City's website. The City has encouraged public comment about the project.

C. LETTER FROM STATE ENVIRONMENTAL AUTHORITY

The South Dakota Department of Environment & Natural Resources (SDDENR) was directly involved in the EPA Pilot Assessments and continues to support the project. See **Attachment A**.

D. SITE ELIGIBILITY AND PROPERTY OWNERSHIP ELIGIBILITY

- 1a. The site is not listed on the National Priorities List.
- 1b. The site is not subject to any orders or judicial consent decrees issued to or entered into by parties under CERCLA.
- 1c. The site is not subject to the jurisdiction, custody, or control of the United States government.
- 2a. Jensen Scrap Yard (referred to hereafter as "Scrap Yard").
- 2b. 204 Mulberry Street.
- 2c. The site is contaminated by historical accumulation of hazardous substances co-mingled with *de minimus* levels of petroleum. No specific spill or release event was identified by EPA Pilot assessments.

¹ Community notification items are available upon request.

- 2d. The EPA Pilot ASTM E1527 Phase I assessment identified that the 1.25 acre site was owned until May 2004 by Mr. Robert Jensen. Mr. Jensen had owned the site since 1948, and used it as a scrap yard and salvage operation. Prior to Jensen's ownership, a railroad line was present on the site back to the late 1800s. The railroad was active throughout most of the 1900s, but the tracks were pulled up around 1980. Other historical uses of site prior to Jensen's ownership include the commercial sale of agricultural implements, industrial storage of bulk oil, and residential use.

Although the City purchased the property from Jensen in May 2004, he has until January 2005 to vacate the property. He continues to operate on the site as he removes his equipment. Scrap metal is still present, as well as used batteries, electrical equipment, hydraulic equipment, and various automotive parts.

- 2e. The EPA Pilot Phase II assessment of the site found arsenic, polynuclear aromatic hydrocarbons (PNAs), total petroleum hydrocarbons (TPH), chromium, lead, and polychlorinated biphenyls (PCB). Recognized environmental conditions include: onsite storage of metal and certain electrical, hydraulic, and automotive equipment on the ground surface; the storage of used batteries; and 55-gallon oil drums on the ground surface with no secondary containment. These conditions produce environmental impairment, increase the risk to human health if not managed, and inhibit the property's future development potential.
3. A property-specific determination is not needed for the site. Isolated, co-mingled PCBs less than 50 parts per million and not subject to an involuntary action are present at the site.
4. The site has become contaminated through over a century of overlapping industrial and commercial activity, beginning with the railroads and continuing up to the salvage yard operation. The Phase II assessment sampled and tested soil and groundwater using a combination of judgmental and statistical sampling designs approved by the EPA and SDDENR. Laboratory analysis measured chemicals in soil/fills and groundwater above laboratory method detection limits. Site soils are impacted above the development thresholds established as EPA Region 9 Preliminary Remediation Goals. Elevated arsenic concentrations were generally distributed throughout soils and appear to be the result of natural contribution. PNAs, total petroleum hydrocarbons (TPH), chromium, lead, and PCBs were identified in the upper two feet of soil. Lead was identified in some areas to depths of eight and one-half feet. TPH was identified as part of the volatile and semi-volatile analysis subject to limits of the Petroleum Exclusion. Residual TPH is co-mingled with hazardous substances.

The impacts do not pose an imminent danger to the public. They can be remedied and managed within SDDENR cleanup programs as isolated, focused removals at one shallow and one deep location involving an estimated 4,500 cubic yards of soil.

5. No additional assessment is required. Under the EPA Pilot, a Phase I ASTM E-1527 Environmental Site Assessment was completed on June 5, 2003. A Phase II environmental assessment approved by EPA Region 8, with cost-to-remedy analyses, was reported September 3, 2003. The assessment included preliminary Phase III cost-to-remedy analyses for a range of future land uses, including residential, and types of presumptive remedies.

In September/October 2004, the Pilot refined the Phase II/III cost-to-remedy analysis for “Jensen Scrap Yard, Potential Remedy #2c – Industrial/Nonhazardous Soil: Excavation and Off-Site Subtitle D Landfill Disposal Remedy of Soils (Non-Hazardous) To EPA PRG Industrial Standard”, Inset 24 of EPA Pilot phase II report. These revised cost-to-remedy estimates are reflected in this application.

6. The City of Yankton has no responsibility for contaminants at the site. There are no ongoing or anticipated environmental enforcement actions on the site.
- 7a. The site was purchased from Jensen by the City of Yankton in May 2004. Mr. Jensen has until January 2005 to vacate the property.
- 7b. All hazardous material releases on the site occurred before the City of Yankton purchased the property, and the City is in no way responsible for any environmental contamination present.
- 7c. Phase I and Phase II EPA Pilot assessments of the site were completed under EPA and SDDENR oversight by Terracon, Inc. In designing the Phase II Pilot assessment, the Phase I was revisited for consistency with definitions of the Small Business Liability Relief and Brownfields Revitalization Act, including issues of all appropriate inquiry (AAI). Terracon staff are qualified as environmental professionals using the 2004 EPA Final Rules definitions of AAI. Terracon has conducted over 27 EPA Brownfield pilot or grant assessment projects.
- 7d. The historical uses on the site have been described previously. The City of Yankton only acquired ownership of the property in May 2004, and no new uses have occurred there. As mentioned, Mr. Jensen still is operating his scrap yard business on the site, even as he is in the process of removing his equipment.
- 7e. The City of Yankton is in no way liable for any contamination present on the site, nor is the City affiliated with anyone that may be liable.
- 7f. Mr. Jensen, the former owner of the property potentially is responsible, but conditions of assessment do not warrant regulatory action. The City of Yankton has no business or contractual relationship whatsoever with Mr. Jensen (other than the purchase of the site). No one in Yankton city government has a familial relationship with Mr. Jensen.
- 7g. The City will take reasonable steps to expedite site remedy with SDDENR upon award of a cleanup grant. There are no releases or deposition of hazardous substances occurring, and the City will not engage in activity that releases or deposits such substances. After Mr. Jensen has vacated the property, all existing structures, including the perimeter fencing, will have been removed. The City will then erect signs warning people of the hazards present. Also, the City will develop a soil management plan that will convey with the property and address residual levels of hazardous substances for future construction, landscaping, and utility work.
- 7h. The City of Yankton will cooperate fully with SDDENR throughout the cleanup process. The City will comply with all land use restrictions, information requests, and any administrative subpoenas issued in connection with the property. All required notices will be provided.

CLEAN-UP GRANT RANKING CRITERIA

A. HAZARDOUS SUBSTANCES CLEANUP GRANT BUDGET

Funds will implement the removal of soil at the Scrap Yard to eliminate health risks, thus preparing the site for redevelopment. Following are the estimated costs for each project task.

Table 2

Budget Categories	Task 1 Program Oversight	Task 2 Community Involvement	Task 3 Cleanup Design²	Task 4 Cleanup/ Closure²	Task 5 Remedy Support²	Budget Subtotal
Travel ¹	\$5,000	\$0	\$0	\$0	\$0	\$5,000
Contractual	\$7,000	\$8,000	\$5,000	\$140,000	\$5,000	\$165,000
Grant Subtotal	\$12,000	\$8,000	\$5,000	\$140,000	\$5,000	\$170,000
City Cost Share	\$2,880³	\$1,440³	\$0	\$27,280⁴	\$2,500	\$34,100

Table developed from "Cleanup Planning For Jensen Scrap Yard: Refined Cost-to-Remedy Analysis", Terracon, Inc., October 29, 2004, with input from the City of Yankton.

Note 1: Includes travel for City staff to Brownfields 2005 and 2006 conferences.

Note 2: Allocated from "Cleanup Planning For Jensen Scrap Yard: Refined Cost-to-Remedy Analysis", Terracon, Inc., October 29, 2004, Remedy Scenario #2c reported October 29, 2004. Complete document available upon request.

Note 3: Direct programmatic costs ONLY for City services to prepare requisite quarterly and annual reports to EPA, and participate in Task 1 activities described below. Personnel costs will include assistance from staff of Planning and Development District III.

Note 4: See table in previous Section F. Direct hire alternative available with removal contractor if City equipment/staff not available.

Task 1: Program Implementation and Oversight. Includes project coordination, consultant and contractor hiring, implementation, progress monitoring, meetings at regional peer communities, and five meetings with SDDENR in Pierre, South Dakota over a period of two years. It also includes continuation of the Brownfields website and posting of public reports.

Task 2: Community Involvement. Includes stakeholder consultation and public progress presentations to encourage public participation. It will involve interactive public sessions on the development of institutional controls for the property.

Task 3: Cleanup Design. Includes information development and implementation, and cleanup action planning and scheduling. It involves the preparation of plans and specifications, cleanup contracting, cleanup activities, disposal characterization sampling, and analysis and preparation of documents. Specific technical elements will include remedy evaluation/reports and design approved by SDDENR, quality assurance plans, a site health and safety plan, remedy monitoring/testing revision of the EPA Pilot Phase II site conceptual model for public risk and as-built documentation, disposal characterization/confirmation, and Subtitle D landfill permits.

Task 4: Site Cleanup & Closure. This task involves implementing the cleanup as developed with and approved by SDDENR. Specific technical elements will include excavating and loading ~4,500 cubic yards of contaminated soils from two areas, removal, confirmation sampling, transportation/disposal to Subtitle D landfill, cleaning, Subtitle C disposal contingency, and backfilling with imported fill.

Task 5: Post-Closure & Remedy Support. This action includes developing documents and controls that will protect public health and monitor effectiveness of the closure into the future. Specific elements will include a post-closure stormwater management plan and a post-closure soil management plan produced by the City for future owners/developers.

B. COMMUNITY NEED

1. The target community for this project is Census Tract 9661, Block Group 4, which is the location of the Scrap Yard. The total population of this block group is 816. As shown in Table 3, the area is characterized by very low incomes.

Table 3

Area Statistics	United States	Census Tract 9661, Block Group 4
Family poverty rate	9.2%	16.6%
Individual poverty rate	12.4%	25.2%
Unemployment rate	4.0%	2.8%
Median family income	\$50,046	\$26,161
Per capita income	\$21,587	\$15,443
Minority population	22.9%	9.4%
Housing vacancy rate	9.0%	9.9%
Owner occupancy rate	66.2%	34.5%

Source: 2000 U.S. Census

A misleading statistic is the target area’s minority population. Although the figure of 9.4 percent is well below the national average of 22.9 percent, it is higher than Yankton’s overall minority percentage of 5.6 percent. Most of the minorities are American Indians, many of whom come from underprivileged backgrounds. The area’s low unemployment rate also is misleading. Combined with low median incomes, it indicates that most people in the area have jobs in low-income occupations.

Although Block Group 4 is considered the target community for this project, Yankton is small enough that the project will directly impact the entire city. Yankton is a “blue-collar” town, and the economic hub of southeast South Dakota. The major local employers are retail and manufacturing businesses, along with large health care and public institutions. Poverty is not a significant problem, but incomes are modest in comparison to the rest of the nation.

Overall, the City of Yankton is not as poor as the target community, but it is still below the national average in terms of family and personal income levels. This fact, plus the City’s small size, justifies the need for outside financial assistance. The City also has several major

financial obligations, including a new high school, a new technical institute, a proposed public safety center, and a new bridge over the Missouri River.

Recent downturns in the local economy have further strained the community's financial resources. These downturns include a recent business closing that resulted in the loss of over 600 jobs; the closing of three manufacturing plants; the closing of two major discount stores; and the closing of a large department store. Unemployment filings increased significantly, and Yankton's unemployment rate is now higher than it was prior to these closings.

Severe droughts led to a federal disaster declaration for the City of Yankton and Yankton County in 2002, and the effects of the drought are still being felt. Yankton is an agricultural service center, and the economic harm from the drought is working its way through local businesses. Local banks have noted that farmers receive 60 percent of their income from government transfer payments, placing the farmers in a precarious financial position. Sales taxes and other city revenue have declined as a result of the loss of income to area residents.

Despite these hardships, the community has supported cleanup and redevelopment activities. For instance, the latest report of the Auld-Brokaw Trail Committee is that over \$1,000,000 in private donations has been pledged toward the development of the Auld-Brokaw Trail.

2. The Scrap Yard's cleanup will benefit the target community in many ways. First, a public health threat will be removed. Although the City will put up warning signs around the perimeter of the site after it is vacated, access to the site will be easier than it is now. If there is no cleanup, this will pose a risk to neighborhood children, who could come into contact with contaminated soil and scrap metal if they play on the site. Neighborhood residents also may be at greater risk from wind-blown soil particles from the property. Cleanup and redevelopment of the property also will have aesthetic benefits for neighborhood residents. The area will become a more attractive place to live, which should, in turn, increase local property values.
3. Yankton's Brownfields EPA Pilot area covers roughly 40 city blocks in the downtown/riverfront area. Phase I assessments were performed at nine properties within this area. Phase II assessments were done at the Scrap Yard, at the adjacent Block 49 and 70 property, and at several parcels in Block 69.

Yankton's Brownfields have had a variety of impacts on the city. Regarding public health, the Phase II environmental report found no immediate threat, but the potential does exist, particularly given the number of nearby residences. As noted previously, the Scrap Yard site still contains residual scrap metal materials and debris that pose a public hazard. Contaminated soil poses dermal and dust inhalation/ingestion risks, and the community perception is that the contamination at the Scrap Yard, as well as on Block 49 and 70, has the potential to have much wider health and environmental impacts.

Regarding environmental impacts, groundwater contamination requiring remedy has not been required by SDDENR at any site, but if the contaminants are not cleaned up, ground water quality could be harmed. Storm water runoff from the Brownfields poses a risk to the

Missouri River, which is used by Yankton and downstream communities as their primary source of drinking water.

The economic impacts of the city's Brownfields have been quite significant. The Brownfield target area is located in Yankton's original industrial district. For the last several years, the area has been the primary focus of the City's development efforts, as leaders have tried to "reinvent" downtown Yankton. The City has been somewhat successful in this effort, but the Brownfields have hindered further commercial development. The Scrap Yard and adjacent Block 49 and 70 property have been the main impediments to development, because of their high visibility and land use history. The Block 49 and 70 site is being developed, but the Scrap Yard remains an impediment to further redevelopment in the area.²

Finally, the Brownfields detract from the aesthetic qualities of the community. The Scrap Yard, Blocks 49 and 70, and Block 69 are located along Second Street, one of the main avenues through downtown Yankton. They are easily visible to travelers, and they present an unattractive image. In addition to their high visibility, the proximity of the Missouri River and Yankton's Riverside Park are compelling reasons why the properties need to be redeveloped. The Scrap Yard site is especially critical because of its location between Riverside Park and Yankton's central business district. This geographic orientation has the effect of weakening the City's connection with the Missouri River, the region's only notable natural feature and the source of Yankton's civic identity.

C. SUSTAINABLE REUSE OF BROWNFIELDS

1. Cleaning up the Scrap Yard for development makes sense environmentally because it will redirect development away from the edge of Yankton, which is where most new businesses and residential homes are being built. By reducing urban sprawl, the project will lead to a reduction in resource consumption - the resource in this case being land. This is consistent with Yankton's comprehensive plan, which emphasizes more development in the urban core, rather than on the city's periphery.
2. The project will stimulate economic development by allowing development to occur on the site, which should spur further redevelopment in the area. Yankton Area Progressive Growth (YAPG) has been marketing the Scrap Yard site and the other Brownfields in the area to potential developers. Several inquiries have been made about the Scrap Yard, and it is likely that the site will be developed soon after it is cleaned up.

The Scrap Yard's strategic location, as described earlier, is the reason community leaders are confident that its cleanup will encourage further redevelopment in the downtown area. The site is a barrier to investment in the area, and its renewal is likely to have a positive impact on other Brownfields and other under-utilized properties in the area.

It will take a major expenditure of political capital and private resources to bring the downtown/riverfront area back to prominence. Failure to act could result in the continued

² Contaminated soil is being removed from the Block 49 and 70 site using South Dakota Department of Environment and Natural Resources funds.

release of hazardous contaminants, declining property values, loss of jobs, and aesthetic deterioration. Neither the City nor YAPG will be in a position to move forward with redevelopment initiatives until the contamination is addressed.

3. Redevelopment of the Scrap Yard site is not an isolated project, but a critical component of the City's redevelopment plans. The City's master plan shows various concepts for the downtown area, all of which show the Scrap Yard and the surrounding area being redeveloped for productive use. This vision is being realized through many public and private sector investments in the area. Community leaders envision the Scrap Yard site as being occupied by a commercial business or office building that will add to the vibrancy and diversity of downtown Yankton. To ensure that appropriate redevelopment does occur, the City will place deed restrictions and/or covenants on the property. Appropriate development will help reestablish in both a physical and an aesthetic sense the connection between the City's core and the Missouri River/Riverside Park area.
4. Existing public infrastructure is sufficient for the type of commercial or office space development planned for the property. All utilities (water, sewer, gas, electricity) and roads are in place. The City recently completed a major road widening and realignment project in the area, which will provide even greater access to the property.
5. Development of the site should encourage additional downtown development in Yankton. It will reduce sprawl, and result in additional job opportunities in the inner core of the city. Potential workers for new downtown businesses may come from the surrounding neighborhood. The workers may not use public transportation to get to work, since Yankton is too small to have an extensive public transit system, but the traffic patterns that result as downtown Yankton grows should be more efficient and sustainable.
6. The Yankton community has become more aware of the issues surrounding Brownfields and their negative environmental and economic impacts. For example, Yankton officials worked with the business community during the assessment process. Such communication will continue. This outreach and engagement will raise further the public's awareness of environmental issues, thus helping prevent the creation of future Brownfields.

D. CREATION AND/OR PRESERVATION OF GREENSPACE/OPEN SPACE OR OTHER NONPROFIT PURPOSES

Redevelopment of the site will spur additional development in Yankton's downtown, which will preserve open space on the fringes of the city. The City is focusing its development efforts on the downtown area in order to revitalize the urban core and to discourage fringe development.

Site redevelopment also will benefit Yankton's two main greenspace amenities, Riverside Park and the Auld-Brokaw Trail³. The park is located directly across from the site, and the trail is located just east of the park. Site cleanup and redevelopment will provide long-term aesthetic benefits to both the park and the trail.

³ The trail is named for Tom Brokaw, a native of Yankton.

E. COMMUNITY INVOLVEMENT

1. The public has had ample opportunity to voice its opinions regarding redevelopment of the City's Brownfields during the comprehensive plan process. However, City leaders understand that encouraging further public input is important as new findings emerge and development proposals are considered. Therefore, the City will continue to involve the public during the cleanup phase. The City will follow two philosophies:
 1. Project ownership begins with direct and timely information; and
 2. Public and private interests are best served when a consensus is achieved.

Throughout Yankton's experience in the Brownfield program, the people of the community have been informed as to:

- What the Brownfields assessment and proposed cleanup is all about;
- What the benefits are for active public participation;
- What the consequences may be if the Brownfields are not cleaned up;
- What plans the City has for the downtown area after cleanup is complete; and
- What measures will be taken to ensure the long-term redevelopment of the area.

This dialog has occurred through a variety of public venues. Information has been presented at Yankton city commission meetings, on the City of Yankton's website, at formal Brownfield presentations to local community organizations, and at two special Brownfield events. The first event was held in April of 2003 at the start of the assessment, and the other was held in November 2003. Turnout for both events exceeded expectations. Notices regarding these meetings were published in the *Yankton Press and Dakotan*, and a letter was sent to neighborhood residents to further publicize the meetings. Brochures were also available for people to take home.

The City will continue to give citizens the opportunity to comment throughout the cleanup process. This application has been discussed at City commission meetings and is featured on the City's website. Also, the City mailed a letter about the application to approximately 200 households in the Brownfields area. To further publicize the application, City staff contacted the local newspaper, the *Yankton Press and Dakotan*, which ran a prominent story about the City's Brownfield experience. These efforts foster community support and understanding of the City's cleanup and redevelopment plans. A consensus is being achieved as to the best use of the downtown/riverfront area once the cleanup is complete.

2. The community is aware of the assessment and proposed cleanup at the site, and YAPG has been actively marketing the City's Brownfields to the development community. The City has involved many other local groups throughout the Brownfield process, as listed in Table 4. Most of these groups were engaged in downtown redevelopment long before the City became involved in the Brownfield program. Redevelopment of the urban core is the City's primary planning focus, and there is too much at stake for the City to exclude any potential partners in the redevelopment process.
As the assessment began, the City employed the resources and staff of the South Dakota Department of Environment and Natural Resources, which has provided technical knowledge

and expertise to complement the City's resources. SDDENR also arranged to have the Block 49 and 70 property cleaned up, which is scheduled to be completed in the spring of 2005.

- Cleanup progress will be communicated to the citizens of Yankton primarily through regular outreach meetings, the City's website, and newspaper articles. The outreach meetings will take place prior to meetings of the Yankton City Commission. They are planned to occur at least once every other month, but will be held more frequently if developments warrant. As with the assessment phase, there may be a special event where the public will be invited to share its thoughts on the project's progress.

People for whom English is not their first language also will be given the opportunity to be involved in the project. The Benedictine Sisters at the Sacred Heart Monastery in Yankton have provided translation services to Yankton's Spanish-speaking residents.

- The following table lists the community groups that have been involved in Yankton's Brownfields activities.

Table 4

ENTITY	CONTACT	PHONE	PROJECT ROLE
Yankton Area Progressive Growth	Ron Kraft	(605) 665-9011	Marketing the property for redevelopment.
Keep Yankton Beautiful	Gail Miner	(605) 665-8485	Ensuring that Yankton remains a clean, attractive city.
Yankton Chamber of Commerce	Bob Cappel	(605) 665-3636	Promoting economic development in Yankton.
Riverboat Days Committee	Pauline Rhoades	(605) 660-2033	Organizing Riverboat Days, Yankton's premier outdoor event, which occurs at Riverboat Park.
Yankton Historic Riverfront District	Ronda Barry	(605) 260-3003	Promoting a successful, vibrant downtown for Yankton.
Marne Creek Greenbelt Committee	Kathie Gerstner	(605) 665-4885	Reclaiming Marne Creek, which flows by the eastern edge of the Brownfield area.
Yankton Planning Commission	Steve Pier, Chairman	(605) 665-3000	Guiding land use development in Yankton.
Habitat for Humanity	Ken Halverson	(605) 665-5040	Helping build homes for Yankton's poorer families. Many of their homes are in the City's Brownfield area.

These groups have elevated the community's level of awareness about Brownfield issues. A primary mechanism for addressing these issues was through the development of Yankton's comprehensive plan. A major component of the document was the downtown area master plan, and many of the groups listed here participated in the development of that section. During its drafting, a great deal of discussion occurred regarding downtown redevelopment and the role that Yankton's Brownfields would play in redevelopment.

Also, as mentioned earlier, the City has been assisted by the South Dakota Department of Environment and Natural Resources, which has relevant experience in dealing with groundwater and soil contamination. SDDENR is required by South Dakota law to be

involved whenever soil and/or groundwater contamination is reported. The department's groundwater quality program staff will be heavily involved in the cleanup project through oversight and direction, contacting companies that provide cleanup services, reviewing cleanup work plans, and monitoring cleanup activities.

F. REDUCTION OF THREATS TO HUMAN HEALTH AND THE ENVIRONMENT

1. The funds will be used to clean up the contaminants on the site that pose an excessive risk above remedy EPA Region 9 and SDDENR-based thresholds to human health and the environment. Details on the specific materials to be removed are discussed earlier in this document. Cleanup will be performed to ensure that contamination does not migrate to adjacent properties, the groundwater, or the Missouri River, and that it will not adversely impact workers at the site.
2. The South Dakota Department of Environment and Natural Resources will continue its involvement throughout the cleanup process, as it has during the assessment phase of the project, to ensure that the cleanup is accomplished in a manner protective of human health. Its staff will review sample results, review remediation reports, and work with Yankton Area Progressive Growth and any identified property developers to ensure that the cleanup is protective of construction workers and future occupants of the structures built on the property. As previously discussed, State of South Dakota Brownfields funds are being used to clean up the adjacent Block 49 and 70 property.
3. The primary project decision produced by Terracon in its Phase II assessment determined that the Scrap Yard is environmentally impaired. The assessment identified soil impacted by arsenic, lead, chromium, TPH, PNAs, and PCBs relative to EPA industrial Preliminary Remediation Goals (PRGs) or statewide standards set as the development thresholds.

The cleanup is a removal action of approximately 4,500 cubic yards of impacted soils exceeding threshold standards for arsenic and lead, but below levels classified as hazardous waste. Remedy Scenario #2c was selected from assessment conducted under the EPA Assessment Demonstration Pilot (*Phase II Environmental Site Assessment, Jensen Scrap Yard and Vacant City-Owned Parcels: Blocks 49 and 70*, United States Environmental Protection Agency, Region 8, Cooperative Agreement No. BP-9887010, September 3, 2003). Remedy #2c was refined to budget estimates in *Cleanup Planning For Jensen Scrap Yard: Refined Cost-to-Remedy Analysis* (Terracon, Inc., October 29, 2004), Section 14. Also considered were containment and more complex uses of engineering controls. Budgets for this proposal were developed from Section 12.7.1: Jensen Scrap Yard Scenarios of that report. Cleanup plans will incorporate EPA quality assurance plans consistent with funding under a Cooperative Agreement.

Reduction of residual hazardous substances will occur to bring site-wide levels below project industrial remediation goals primarily for heavy metals and PNAs. Remedy will simultaneously remove other volatile organic compounds and semi-volatile organic compounds (as petroleum and PNAs) co-mingled with hazardous substances as *de minimus* concentrations. The Agency for Toxic Substances and Disease Registry (ATSDR) indicates several studies have shown that inorganic arsenic can increase the risk of lung cancer, skin

cancer, bladder cancer, liver cancer, kidney cancer, and prostate cancer. Public health agencies have determined that inorganic arsenic is a human carcinogen. Birth defects have been observed in animals exposed to inorganic arsenic. ATSDR suggests that those living or working in areas with high arsenic levels in water or soil should use cleaner sources of water and limit contact with soil.

Lead can affect almost every organ and body system, especially the central nervous system. Lead also damages kidneys and the reproductive system. The effects are the same whether it is breathed or swallowed. At high levels, lead may decrease reaction time, cause anemia, cause muscle weakness, and possibly affect the memory. It also can damage the male reproductive system. The connection between these effects and exposure to low levels of lead is uncertain. The U.S. Department of Health and Human Services has determined that lead acetate and lead phosphate may reasonably be anticipated to be carcinogens based on studies in animals. There is inadequate evidence to clearly establish lead's carcinogenicity in people.

Cleanup will reduce levels of residual compounds and further limit potential contact protective of commercial land use. Specifically, the Region 9 PRG-based reduction will be within the goals of the National Contingency Plan for target risk levels between 10^{-04} and 10^{-06} . Cleanup also will produce a condition of reduced availability for transfer to surface water runoff or groundwater that could eventually move to the nearby Missouri River.

4. The City has relied upon the Brownfield expertise of SDDENR and the technical consultant to devise a cleanup plan that is protective of human health and the environment, and that complies with all federal and state laws. Deed restrictions and/or covenants will be placed on the property to ensure it is redeveloped in accordance with the City's vision for the area.
5. No engineering controls have been proposed as part of remedy. The primary institutional controls that will be used are the deed restrictions and/or covenants that will be placed on the property to control the post-cleanup use of the site. Also, the City is in the process of developing a stormwater management ordinance that will regulate the volume and state of stormwater runoff from properties. This will be supported by development of property-specific stormwater management and soil management plans incorporated into a restrictive covenant on the property and running with the land as further assurance that residual chemicals not removed will not impair human health or the environment.

G. LEVERAGING OF ADDITIONAL RESOURCES

1. The cost estimate for the cleanup phase is \$204,100. This estimate was produced from "*Cleanup Planning For Jensen Scrap Yard: Refined Cost-to-Remedy Analysis*", Terracon, Inc., October 29, 2004. The estimated cost for site redevelopment, based on the office building that will be built on the Block 49 and 70 property, is approximately \$275,000. Redevelopment costs will be incurred by the private sector.
2. The City of Yankton has committed a substantial amount of money and labor toward the redevelopment of the Scrap Yard site and surrounding area. To date, approximately 615 hours of City labor has been devoted to activities related to the Brownfield assessment. The City has spent over \$4 million on infrastructure improvements in the immediate area,

including a major realignment of roads very near the Scrap Yard. Also, the City spent \$300,000 to acquire the Scrap Yard property.

During cleanup, many of the administrative and programmatic tasks will be provided by City of Yankton staff. Any cash match needed will come from the City's general revenue fund.

3. The City of Yankton is committed to providing any funds necessary to match the grant funds. If truly extraordinary circumstances cause cleanup costs to rise far above current estimates, Yankton may be able to apply to SDDENR for low-interest loans to cover the gap if the department receives federal Brownfields Revolving Loan Funds.

H. ABILITY TO MANAGE GRANTS

1. City of Yankton staff have considerable experience in managing federal grant projects. The City's experience with the Brownfield assessment has familiarized its staff with the operations of the Environmental Protection Agency. The City is in good standing with EPA on its assessment grant, and all reporting requirements are being met. The City also will have Planning and Development District III available to provide grant management assistance as needed. The District III office has a 30-year history of working with Yankton on various projects involving federal funds, including Economic Development Administration and Community Development Block Grant projects.
2. The City of Yankton has managed grant funds from several federal agencies, including the Economic Development Administration, the Environmental Protection Agency, Housing and Urban Development, and the Federal Aviation Administration. The City has never had an adverse audit finding, nor has it ever been required to comply with "high risk" terms and conditions. Planning and Development District III also has extensive experience managing federal funds. The district administers approximately 100 projects at any given time, most of which involve federal funds.
3. The City of Yankton was the recipient of an EPA Brownfields cooperative agreement. The City has complied with all quarterly reporting requirements, Brownfields reporting measures, and annual financial status reporting.
4. The City of Yankton was awarded Brownfields assessment grant funds in 2002. Currently, \$53,783 remains to be drawn. An additional \$46,316 in assessment costs has been incurred since the first and only drawdown, which will leave \$7,467 remaining.
5. With the Brownfields funds, the City has had Phase I environmental assessments completed at nine sites, and Phase II assessments completed at the Scrap Yard, at the Block 49 and 70 property, and at several parcels in Block 69. These assessments have given community leaders a much better understanding of the nature of the contamination at the sites.