R08-20-C-003

NORTHERN CHEYENNE TRIBE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
P.O. BOX 128
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U.S. EPA 2020 Brownfields Assessment Grant Application – Narrative Information Sheet

1. Applicant Identification: Northern Cheyenne Tribe, P.O. Box 128, Lame Deer, MT 59043

2. Funding Requested:
   a. Grant Type: Multi-Site Cleanup
   b. Federal Funds Requested:
      i. Requested amount: $364,500
      ii. Cost share waiver requested: Yes
   c. Contamination: Hazardous Substances

3. Location:
   a. Tribally-owned lands in Lame Deer, Northern Cheyenne Indian Reservation, Rosebud County, MT.

4. Property Information:
   Former IHS Housing Site, 430 Beaverheart Street, Lame Deer, MT 59043
   Former Tribal Office Building Site, 19 Cheyenne Avenue, Lame Deer, MT 59043
   Julene Redneck Site, 119 Blackhorse Street, Lame Deer, MT 59043
   Food Bank Site, 27 Kit Fox Street, Lame Deer, MT 59043
   Old Chamber of Commerce Site, 29 Blackstone Street, Lame Deer, MT 59043
   Air Force Housing Site, 201 Dull Knife Drive, Lame Deer, MT 59043

5. Contacts:
   a. Project Director: Wayne Roundstone, Brownfields Coordinator, (406) 477-6506 ext. 110, wayne.roundstone@cheyennenation.com, P.O. Box 128, Lame Deer, MT 59043
   b. Chief Executive: Rynalea Whiteman Pena, President, Northern Cheyenne Tribe, (406) 477-4867, rynalea.pena@cheyennenation.com, P.O. Box 128, Lame Deer, MT 59043

6. Population: Approximately 4,900 members of the Northern Cheyenne Tribe reside on the Reservation. In this application, funds are being requested for the community of Lame

Deer. According to the U.S. Census, the 2013-2017 5-year population estimate was 2,188. Approximately 94% of the residents are American Indian.

7. Other Factors Checklist:

Community population is 10,000 or less	Pg. 1
The applicant will assist a federally recognized Indian Tribe	Pg. 1
The priority brownfield sites are impacted by mine-scarred land	N/A
Secured firm leveraging commitment	Pg. 3
Proposed sites adjacent to a body of water	Pgs. 1-2
Renewable energy or energy efficiency	Pg. 3
30% or more of the overall budget to be spent on reuse planning	N/A

8. Letter from the State or Tribal Environmental Authority
   According to EPA Guidance, a letter from the Northern Cheyenne Tribe Environmental Protection Department is not required since the Northern Cheyenne Tribe is the applicant.

Narrative /Ranking Criteria Outline for <u>Cleanup</u> Grant Application

1. Project Area Description and Plans for Revitalization

a. Target Area and Brownfields

i. **Background and Description of the Target Area:** The Northern Cheyenne Tribe (NCT) of southeastern Montana is requesting EPA funds to clean up six sites in Lame Deer, Montana. Our people have a long and storied history. The Northern Cheyenne travelled the continent from the Hudson Bay area in the 1600s southwest to present day Montana. They endured numerous encounters with US military forces, a cholera epidemic, the Battle of the Little Big Horn, and a malaria outbreak. They suffered a lack of food and water, the Spanish influenza, German measles, and a battle for mineral rights on the Northern Cheyenne Indian Reservation. The Reservation was created in 1884 and is located on nearly 700 square miles of rolling prairies, sandstone outcrops, and ponderosa pines. Roughly 4,900 Tribal members live on the Reservation. The Tribal headquarters is in Lame Deer, the target area for this grant application.

As visitors drive along US Highway 212 through southeastern Montana, many keep their blinders on and do not stop on the Reservation due to the blight caused, in part, from brownfields sites on the main streets of our communities. Due to persistent poverty we have not been able to maintain the buildings in our community. Lack of adequate, safe, and clean housing is a major problem, and numerous brownfields sites are abandoned housing units that are unfit for occupation.

The NCT continues to build on its successful 128(a) Brownfields Tribal Response Program. In 2017, we received $300,000 for assessment on sites in Lame Deer and throughout the reservation. We conducted Phase II hazardous substance assessments on six sites based on community need and redevelopment potential. We developed a draft Analysis of Brownfields Cleanup Alternatives for each site. We are applying for a $364,500 brownfields hazardous substance cleanup grant to mitigate asbestos and lead-based (LBP) paint. We are requesting a waiver of the cost share requirement due to hardship. Redevelopment will include greenspace, residential uses, a homeless shelter, wellness center, and a fitness complex.

ii. **Description of the Brownfield Site(s):** The NCT is targeting six sites for cleanup in Lame Deer. A Phase II environmental site assessment (ESA) for each site conducted in 2019 identified asbestos and LBP.

Air Force Housing: The site originally consisted of 16 manufactured residential units that were reportedly brought to Lame Deer from the Malmstrom Air Force Base in Great Falls, Montana. Built in the 1960s, they were placed on the Reservation between 1996 and 2004. Eleven of the homes are currently occupied while three are vacant. Three of these 14 structures will be rehabilitated once hazardous building materials are removed. One structure has burned and only a foundation remains of another. Asbestos-containing materials were identified, including adhesives and fillers, roofing components, floor tile, and vinyl sheet flooring. Several exterior and interior paints were found to contain lead. Potential human exposure pathways include inhalation of asbestos fibers, and inhalation and ingestion of LBP.

Former Food Bank: This building sits vacant, is partially burned, and is a known locale for illegal drug use. Asbestos was confirmed in the bathroom flooring and in log chinking. The property is unfenced, and the site represents a public safety hazard and a health threat for local residents and workers. Thirteen paints were determined to contain lead. Potential human exposure pathways include inhalation of asbestos fibers, and inhalation and ingestion of LBP. The tribe would like to demolish the building, but the presence of contaminants is hindering property reuse. The site lies approximately 250 feet from Lame Deer Creek.

Former Indian Health Service (IHS) Housing: This former residential building for IHS employees sits abandoned in poor condition with a partially collapsed roof. Asbestos was confirmed in 10 building materials, and four types of interior paint were determined to contain lead. Potential human exposure pathways to these materials include inhalation of asbestos fibers and inhalation and ingestion of LBP. Building demolition and site reuse have been delayed by the presence of hazardous materials.

Julene Redneck Site: This log-framed former home is abandoned, dilapidated, and lacks a roof. The predominantly burned interior of the building contains vegetation and debris. The property is unfenced, and the site represents a public safety hazard and a health threat for local residents and workers. Asbestos was confirmed in exterior caulking, and two surfaces contained lead. Potential human exposure pathways to these materials include inhalation of asbestos fibers, and inhalation and ingestion of LBP. The presence of hazardous building materials has been an impediment to building demolition, debris removal, and site reuse. The site is located approximately 300 feet from Lame Deer Creek.

Old Chamber of Commerce: The site includes a two-story commercial building and a log cabin, both of which are abandoned, dilapidated, and represent public safety hazards. The commercial building was reportedly constructed in the 1930s. The property is unfenced, and the site's structures are health threats for local residents and workers. Asbestos-containing building materials were identified, including vinyl floor tiles, caulking, and a sprayed-on texture. Three paints on the building are considered LBP and surface soil samples from the perimeter of the Old Chamber building contained lead at elevated concentrations. Potential human exposure pathways to these materials include inhalation of asbestos fibers, inhalation and ingestion of LBP, and ingestion of lead in soil. Reuse of the property as a homeless shelter has been delayed by the presence of asbestos and LBP. The property is located about 40 feet from Lame Deer Creek.

Former Tribal Office Building: The building was formerly occupied by offices of the NCT, but is now vacant and has become dilapidated. The site is abandoned and the structure is in poor condition. The property is unfenced, and the site represents a public safety hazard and a health threat for local residents and workers. Asbestos was found in four building materials. Two of them contained greater than 1% asbestos, which will require special abatement considerations. LBP was found on exterior and interior surfaces. Potential human exposure pathways to these materials include inhalation of asbestos fibers and inhalation and ingestion of LBP. Building demolition and site reuse have been hampered by the presence of hazardous materials. Lame Deer Creek is located approximately 240 feet from the site.

b. Revitalization of the Target Area

i. **Reuse Strategy and Alignment with Revitalization Plans:** The cleanup and redevelopment of these six sites is critical to the community of Lame Deer and the NCT. In 2018, NCT teamed with local and state-based partners[1] to conduct community health meetings in order to develop priorities and identify key programming needs to improve the health and well-being of Lame Deer. We also conducted in-person surveys with 332 residents. Among the priorities that emerged were housing and homelessness, education and youth opportunities, and chronic disease[1]. In addition, EPA, in coordination with NCT, conducted Brownfields surveys in the summer of 2019 at the annual Northern Cheyenne Powwow. In accordance with our cleanup plans, the highest priority of residents was to cleanup and redevelop downtown Lame Deer.[2]

Air Force Housing: The NCT plans to reuse the structures, to the extent possible, as residences that are healthy, safe, and free from hazardous building materials. Three of the structures are currently vacant but can likely be renovated, which will provide additional residences for families on the long waiting list for homes. Any structures not reusable will be demolished, which will remove a safety hazard from the community. Redevelopment will help address the need for housing identified in the planning sessions.

Former Food Bank: The NCT plans to demolish the remains of the former food bank, transport the wastes offsite for disposal, and construct a wellness and fitness center. With a need for multiple services, NCT is evaluating the most beneficial programs for the wellness center including nutritional guidance programs, mental health services, a day care, fitness classes, and a range of other services. Using cleanup funds for a

[1] NCT 2018 Community Health Assessment; https://mthcf.org/wp-content/uploads/2018/10/NC-CHA_8.29.18-FINAL.pdf
[2] Greg Davis, EPA. Personal Communication, 9.27.2019

Resource Roadmap will help make program determinations. Reuse will provide facilities to promote healthy living, and fits with the opportunity for youth need identified in the planning sessions.

Former Indian Health Service Housing: The NCT plans to demolish the building and leave the site as public green space. Potential future amenities include a walking path, picnic tables, and a playground. Reuse will provide a recreational space and lunch spots for the employees at the neighboring IHS Administration building, surrounding tribal government offices, and students and faculty at Chief Dull Knife College.

Julene Redneck Site: The NCT plans to demolish the remains of the building, transport the wastes offsite for disposal, and reuse the property as a home site for a family on the long housing waitlist. This will help address the housing need identified in the planning sessions.

Old Chamber of Commerce: The site is located within the Lame Deer central business district, and has been identified as the location of a planned homeless shelter. Building reuse will serve Lame Deer residents as well as members of outlying communities on the Northern Cheyenne Indian Reservation. This will help address the temporary housing need identified in the planning sessions. Using funds to complete a Resource Roadmap will help bring the project to full fruition.

Former Tribal Office Building: The NCT plans to demolish the building and reuse the site as public green space with picnic tables and/or a parking lot. Removal of hazardous building materials will reduce threats to public safety and health for local residents and tribal government workers. This will help cleanup and make downtown Lame Deer more attractive, a priority of residents from the Powwow surveys.

ii. **Outcomes and Benefits of Reuse Strategy** Lame Deer and the entire Northern Cheyenne Indian Reservation are in a designated Opportunity Zone. Cleanup of sites in Lame Deer will clear the way for several non-profit uses including a community wellness and fitness center and a homeless shelter. Not only would these provide much needed services to an underserved community, but also create jobs, helping to spur economic development. During the community health surveys, 7% of residents stated they had no reliable childcare[3] but daycare services at the wellness center would help fill this need. Nutritional counseling at the center would also help educate residents on how to reduce their risk of diabetes. Housing and homelessness were identified as a top priority concern due to the lack of quality housing and overcrowding.[3] The nearest homeless shelter is in Birney, a 29-mile rural drive. Instead, people stay with friends and family which leads to high rates of overcrowding. Data was not available specifically for Lame Deer but 44% of residents on the reservation live in households with four or more people compared to 18% for all of Montana.[3] A homeless shelter would take the burden off friends and family and provide a safe place for those in need of a home. In addition, cleanup of the Air Force Houses will provide additional housing, free from asbestos and LBP. Unmet housing needs leads to higher mortality rates, poor health, and being at risk for serious chronic illnesses.[4] These land uses will help spur economic development by creating jobs. Using energy- efficient fixtures and home equipment is important for our low-income population when we build new housing. New green space at the former IHS housing and tribal office building will provide a welcoming environment to people traveling through town.

c. Strategy for Leveraging Resources

i. **Resources Needed for Site Reuse:** The Dept. of Environmental Protection (DEP) plans to contribute $10,000 from its Tribal Response Program to assist with cleanup grant activities (Attachment A). Despite a concerted effort, the DEP was not able to secure firm leveraged funding commitments from project partners for reuse of the sites prior to submittal of this application. We will continue to seek a commitment from the NCT Board of Health for planning support related to the proposed fitness complex and wellness center. We will also seek in-kind support from other tribal departments to support post-cleanup

[3] NCT 2018 Community Health Assessment; https://mthcf.org/wp-content/uploads/2018/10/NC-CHA_8.29.18-FINAL.pdf
[4] https://planh.ca/take-action/healthy-environments/built-environments/page/healthy-housing

demolition and site redevelopment using their personnel and equipment. As a federally recognized tribe, NCT is an eligible applicant for a number of redevelopment grants. For the homeless shelter, the NCT is exploring applying for a HUD Indian Community Development Block Grant. For the wellness center, we may apply for USDA Rural Development Community Facility funds. These funds are specifically for small, low-income communities and could be used for construction. A US Department of Health and Human Services Child Care and Development Block grant could help fund a day care. We are evaluating other USDA Rural Development programs, state and federal revolving loan funds, and funds from the NCT Housing Authority.

ii. **Use of Existing Infrastructure:** All six cleanup sites are located within Lame Deer and have adequate water, sewer, power, phone, and internet service for the redevelopment purposes. No infrastructure improvements should be needed to carry out cleanup and redevelopment.

2. Community Need and Community Engagement

a. Community Need

i. **The Community's Need for Funding:** Due to the unique relationship Reservation residents have with the United States government and its treaty obligations, NCT does not tax its members. The Tribe does not have a sound financial basis to fulfill the basic human needs of our members, which means we have no funds for completing assessment, cleanup, and redevelopment projects. Fees currently charged for water and wastewater services are not even adequate to cover utility maintenance costs. Our tribal departments are struggling and most funding comes from grants that typically must be expended on grant-specific items, and funds often cannot be shared between departments due to grant restrictions. We have no funding sources other than grants that could be brought to bear to clean up the sites included in this application. The poverty rate in Lame Deer is nearly 40%, well above equivalent figures for Montana (14.4%), and the nation (14.6%). The Lame Deer unemployment rate is 28.2 percent, and the per capita income is $13,791 which is approximately half that of the state of Montana. In addition, the Northern Cheyenne Indian Reservation is a "persistent poverty" jurisdiction according to the U.S Census Bureau, as shown in the table below.

Persistent Poverty Statistics – Northern Cheyenne Indian Reservation Poverty Rate					
	1990	**2000**	**2010**	**2014**	**2017**
Northern Cheyenne Indian Reservation	20.4%* / 35.3%*	46.1%	34.8%	44.5%	36.5%

Source: 2013-2017 American Community Survey 5-Year Estimates. * = Data for the Reservation not available. Rates are for Rosebud and Big Horn Counties, respectively, where the Reservation is located. Compiled from Persistent Poverty Statistics, KSU TAB Resources.

Local economic conditions will soon become worse due to a nearby industrial closure on the horizon. Tribal members are currently employed at the Colstrip energy plant 15 miles north of the Reservation or at businesses that are supported by the generating station. In 2016, the plant operator agreed to shut down two of its four units by 2022 in order to avoid purchasing costly pollution-control equipment. This closure will undoubtedly represent a significant local and regional economic disruption, and will impact the few available jobs. Since many tribal members work at this facility, job losses for our community are imminent.

ii. Threats to Sensitive Populations

(1) Health or Welfare of Sensitive Populations: The NCT community suffers from a number of health and welfare disparities, specifically for our sensitive populations. Approximately 93% of residents on the Northern Cheyenne Indian Reservation are American Indian and 38% of the population is under the age of 18. Of these young people, 46% live in poverty. This is more than double the rate of poverty for all young people in Montana (17.6%)[5]. The teen birth rate is 95 births per 1000 women age 15-19 which is nearly three times the number for white Montana women (32 births per 1000 women).[1] There is higher risk of complications with teen births including a higher risk of preterm birth and unfortunately, 13% of all

[5] Data are from the 2013-2017 American Community Survey Selected Population Characteristics data profile

pregnancies on the Northern Cheyenne Indian Reservation result in births prior to 37 weeks (compared to 9% for Montana white women). The nearest birthing hospital is in Billings, approximately 100 miles away. Children born to teen mothers have higher rates of being incarcerated during adolescence, lower levels of school achievement, and a higher likelihood of giving birth as a teen[6], which continues the cycle. Rates of homelessness in Lame Deer and on the Northern Cheyenne Indian Reservation are not available. A 2018 Community Health Assessment for the reservation identified homelessness and overcrowding as priority concerns. The closest emergency shelter for crime victims is more than an hour away in Billings. Vacant homes and buildings provide an obvious location for alcohol and drug use. Alcohol and drugs run rampant on Montana reservations. American Indians and Alaska Natives are six and a half times more likely to die from alcohol-related illness than any other U.S. race and twice as likely to be murdered or die unintentionally.[7] By cleaning up and reusing each of the sites, the number of vacant buildings on the Reservation will be reduced, which will decrease the number of locales likely to host illegal activity.

This grant has the ability to provide substantial health benefits to sensitive populations in the community above and beyond removing the risks to human health due to asbestos and LBP. The wellness and fitness center at the former food bank site will be a vital resource for youth and adults alike. The wellness center can provide programs to help prevent teen birth and to serve as a resource for young pregnant women so they will have an increased likelihood of having a full-term baby.

(2) Greater Than Normal Incidence of Disease and Adverse Health Conditions: Asthma and chronic obstructive pulmonary disease are the two most common types of chronic respiratory disease on the Northern Cheyenne Reservation. The EPA considers the Reservation an air quality non-attainment area for PM10, which refers to particles of very small size, and the area is consistently unable to meet EPA Air Quality Standards.[8] Asthma is the third-highest chronic disease diagnosis at the IHS hospital in Lame Deer, and in 2015 almost 20% of 10-14 year old children received an asthma diagnosis[9]. The main source of PM10 in Lame Deer is road dust.[9] Our brownfields sites may exacerbate air quality problems due to asbestos being released from dilapidated buildings that are burned or in complete disrepair. In addition, lung cancer is the third most common type of cancer on the Reservation and asbestos is a known carcinogen. By cleaning up all six of our sites, we will provide asbestos-free housing and safe public buildings.

A wellness center would also be beneficial to the significant number of adults with diabetes. The prevalence of adult diabetes on the Northern Cheyenne Reservation is 14% while the Montana rate is 8% and the U.S. rate is 9%.[9] According to IHS, Native Americans are almost three times as likely to die as non-Native Americans from diabetes.[7] According to the Northern Cheyenne 2018 Community Health Survey[9], 69% of adults reported they had exercised a total of 60 minutes or less for the previous week. With long, cold, and harsh winters, a wellness and fitness center would provide residents a place to gather for regular indoor exercise, which would help prevent the onset of diabetes.

(3) Disproportionally Impacted Populations: American Indians have long suffered environmental justice challenges. Several recent examples show how the Tribe is left out of major federal environmental decisions that affect our people. In 2017, NCT had to fight to keep sacred land in the Tongue River Basin from being mined for coal. Our Reservation is nearly surrounded with coal mines. We disproportionately shares the negative environmental consequences from government leasing their land for coal mining against their will and ruining sacred land. The Colstrip coal-fired power plant is approximately 19 miles from the northern border of our Reservation. Continuous air monitoring is required, and air monitoring stations are managed and maintained by the Northern Cheyenne Air Quality program. Such plants emit up to 84

[6] https://youth.gov/youth-topics/pregnancy-prevention/adverse-effects-teen-pregnancy
[7] https://www.ihs.gov/newsroom/factsheets/disparities/
[8] http://deq.mt.gov/Air/2017Air/Standards/airnonattainment
[9] Northern Cheyenne 2018 Community Health Assessment

hazardous air pollutants[10], and can travel many miles when attached to fine particulates. These emissions create environmental impacts and potential contributors to human health problems.

According to the EPA's online Environmental Justice Screening and Mapping Tool, the target area is characterized by a variety of Environmental Justice Indices that are elevated compared with non-tribal lands in the rest of Montana. These include particulate matter, ozone, and air toxics; lead-based paint (pre-1960 homes); cancer risk; and proximity to hazardous wastes. Environmental justice issues can surface as residents on limited incomes must live in substandard housing near contaminated property. The brunt of the impacts associated with brownfields is often absorbed by the poor and elderly in our communities.

b. Community Engagement

i. and ii. Project Partners and Project Partner Roles: The NCT has worked with organizations and other tribal departments to educate residents solicit input related to planned site cleanups and reuse/redevelopment. The table below lists select organizations and their commitments for this grant.

Partner Name	POC (name, email, phone)	Specific Project Role
Boys & Girls Club of the Northern Cheyenne Nation	Larissa Killsnight, Unit Dir. larissa@ncbgclub.org 406-477-8646	Help bring youth to the new wellness & fitness center and encourage physical activity in its programs.
Tribal Employment Rights Office	Shandi Eaglefeathers shandi.eaglefeathers@cheyennenation.com 406-477-6287	Match unemployed or underemployed individuals with potential jobs related to the cleanup and/or new businesses and monitor and document proper implementation of Indian Preference policies that promote Indian-owned businesses and Indian employment
People's Partner for Community Development	Sharon Small sksmall@hotmail.com 406-477-7723	Provide space for public meetings.
Eastern Montana Brownfields Coalition	Tori Matejovsky 406-653-2590 torimatejovsky@gmail.com	Provide EPA brownfields RLF funding if unanticipated cleanup costs arise.
Northern Cheyenne Tribal Board of Health	Eugene Little Coyote director@nctribalhealth.org 406-477-4900	Identify sensitive populations within the community and ensure they are not exposed to contaminants before, during, and after the cleanup.
Northern Cheyenne Tribal Housing Authority	Rodney Trehan streamline.rod@gmail.com 406-477-6419	Identify alternative housing arrangements for current occupants of the Air Force Housing site during abatement and cleanup.

ii. **Incorporating Community Input:** Community involvement will be critical to the success of the proposed cleanups and redevelopment of the sites. The community involvement plan will be completed within 3 months of grant award. We will re-publish and maintain our existing brownfields website. We will revise the existing fact sheet for each site and conduct public meetings in Lame Deer. Project updates will be posted on the web site and provided at Tribal Council meetings. Proposed brownfields-related events include two community meetings. We anticipate all cleanups happening within three months of each other. Therefore, at the first meeting we will present the final ABCAs and discuss the cleanup results of all sites at the second meeting. We held an initial publicly-advertised community meeting in Lame Deer in preparation for this grant application, and will follow a similar forum for future gatherings. NCT will engage local media outlets such as the Bighorn County News and the Powder River Examiner to spread the word about the cleanup plans. We will make accommodations for community members with disabilities, the elderly, and residents without telephones or Internet service. We will work with the Northern Cheyenne Transit Program to facilitate transportation. Documents relevant to the project will be presented in the Cheyenne language on an as-needed basis. Public meetings will accommodate hearing and sight concerns through large print publications and the use of disabled-accessible facilities as needed. A partner at the NCT Cultural Commission will assist with language accommodations and cultural considerations as needed.

[10] https://www.lung.org/assets/documents/healthy-air/emissions-of-hazardous-air.pdf

3. Task Descriptions, Cost Estimates, and Measuring Progress

a. **Proposed Cleanup Plan:** *Air Force Housing:* The Phase II ESA confirmed asbestos and lead-based paint on and within residential structures. Twenty-four materials containing greater than 1% asbestos were identified, including adhesives and fillers, roofing components, floor tile, and vinyl sheet flooring. Several exterior and interior paints contain lead. The preferred cleanup is abatement of asbestos and lead for 14 of the onsite structures, for future re-occupation by residents. Debris and wastes from two of the structures that can no longer be used will be transported to a Class II landfill.

Former Food Bank: The Phase II ESA confirmed the presence of asbestos in the bathroom flooring and in log chinking. Thirteen paints were determined to contain lead, including surfaces on ceilings, walls, and exterior window casings and window stops. Lead sampling indicates that if the building is demolished and disposed of in its entirety, the waste stream generated may be disposed of in a Montana Class II landfill as a non-hazardous waste. The selected cleanup method is abatement of asbestos, demolition of the onsite structures, and transport to a Montana Class II landfill.

Former Indian Health Service Housing: The Phase II ESA confirmed ten building materials with greater than 1% asbestos and four types of interior paint were determined to contain lead. The selected cleanup method includes abatement of asbestos in the onsite structure and transportation to and disposal of wastes at a Montana Class II landfill in anticipation of building demolition and site reuse.

Julene Redneck Site: A Phase II ESA confirmed the presence of asbestos in exterior caulking on the partially-burned structure. Two painted surfaces on the ends of the logs were found to contain lead. The cleanup plan includes demolition of the remains of the building and transport of the wastes offsite for disposal at a Montana Class II landfill.

Old Chamber of Commerce: The Phase II ESA confirmed asbestos-containing building materials in the Old Chamber building and onsite cabin, including vinyl floor tiles (VFT), mastic or adhesive associated with the VFTs, caulking around a roof exhaust vent, and a sprayed-on texture in the cabin. Three paints on the Old Chamber building and five paints on and in the cabin are considered LBP. Surface soil samples collected around the perimeter of the Old Chamber building contained lead at elevated concentrations. The cleanup plan includes abatement of asbestos and disposal at a Montana Class II landfill. Depending on renovation plans, lead abatement may also be required. Surface soil will be removed where elevated lead concentrations have been documented.

Former Tribal Office Building: The Phase II ESA confirmed asbestos in four building materials: vinyl sheet flooring and mastic; vinyl floor tile; drywall, tape and joint compound; and window glazing. Two materials contained greater than 1% asbestos, which will require special abatement considerations. A field survey using an X-Ray Fluorescence device identified six interior and exterior painted surfaces that contained lead. The cleanup plan includes abatement of hazardous materials and disposal at a Montana Class II landfill.

b. Description of Tasks/Activities and Outputs

Program Management
i. Project Implementation
• Oversight of cooperative agreement with EPA. • Financial and administrative grant management. • Coordination with project partners and EPA. • Completion of quarterly reports and upload of information into ACRES. • Procurement and management of a Qualified Environmental Professional (QEP). • Non-EPA resources: in-kind and financial support from our Tribal Response Program.
ii. Anticipated Project Schedule: Cooperative Agreement completed with EPA as soon as possible following award; grant management throughout the 3-year period; QEP procurement completed within 2 months of completion of Cooperative Agreement.

iii. Task/Activity Lead(s): NCT
iv. Output(s): 1 cooperative agreement, 1 RFP, 1 QEP contract, 12 Quarterly Reports, 12 ACRES updates, Attendance at Tribal Lands and Environment Forum conference for Brownfields Coordinator
Community Outreach
i. Project Implementation
• Community Involvement Plan • Public meetings • Updated fact sheets for each brownfields site to be remediated • Incorporation of previously-identified priorities and needs into reuse and redevelopment planning • Resource Roadmap for Old Food Bank and Old Chamber of Commerce sites. • Non-EPA grant resources: in-kind support from Tribal Response Program and project partners
ii. Anticipated Project Schedule: Community outreach will follow procurement of a QEP; Community Involvement Plan completed within 3 months of completion of Cooperative Agreement. Community involvement throughout the 3-year grant period. Reuse planning completed years two and three.
iii. Task/Activity Lead(s): NCT with QEP assistance and partner support
iv. Output(s): 1 Community Involvement Plan, 6 updated site fact sheets, 2 meetings; 2 Resource Roadmaps
Cleanup[11]
i. Project Implementation
• Purpose of cleanup plans: document the approaches that will be used to complete abatement of hazardous building materials. Evaluations of costs and cleanup alternatives. Each plan will be approved by EPA prior to implementation. • Purpose of cleanups: complete abatement of hazardous building materials at each structure in accordance with the cleanup plans. • Finalization of ABCAs • Cleanup and Cleanup Oversight • Non-EPA grant resources: in-kind support from our Tribal Response Program and project partners.
ii. Anticipated Project Schedule: Cleanup plans to be completed during the first year of the grant period. Cleanup activities to be completed during the 2nd and 3rd years of the grant period.
iii. Task/Activity Lead(s): QEP
iv. Output(s): 6 Final ABCAs, 6 EPA-approved cleanup plans; 6 site cleanups; 6 sites ready for reuse.
Cleanup Reporting
i. Project Implementation
• Purpose: document the approaches that were used to complete abatement of hazardous building materials and the results of each cleanup project.
ii. Anticipated Project Schedule: To be completed during the 2nd and 3rd year of the grant.
iii. Task/Activity Lead(s): QEP
iv. Output(s): 6 Cleanup completion reports and 6 NCT certifications that abatement has been completed.

c. Cost Estimates

Budget Categories (programmatic costs only)	Project Tasks				
	Program Management	Community Outreach	Cleanup	Reporting	Total
Personnel	$13,000	$6,400	$600	$600	$20,600
Fringe Benefits	$3,875	$1,915	$180	$180	$6,150
Travel	$3,000	$500	----	----	$3,500
Supplies	----	$1,500	----	----	$1,500

[11] The NC Tribe has already developed an EPA-approved QAPP as part of its existing Brownfields Assessment Program.

Contractual - Air Force	----	$1,600	$110,000	$4,500	$116,100
Contractual - Food Bank	----	$1,400	$18,100	$3,750	$23,250
Contractual - IHS Housing	----	$1,400	$52,800	$3,750	$57,950
Contractual - Tribal Office	----	$1,400	$30,750	$3,750	$35,900
Contractual - Redneck	----	$1,150	$14,950	$2,600	$18,700
Contractual - Old Chamber	----	$1,600	$74,750	$4,500	$80,850
Total Direct Costs	**$19,875**	**$18,865**	**$302,130**	**$23,630**	**$364,500**
Cost Share	$3,975	$3,773	$60,426	$4,726	$72,900
Cost Share Waiver	-$3,975	-$3,773	-$60,426	-$4,726	-$72,900
Total Budget	**$19,875**	**$18,865**	**$302,130**	**$23,630**	**$364,500**

Task 1, Program Management: Personnel costs calculated at 520 hours @ $25/hr = $13,000. Per quarter estimate: 10 hrs EPA reporting & records management; 10 hrs monthly progress meetings; and 23 hrs engagement with community and site work. Additional hours will be in-kind. Fringe was calculated at 30% of the personnel cost. Travel includes one trip for two staff to attend the Tribal Lands and Environment Forum (per person: $550 airfare, 3 nights lodging @ $450, and 4 days per diem/incidentals @ $500).

Task 2, Community Outreach: Personnel costs calculated at 256 hours for public meetings and redevelopment planning sessions @ $25/hr = $6,400. Per quarter estimate: 12 hrs redevelopment planning; 9 hrs public meetings. Additional hours will be in-kind. Fringe was calculated at 30% of the personnel cost. Travel includes day trips throughout the Reservation (vehicle and fuel). Supplies were calculated for meeting and planning, including white boards, markers, paper, and meals. Contractual was calculated at 2 public meetings @ $1,000 each for QEP costs = $2,000. 2 Resource Roadmaps estimated at $6,550.

Task 3, Cleanup: Personnel to work with QEP and review cleanup plans estimated at 24 hrs @$25/hour = $600. Fringe was calculated at 30% of the personnel cost. Cleanup plans estimated between $1,750 (Julene Redneck Site) and $3,000 (Old Chamber & Air Force sites) dependent upon extent of cleanup (total = $15,250). Cleanup costs based on estimates prepared for Phase II ESAs completed in 2019 for each site.

Task 4, Reporting: Personnel costs to review 6 final reports at 4 hours each (total 24 hrs) @ $25/hr = $600. Fringe was calculated at 30% of the personnel cost. Cleanup report contractual costs range from $2,600 (Julene Redneck) to $4,500 (Old Chamber & Air Force Housing sites) based on site complexity and hazardous building materials described in each Phase II ESA (total = $23,630).

Cost Share: NCT is requesting a cost-share waiver.

d. **Measuring Environmental Results:** The NCT brownfields coordinator will be responsible for tracking and measuring progress. He will routinely evaluate performance of the contract agreement work plan via quarterly reports and ACRES and discuss any obstacles with the EPA project officer. NCT and the EPA project officer will develop a plan to overcome any obstacles to achieve desired outcomes. Final outcomes will include: reduced risks to human health and safety, a homeless shelter; improved access to green space; additional opportunities for economic activity through site redevelopment; a community wellness complex and fitness center, and additional home sites. NCT is confident the cleanups and grant tasks will be completed within the three-year grant period.

4. Programmatic Capability and Past Performance

a. Programmatic Capability

b. Organizational Structure & ii. Description of Key Staff: NCT has the track record, capability, and administrative capacity to successfully manage a brownfields cleanup grant. The Northern Cheyenne DEP, formed in 1998, has successfully managed federal, state, and local grants. These include our current Brownfields Assessment grant Brownfields Tribal Response Program, which began in 2009, and. Our primary funding sources are the EPA, U.S. Department of Agriculture, U.S. Department of Energy, Bureau

of Indian Affairs, U.S. Fish and Wildlife Service, and PPL Montana, a local utility company.

Charlene Alden, Director of the DEP, will provide direction and supervision to ensure the Brownfields Program is completing its objectives. Ms. Alden has been employed with the Department since 2009 in this capacity, and has successfully overseen NCT's Brownfields Tribal Response Program for 10 years. Wayne Roundstone, the DEP's Brownfields Coordinator, will administer the technical work plan component of the grant. He is the manager of the existing Brownfields Tribal Response Program and the Brownfields Assessment grant program. Wayne will serve as the day-to-day manager of the brownfields cleanup grant activities. He has been with the Department for two years, and has prior experience working for the Chief Dull Knife College science department. Mr. Roundstone is well-qualified and motivated to help expand the Department's existing brownfields program. Marty Ewing, the DEP Office Manager, will fill the role of budget manager. She has been employed with the Department for two years. During her tenure with the department, she has become knowledgeable in the areas of federal grant administration and project management. Ms. Ewing will ensure the timely expenditure of funds and the fulfillment of the financial requirements of the grant.

i. **Acquiring Additional Resources:** The Northern Cheyenne Tribe has a formal procurement policy which provides for the fair and equitable treatment of all persons in public purchasing by the Tribe, maximizes the purchasing value of public funds in procurement, and provides safeguards for maintaining a high-quality procurement system that has integrity. We will select a qualified environmental professional in accordance with our procurement policy.

c. Past Performance and Accomplishments

i. Currently Has or Previously Received an EPA Brownfields Grant

(1) Accomplishments: The Northern Cheyenne Tribe began receiving Tribal 128(a) funding in 2009. We received $100,000 each year from 2009 through 2014, and approximately $105,000 from 2015 through 2019. Our current grant began October 1, 2019 and will continue through September 30, 2020. Approximately $87,500 in grant funds remain. Specific outputs that we accomplished include: an inventory of approximately 180 potential brownfields sites on the Reservation, eight Phase I ESAs, one field sampling plan approved, and one Phase II ESA completed. These outputs were reported to EPA in quarterly reports and through ACRES. We received a $300,000 Brownfields Assessment Grant in May 2017. Over the course of our Brownfields assessment grant, we have overseen the successful completion of Phase I ESAs at two hazardous substances and two petroleum sites and Phase II ESAs at seven hazardous substances sites. Our Brownfields Assessment program has produced cleanup cost estimates for seven hazardous substances sites. Our assessment grant is scheduled to be closed out in 2020.

Programmatic and management components of grant administration for both the 128(a) and the Brownfields Assessment grants have included: timely preparation and submittal of quarterly reports, Phase I ESA reports, and Phase II ESA reports to the U.S. EPA; management oversight of ESAs performed by subcontractors; provision of technical assistance to other Tribal Departments as necessary; and preparation of property profile forms and timely submittal of information within ACRES. Our office just completed the successful cleanup of a property containing hazardous building materials in central Lame Deer using 128(a) funds. This experience will be valuable as we oversee the cleanup of the six properties identified in this application.

(2) Compliance with Grant Requirements: We have complied with grant work plans, schedules, and conditions and have successfully managed funds and performed all phases of work under each grant. We have provided oversight during the successful completion of brownfields ESAs, and have ensured that documents such as Sampling and Analysis Plans (SAPs) are followed by contractors and that all necessary activities are performed using appropriate methods. Funds have been fully expended by the end of each grant cycle. All funds have been expended at the end of each grant cycle. Approximately $155,000 in funds remain in our Brownfields Assessment grant, and we anticipate drawing down these funds by the end of the grant period.

ATTACHMENT A
COMMITTED LEVERAGED RESOURCES

NORTHERN CHEYENNE TRIBE
ENVIRONMENTAL PROTECTION DEPARTMENT
PO Box 128 Lame Deer, MT 59043
(406) 477-6506 (p) (406) 477-8294 (f)

December 2, 2019

Melisa Devincenzi
U.S. EPA Region 8
1595 Wynkoop Street (EPR-B)
Denver, Colorado 80202-1129

RE: Committed Leveraged Resources

Dear Melisa,

The purpose of this letter is to indicate that the Northern Cheyenne Tribe (NCT) Department of Environmental Protection (EPD) supports the NCT's application for a U.S. EPA Brownfields cleanup grant for FY 2020. The EPD receives Tribal Response Program (TRP) 128(a) funds from the EPA for Brownfields-related projects on the reservation. In the event that the competitive cleanup grant application is successful, we will commit **$10,000.00** of our TRP resources to assist with cleanup-related tasks and salaries as our Brownfields Coordinator oversees the cleanups.

Please feel free to contact me if you have any questions.

Thank you,

Charlene W. Alden,
Director

ATTACHMENT B
THRESHOLD CRITERIA RESPONSE

Threshold Criteria Response

1. **Applicant Eligibility.** The Northern Cheyenne Tribe is an eligible entity to apply for a cleanup grant because it is a federally-recognized Indian Tribe. Documentation of eligibility is not required because the applicant is a tribe.
2. **Previously Awarded Cleanup Grants.** The sites proposed for cleanup have not received funding from a previously awarded EPA Brownfields Cleanup Grant.
3. **Site Ownership.** The Northern Cheyenne Tribe owns all of the sites proposed for cleanup.
4. **Basic Site Information**.
    - Former IHS Housing Site, 430 Beaverheart Street, Lame Deer, MT 59043
    - Former Tribal Office Building Site, 19 Cheyenne Avenue, Lame Deer, MT 59043
    - Julene Redneck Site, 119 Blackhorse Street, Lame Deer, MT 59043
    - Food Bank Site, 27 Kit Fox Street, Lame Deer, MT 59043
    - Old Chamber of Commerce Site, 29 Blackstone Street, Lame Deer, MT 59043
    - Air Force Housing Site, 201 Dull Knife Drive, Lame Deer, MT 59043
5. **Status and History of Contamination at the Sites**
    - The Former IHS Housing Site is contaminated by hazardous substances. The site formerly served as a residential building for health service workers and is currently unoccupied and unused. Asbestos containing building materials and lead-based paint have been documented at the site. The site became contaminated when hazardous building materials were used in construction prior to 1979. 10 building materials contain greater than 1% asbestos, and four types of interior paint contain lead.
    - The Former Tribal Office Building Site is impacted by hazardous substances. The onsite building was formerly occupied by offices of the Northern Cheyenne Tribe but is currently vacant and abandoned. Asbestos containing building materials and lead-based paint have been documented at the site. The site became contaminated when hazardous building materials were used in construction prior to 1979. Four building materials contain asbestos (two materials contain greater than 1% asbestos). Six types of interior and exterior painted surfaces contain lead.
    - The Julene Redneck Site is impacted by hazardous substances. The onsite building was formerly used as a residence but is currently vacant and abandoned. Asbestos containing building materials and lead-based paint have been documented at the site. The site became contaminated when hazardous building materials were used in construction prior to 1979. One building material contains asbestos, and two types of exterior painted surfaces contain lead.
    - The Food Bank Site is impacted by hazardous substances. The onsite building was formerly used as a food bank and a residence but is currently vacant and abandoned. Asbestos containing building materials and lead-based paint have been documented at the site. The site became contaminated when hazardous building materials were used in construction prior to 1979. Two building materials contain asbestos, and thirteen lead-based paint surfaces were documented.
    - The Old Chamber of Commerce Site is impacted by hazardous substances. The onsite building was formerly used as the offices of the Lame Deer Chamber of

Commerce but is currently vacant and abandoned. Asbestos containing building materials and lead-based paint have been documented at the site. The site became contaminated when hazardous building materials were used in construction prior to 1979. Four types of building materials contain asbestos, and five types of lead-based paint were documented. Lead concentrations were elevated in soils surrounding the building.

- The Air Force Housing Site is impacted by hazardous substances. Some of the onsite buildings are currently used as residences, while others are unoccupied or have partially burned. Asbestos containing building materials and lead-based paint have been documented at the site. The site became contaminated when hazardous building materials were used in construction prior to 1979. Seven types of building materials contain asbestos, and four types of lead-based paint were documented.

6. **Brownfields Site Definition.** The sites listed above meet the definition of a brownfield site and are a) not listed or proposed for listing on the National Priorities List; b) not subject to unilateral administrative orders, court orders, administrative orders on consent, or judicial consent decrees issue to or entered into by parties under CERCLA; and c) not subject to the jurisdiction, custody, or control of the U.S. Government. Lands owned by the Northern Cheyenne Tribe may be subject to the custody of the U.S. Government; however, land held in trust by the government for an Indian tribe is eligible for funding.
7. **Environmental Assessments Conducted.** ASTM-compliant Phase II Environmental Site Assessments for building materials have been completed for each of the sites listed above. The report dates are as follows:
    - Former IHS Housing Site – July 1, 2019
    - Former Tribal Office Building Site – June 7, 2019
    - Julene Redneck Site – June 4, 2019
    - Food Bank Site – April 26, 2019
    - Old Chamber of Commerce Site – September 11, 2019
    - Air Force Housing Site – November 15, 2019 (Draft)
8. **Enforcement or Other Actions.** The Northern Cheyenne Tribe is unaware of any ongoing or anticipated environmental enforcement or other actions related to the above sites.
9. **Property-Specific Determination.** Based on the information provided in the RFA guidance and the document entitled "Information on Sites Eligible for Brownfields Funding under CERCLA § 104(k)," the sites do not require property-specific determinations.
10. **a. Property Ownership Eligibility Information for Hazardous Substances Sites.** According to EPA guidance, the Northern Cheyenne Tribe, as a federally-recognized Indian tribe, is exempt from demonstrating that it meets the requirements of a CERCLA liability defense.

    b. Property Ownership Eligibility Information for Petroleum Sites. Not Applicable.

11. **Cleanup Authority and Oversight Structure.**
    a. The Northern Cheyenne Tribe Environmental Protection Department EPD will oversee the cleanups of the above sites with the assistance of a Qualified Environmental Professional (QEP). We have experience with similar cleanup projects in Lame Deer.

The Northern Cheyenne Tribe will consult with EPA to ensure that all cleanup plans are appropriate and that the cleanup activities and resulting transformed sites will be protective of human health and the environment. The Northern Cheyenne Trib will select a QEP using a competitive procurement process that complies with federal requirements using an approach similar to that employed for our existing Brownfields Assessment grant. We will ensure that the QEP contract is in place prior to beginning cleanup activities.

b. Access to neighboring properties will not create problems for this project because the sites proposed for cleanup are parts of larger tracts that are all owned by the Northern Cheyenne Tribe.

12. **Community Notification.** The following community notification documents are included with this Threshold Criteria Response as Attachment C:

- Draft Analysis of Brownfields Cleanup Alternatives (ABCA) for each site.
- Community Notification Ad.
- Public comments or a summary of the public comments received.
- The Northern Cheyenne Tribe's responses to those comments.
- Meeting notes or summary from the public meeting.
- Meeting sign-in sheets.

13. Cost Share Waiver Request. The Northern Cheyenne Tribe is requesting a waiver of the 20% cost share requirement due to undue hardship. The Hardship Waiver Request is included with this Threshold Criteria Response as Attachment D.

ATTACHMENT C
COMMUNITY NOTIFICATION DOCUMENTS

DRAFT Analysis of Brownfield Cleanup Alternatives (ABCA)
Air Force Housing Site
Northern Cheyenne Indian Reservation
Lame Deer, Rosebud County, Montana

Introduction and Background

The Northern Cheyenne Tribe (NCT) Environmental Protection Department (EPD) prepared this draft Analysis of Brownfields Cleanup Alternatives (ABCA) in anticipation of the NCT's application for a U.S. EPA Brownfields cleanup grant for the Air Force Housing site. The draft ABCA was developed following completion of a Phase II Environmental Site Assessment (ESA) at the property. The site is located in Lame Deer, the cultural and administrative center of the Northern Cheyenne Indian Reservation.

The site, whose address is 201 Dull Knife Drive, is located south of U.S. Highway 212 and east of Cheyenne Avenue in a residential area. The site contains 16 manufactured residential units that were reportedly brought to Lame Deer from the Malmstrom Air Force Base in Great Falls, Montana. The structures were built in the 1960s, and were placed on the site sometime between 1996 and 2004. The footprint of each structure is approximately 1,300 square feet, and the buildings are generally similar with respect to design, layout, and construction. Some of the residences are occupied, while others are unoccupied and/or burned.

The properties are generally served by city water and sewer utilities as well as electrical and phone services. Since many of the structures are occupied, ongoing exposures to asbestos and lead-based paint may be human health concerns. The unoccupied/burned structures are public safety hazards. The NCT plans to reuse the intact structures, to the extent possible, as revitalized residences that are healthy, safe, and free from hazardous building materials. Any structures that cannot be reused will be demolished.

A Phase II ESA building materials inspection was completed at the site in October 2019. A draft Phase II ESA report prepared in November 2019 evaluated the potential presence of asbestos and lead-based paint (LBP). A variety of asbestos-containing materials were identified at the site, including adhesives and fillers, roofing components, floor tile, and vinyl sheet flooring. Several exterior and interior paints were found to contain lead. Human exposure pathways to these materials include inhalation of asbestos fibers, inhalation of LBP, and ingestion of LBP. The ESA recommended abatement of asbestos materials prior to renovations of any structures.

<u>Cleanup Alternatives</u>

The NCT considered three cleanup alternatives for the Air Force Housing site. Under the first alternative, the "no action" alternative, the site would not be cleaned up. The site and onsite structures would remain a risk to human health and, in some cases, physical safety hazards. No new community assets would be created. The NCT has the ability to implement this alternative, because no activities would be carried out. Although no costs would be incurred in associated with implementation of the "no action" alternative, community benefits would not be realized and the area would remain blighted. Treatment of injuries or health problems resulting from unauthorized uses of the site would result in unexpected costs. This alternative is therefore not considered reasonable or effective because the redevelopment goal for the site would not be realized, and protection of human health would not be achieved.

The second alternative would include abatement of asbestos in onsite structures followed by demolition of the buildings, transport of the waste to a licensed facility, and site redevelopment with new construction. The total estimated cost to complete onsite abatement work, as presented in the Phase II ESA, is $108,785. The anticipated cost to remove and dispose of remaining building materials was not estimated but is expected to be at least $250,000. The site of the former structures would then be available for redevelopment as new residences.

The second alternative is not reasonable nor effective because it does not allow for site reuse without the need for substantial capital investment. The total estimated cost to complete abatement, as presented in the Phase II ESA, is $108,785. The total cost to implement this alternative would be higher than the third alternative (below), and insufficient funds are currently available to build any new structures. The NC Tribe may not be able to implement this plan in its entirety due to the high total cost of site reuse. With many families on the housing waiting list, an alternative that will decrease the number of livable units, even for a short time, would not be in the best interest of the community.

The third alternative would result in the abatement of asbestos in the residential units followed by renovation and reuse of the existing buildings. The estimated cost to complete renovations following abatement is approximately $110,000. Under this scenario, consideration would need to be given to the presence of LBP with respect to the means of renovation and potential future occupants (specifically children). Contractors performing renovation or restoration would need to be made aware of the presence of LBP, proper work methods, waste testing and disposal requirements, and required worker training and certifications. Depending on these factors, additional LBP testing and/or abatement may also be required.

The NCT prefers the third alternative. This alternative is reasonable and effective because it 1) allows for the safe reuse of the site and its structures for residential purposes, a critical public need in Lame Deer; 2) will prevent injuries resulting from unauthorized entry into unoccupied and burned buildings; 3) will not require funds for redevelopment of the site with new construction; and 4) is more cost effective than the second alternative. The total cost to implement this alternative is higher than the first (no-action) alternative but lower than the second (renovation) alternative. Based on the Phase II ESA cost estimate, the NCT will be able to complete abatement using EPA grant funds in anticipation of structural renovations.

Proposed Cleanup (Recommended Alternative) and Revitalization Plan

The preferred alternative is the third option discussed above: abatement of asbestos in the onsite structures in anticipation of building renovation and reuse as residences. Activities already completed in anticipation of site cleanup include: administrative and programmatic oversight; procurement of a technical consultant; preparation of a Quality Assurance Project Plan (QAPP); preparation of a site-specific Sampling and Analysis Plan (SAP); completion of a Phase II ESA Reports of Findings; preparation of a Community Outreach Plan; and development of a pre-cleanup site fact sheet. The remaining tasks include abatement of asbestos using industry standard methods; transportation to and disposal of wastes at an approved and licensed facility; and preparation of a final cleanup report.

This cleanup plan (residential re-occupancy) aligns well with the redevelopment vision advanced by community members in Lame Deer. Renovated and safe homes in Lame Deer will help the address the issues of inadequate and unsafe housing in the community.

Climate Change and Severe Weather Events

The EPA requires a discussion of whether climate change could impact the cleanup alternatives proposed above. According to the NOAA National Centers for Environmental Information, climate changes predicted for Montana include:

- Continued increases in mean annual air temperatures;
- Increased soil moisture loss during dry periods;
- Increased intensity of droughts;
- Fewer very cold days in the winter;
- Increased springtime precipitation that could result in severe flooding; and
- Increased frequency of wildfire occurrence and severity.

The proposed cleanup project would not be impacted to a significant degree by any of the climatic changes described above in ways that would differ from impacts sustained were the "no action" alternative to be implemented. The site is not in a floodplain and none of the alternatives involve subsurface remediation that would be impacted by increased flooding.

Cleanup Standards

This section summarizes standards for cleanup of asbestos and lead-based paint.

- The NCT will assume oversight responsibility for the site during the abatement process and will work with EPA, the State of Montana, and Qualified Environmental Professionals as needed.
- RCRA Toxicity Characteristic Leaching Procedure (TCLP) limits
- HUD total lead concentration of 0.5% by weight or 5,000 milligrams per kilogram (mg/kg) (not risk based; identifies a lead-based paint)
- EPA National Emission Standard for Hazardous Air Pollutants (NESHAP) for Asbestos (1% by weight) in 40 CFR 61.140-157
- Standards for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no EPA regulations or standards for airborne mold contaminants.

Applicable Laws

This section summarizes laws & regulations that would be applicable to the proposed cleanup.

<u>Lead</u>

Applicable codes, regulations, and laws that govern lead remediation/cleanup work and transport/disposal of lead-contaminated wastes include the following:

1. Code of Federal Regulations (CFR) Publications:
    a. OSHA 29 CFR 1926.62 Construction Industry Standard (1994)
    b. OSHA 29 CFR 1926.500 Guardrails, Handrails, and Covers
    c. OSHA 29 CFR 1910.134 Respiratory Protection

d. OSHA 29 CFR 1910.145 Specifications for Accident Prevention Signs and Tags
e. OSHA 29 CFR 1917.152 Hot Work
f. EPA 40 CFR 61 Subpart A, General Provisions
    i. 40 CFR 61 Subpart M NESHAP
    ii. 40 CFR 260-269 RCRA, Subtitle C

2. American National Standard Institute (ANSI) Publications:
    a. Z88.2-1980 Practices for Respiratory Protection National Institute for Occupational Safety and Health (NIOSH)

Asbestos

Applicable codes, regulations, and laws that govern lead remediation/cleanup work and transport/disposal of lead-contaminated wastes include the following:

1. Code of Federal Regulations (CFR) Publications:
    a. OSHA 29 CFR 1926.1101 Construction Industry Standard (1994)
    b. OSHA 29 CFR 1926.500 Guardrails, Handrails, and Covers
    c. OSHA 29 CFR 1910.134 Respiratory Protection
    d. OSHA 29 CFR 1910.145 Specifications for Accident Prevention Signs and Tags
    e. EPA 40 CFR 61 Subpart A General Provisions
    f. EPA 40 CFR 61 Subpart M National Emission Standard for Hazardous Air Pollutants
    g. EPA 40 CFR 763.120, 121 Asbestos Abatement Projects
    h. EPA 40 CFR 763 Subpart E AHERA, Asbestos-containing Materials in Schools
2. American National Standard Institute (ANSI) Publications:
    i. Z9.2-1979 Fundamentals Governing the Design and Operations of Local Exhaust Systems
    j. Z88.2-1980 Practices for Respiratory Protection National Institute for Occupational Safety and Health (NIOSH) Revised Recommended Asbestos Standard
3. Environmental Protection Agency (EPA):
    k. 560/5-85-024 Guidance for Controlling Friable Asbestos-Containing Materials in Buildings
4. State Requirements:
    l. Chapter 74 Administrative Rules of Montana
    m. Applicable sections of the Asbestos Work Practices and Procedures Manual, (2005)

DRAFT Analysis of Brownfield Cleanup Alternatives (ABCA)
Food Bank Site
Northern Cheyenne Indian Reservation
Lame Deer, Rosebud County, Montana

Introduction and Background

The Northern Cheyenne Tribe (NCT) Environmental Protection Department (EPD) prepared this draft Analysis of Brownfields Cleanup Alternatives (ABCA) in anticipation of the NCT's application for a U.S. EPA Brownfields cleanup grant for the Food Bank site. The draft ABCA was developed following completion of a Phase II Environmental Site Assessment (ESA) at the property. The site is located in Lame Deer, the cultural and administrative center of the Northern Cheyenne Indian Reservation.

The site, whose address is 27 Kit Fox Street, is located west of South Cheyenne Avenue, southwest of the IGA grocery, and east of Lame Deer Creek in a mixed-use neighborhood. A single-story structure of approximately 1,800 square feet, dating from about 1900, was originally constructed using hand-hewn logs. A newer metal-clad single-wide mobile home was reportedly moved onto the site in 1998 to provide additional storage for food items. A breezeway was later built to connect the two buildings. Prior to use as a food bank, the principal (log) building reportedly served as a residence. The property is served by city water and sewer utilities as well as electrical and phone services.

A Phase I ESA and a limited asbestos and lead-based paint inspection of the site were completed in 2013, when the food bank was not in operation and prior to an onsite fire. The 2013 inspection identified chrysotile asbestos in vinyl sheet flooring in the bathroom of the principal structure. Lead-based paint was identified in exterior door trim associated with the main building. Sometime between 2013 and 2018, a structure fire burned part of the log building and the majority of the mobile home. The site is abandoned, dilapidated, and the onsite buildings are in poor condition. The predominantly burned interior of the log building contains vegetation and debris. The property is unfenced, and the site represents a public safety hazard and a health threat for local residents and workers.

A Phase II ESA was conducted in 2019 to further evaluate building materials that may contain asbestos or lead-based paint. The assessment, which was published in April 2019, confirmed the presence of asbestos in the bathroom flooring, and also identified asbestos in log chinking. Thirteen paints were determined to contain lead, including surfaces on ceilings, walls, and exterior window casings and window stops. Potential human exposure pathways to these materials include inhalation of asbestos fibers, inhalation of lead-based paint (LBP), and ingestion of LBP.

The ESA recommended abatement of asbestos prior to building demolition. Lead concentrations in building materials would not preclude landfill disposal if the buildings are completely demolished. The NCT plans to demolish the remains of the building, transport the wastes offsite for disposal, and reuse the property for a wellness center and a fitness complex.

<u>Cleanup Alternatives</u>

The NCT considered three cleanup alternatives for the Food Bank site. Under the first alternative, the "no action," alternative the site would not be cleaned up. The site and onsite structures would remain

dilapidated and underutilized, a risk to human health, and a physical safety hazard. No new community assets would be created. The NCT has the ability to implement this alternative, because no activities would be carried out. Although no costs would be incurred in associated with implementation of the "no action" alternative, community benefits would not be realized and the area would remain blighted. Treatment of injuries or health problems resulting from unauthorized uses of the site would result in unexpected costs. This alternative is therefore not considered reasonable or effective because the redevelopment goal for the site would not be realized, and protection of human health would not be achieved.

The second alternative would result in the abatement of asbestos in the onsite structure followed by renovation and reuse of the building. Under this scenario, contractors that may perform renovation or restoration of the building would need to be informed of the presence of LBP, proper work methods, waste testing and disposal requirements, and worker training or certifications necessary to carry out the work. Consideration would need to be given to the presence of LBP with respect to the means of renovation and potential future occupants (specifically children).

The second alternative is not reasonable or effective because 1) the buildings are in poor structural condition and 2) the onsite structures are not compatible with the planned redevelopment of the site as a wellness center and a fitness complex. The total estimated cost to complete asbestos abatement, as presented in the Phase II ESA, is $15,557. The estimated cost to complete renovations following abatement is difficult to determine based on the poor condition of the building. The total cost to implement this alternative would likely be higher than the third alternative (below), and insufficient funds are currently available to rebuild the existing structure. The NCT may not be able to implement this alternative in its entirety due to the poor building condition and the community's desire to redevelop the site for a different purpose.

The third alternative would involve the asbestos abatement followed by building demolition, transport of the waste to a licensed facility, and redevelopment of the site as a wellness center and fitness complex. The total estimated cost to complete asbestos abatement, as presented in the Phase II ESA, is $15,557. Lead sampling indicates that if the building is demolished and disposed of in its entirety, the waste stream generated may be disposed of in a Montana Class II landfill as a non-hazardous waste. The anticipated cost to remove and dispose of remaining building materials is estimated to be approximately $28,000. The site of the former structure would then be available for redevelopment. Under this scenario, the site would be free from public safety hazards and human health concerns.

The NCT prefers the third alternative. This alternative is reasonable and effective because it 1) allows for the safe and beneficial redevelopment of the site; 2) will prevent injuries resulting from trespassing; 3) will ensure compatibility between the post-cleanup site condition and the redevelopment vision; and 4) is likely more cost effective than the second alternative. The total cost to implement this alternative is higher than the first (no-action) alternative but lower than the second (renovation) alternative. Based on the Phase II ESA cost estimate, the NCT will be able to complete abatement work using EPA grant funds in anticipation of building demolition, waste disposal, and site reuse.

Proposed Cleanup (Recommended Alternative) and Revitalization Plan

The preferred alternative is the third option discussed above: abatement of asbestos, demolition of the onsite structures, transport of the wastes to a licensed facility, and redevelopment of the site. Activities already completed in anticipation of site cleanup include: administrative and programmatic oversight; procurement of a technical consultant; preparation of a Quality Assurance Project Plan (QAPP); preparation of a site-specific Sampling and Analysis Plan (SAP); completion of a Phase II ESA Report of Findings; preparation of a Community Outreach Plan; and development of a pre-cleanup site fact sheet. The remaining tasks include asbestos abatement using industry standard methods; demolition of the onsite buildings; transportation to and disposal of wastes at an approved and licensed facility; and preparation of a final cleanup report. This cleanup plan aligns well with the redevelopment plan advanced by community members in Lame Deer, who would like to see the site redeveloped as a wellness center and fitness complex.

Climate Change and Severe Weather Events

The EPA requires a discussion of whether climate change could impact the cleanup alternatives proposed above. According to the NOAA National Centers for Environmental Information, climate changes predicted for Montana include:

- Continued increases in mean annual air temperatures;
- Increased soil moisture loss during dry periods;
- Increased intensity of droughts;
- Fewer very cold days in the winter;
- Increased springtime precipitation that could result in severe flooding; and
- Increased frequency of wildfire occurrence and severity.

The proposed cleanup project would not be impacted to a significant degree by any of the climatic changes described above in ways that would differ from impacts sustained were the "no action" alternative to be implemented. The site is not in a floodplain and none of the alternatives involve subsurface remediation that would be impacted by increased flooding.

Cleanup Standards

This section summarizes standards for cleanup of asbestos and lead-based paint.

- The NCT will assume oversight responsibility for the site during the abatement process and will work with EPA, the State of Montana, and Qualified Environmental Professionals as needed.
- RCRA Toxicity Characteristic Leaching Procedure (TCLP) limits
- HUD total lead concentration of 0.5% by weight or 5,000 milligrams per kilogram (mg/kg) (not risk based; identifies a lead-based paint)
- EPA National Emission Standard for Hazardous Air Pollutants (NESHAP) for Asbestos (1% by weight) in 40 CFR 61.140-157
- Standards for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no EPA regulations or standards for airborne mold contaminants.

Applicable Laws

This section summarizes laws & regulations that would be applicable to the proposed cleanup.

Lead

Applicable codes, regulations, and laws that govern lead remediation/cleanup work and transport/disposal of lead-contaminated wastes include the following:

1. Code of Federal Regulations (CFR) Publications:
    a. OSHA 29 CFR 1926.62 Construction Industry Standard (1994)
    b. OSHA 29 CFR 1926.500 Guardrails, Handrails, and Covers
    c. OSHA 29 CFR 1910.134 Respiratory Protection
    d. OSHA 29 CFR 1910.145 Specifications for Accident Prevention Signs and Tags
    e. OSHA 29 CFR 1917.152 Hot Work
    f. EPA 40 CFR 61 Subpart A, General Provisions
        i. 40 CFR 61 Subpart M NESHAP
        ii. 40 CFR 260-269 RCRA, Subtitle C
2. American National Standard Institute (ANSI) Publications:
    a. Z88.2-1980 Practices for Respiratory Protection National Institute for Occupational Safety and Health (NIOSH)

Asbestos

Applicable codes, regulations, and laws that govern lead remediation/cleanup work and transport/disposal of lead-contaminated wastes include the following:

1. Code of Federal Regulations (CFR) Publications:
    a. OSHA 29 CFR 1926.1101 Construction Industry Standard (1994)
    b. OSHA 29 CFR 1926.500 Guardrails, Handrails, and Covers
    c. OSHA 29 CFR 1910.134 Respiratory Protection
    d. OSHA 29 CFR 1910.145 Specifications for Accident Prevention Signs and Tags
    e. EPA 40 CFR 61 Subpart A General Provisions
    f. EPA 40 CFR 61 Subpart M National Emission Standard for Hazardous Air Pollutants
    g. EPA 40 CFR 763.120, 121 Asbestos Abatement Projects
    h. EPA 40 CFR 763 Subpart E AHERA, Asbestos-containing Materials in Schools
2. American National Standard Institute (ANSI) Publications:
    i. Z9.2-1979 Fundamentals Governing the Design and Operations of Local Exhaust Systems
    j. Z88.2-1980 Practices for Respiratory Protection National Institute for Occupational Safety and Health (NIOSH) Revised Recommended Asbestos Standard
3. Environmental Protection Agency (EPA):
    k. 560/5-85-024 Guidance for Controlling Friable Asbestos-Containing Materials in Buildings
4. State Requirements:
    l. Chapter 74 Administrative Rules of Montana
    m. Applicable sections of the Asbestos Work Practices and Procedures Manual, (2005)

DRAFT Analysis of Brownfield Cleanup Alternatives (ABCA)
Former IHS Housing Site
Northern Cheyenne Indian Reservation
Lame Deer, Rosebud County, Montana

Introduction and Background

The Northern Cheyenne Tribe (NCT) Environmental Protection Department (EPD) prepared this draft Analysis of Brownfields Cleanup Alternatives (ABCA) in anticipation of the NCT's application for a U.S. EPA Brownfields cleanup grant for the Former Indian Health Service (IHS) Housing Site. The draft ABCA was developed following completion of a Phase II Environmental Site Assessment (ESA) at the property. The site is located in Lame Deer, the cultural and administrative center of the Northern Cheyenne Indian Reservation.

The site, whose address is 430 Beaverheart Street, is located east of North Cheyenne Avenue, south of Sweet Medicine Drive, and southeast of the Bureau of Indian Affairs administrative office. The footprint of the onsite building is approximately 1,600 square feet. The structure formerly served as a residential building for IHS employees. The property is served by city water and sewer utilities as well as electrical and phone services. The site is abandoned, the structure is in poor condition, and the roof has partially collapsed. The property is unfenced, and the site represents a public safety hazard and a health threat for local residents and workers.

No known Phase I ESAs have been completed at the site. As part of a Phase II ESA published in July 2019, 22 building materials were sampled and submitted to a laboratory for asbestos analysis. Ten building materials were found to contain greater than 1% asbestos. Four types of interior paint were determined to contain lead. Potential human exposure pathways to these materials include inhalation of asbestos fibers, inhalation of lead-based paint (LBP), and ingestion of LBP. The ESA recommended abatement (removal) of asbestos and possible abatement of LBP. The NCT plans to demolish the building and leave the site as public green space. Potential future amenities include a walking path and picnic tables.

<u>Cleanup Alternatives</u>

The NCT considered three cleanup alternatives for the IHS Housing site. Under the first alternative, the "no action," alternative the site would not be cleaned up. The site and onsite structure would remain dilapidated and underutilized, a risk to human health, and a physical safety hazard. No new community assets would be created. The NCT has the ability to implement this alternative, because no activities would be carried out. Although no costs would be incurred in association with implementation of the "no action" alternative, community benefits would not be realized and the area would remain blighted. Treatment of injuries or health problems resulting from unauthorized uses of the site would result in unexpected costs. This alternative is therefore not considered reasonable or effective because the redevelopment goal for the site would not be realized, and protection of human health would not be achieved.

The second alternative would result in the abatement of asbestos in the onsite structure followed by renovation and reuse of the building. Under this scenario, consideration would need to be given to the presence of LBP with respect to the means of renovation, potential future occupants (specifically children),

and the future use of the building. Contractors performing renovation or restoration would need to be made aware of the presence of LBP, proper work methods, waste testing and disposal requirements, and required worker training and certifications. Depending on these factors, additional LBP testing and/or abatement may also be required. Depending on the specific renovation plan, additional testing may be required subject to the anticipated renovation waste stream.

The second alternative is not reasonable nor effective because it does not allow for the continued use of the structure without the need for substantial capital investment. The total estimated cost to complete asbestos abatement, as presented in the Phase II ESA, is $50,200. The estimated cost to complete renovations following abatement is approximately $120,000. The total cost to implement this alternative would be higher than the third alternative (below), and insufficient funds are currently available to rebuild the existing structure. The NCT may not be able to implement this plan in its entirety due to the high total cost of site reuse, which would include renovation costs not eligible for Brownfields funding.

The third alternative would involve abatement of asbestos in the structure followed by building demolition and transport of the waste to a licensed facility. The total estimated cost to complete asbestos abatement, as presented in the Phase II ESA, is $50,200. Lead sampling indicates that if the building is demolished and disposed of in its entirety, the waste stream generated may be disposed of in a Montana Class II landfill as a non-hazardous waste. The anticipated cost to remove and dispose of remaining building materials is estimated to be approximately $35,000. The site of the former structure would then be available for use a green space that is free from public safety hazards and human health concerns.

The NCT prefers the third alternative. This alternative is reasonable and effective because it 1) allows for the safe use of the site as a green space; 2) will prevent injuries resulting from trespassing; 3) will not require funds for renovation of the existing structure; and 4) is more cost effective than the second alternative. The total cost to implement this alternative is higher than the first (no-action) alternative but lower than the second (renovation) alternative. Based on the Phase II ESA cost estimate, the NCT will be able to complete abatement using EPA grant funds in anticipation of demolition.

Proposed Cleanup (Recommended Alternative) and Revitalization Plan

The preferred alternative is the third option discussed above: abatement of asbestos in the onsite structure in anticipation of building demolition and site reuse. Following abatement, the building will be ready for demolition and the site can then be reused as green space. Activities already completed in anticipation of site cleanup include: administrative and programmatic oversight; procurement of a technical consultant; preparation of a Quality Assurance Project Plan (QAPP); preparation of a site-specific Sampling and Analysis Plan (SAP); completion of a Phase II ESA Report of Findings; preparation of a Community Outreach Plan; and development of a pre-cleanup site fact sheet. The remaining tasks include abatement of asbestos using industry standard methods; transportation to and disposal of wastes at an approved and licensed facility; and preparation of a final cleanup report.

This cleanup plan aligns well with the redevelopment vision advanced by community members in Lame Deer. Elements of the site reuse vision include open land and/or park space. These facilities will be able to take advantage of existing infrastructure already in place in central Lame Deer.

Climate Change and Severe Weather Events

The EPA requires a discussion of whether climate change could impact the cleanup alternatives proposed above. According to the NOAA National Centers for Environmental Information, climate changes predicted for Montana include:

- Continued increases in mean annual air temperatures;
- Increased soil moisture loss during dry periods;
- Increased intensity of droughts;
- Fewer very cold days in the winter;
- Increased springtime precipitation that could result in severe flooding; and
- Increased frequency of wildfire occurrence and severity.

The proposed cleanup project would not be impacted to a significant degree by any of the climatic changes described above in ways that would differ from impacts sustained were the "no action" alternative to be implemented. The site is not in a floodplain and none of the alternatives involve subsurface remediation that would be impacted by increased flooding.

Cleanup Standards

This section summarizes standards for cleanup of asbestos and lead-based paint.

- The NCT will assume oversight responsibility for the site during the abatement process and will work with EPA, the State of Montana, and Qualified Environmental Professionals as needed.
- RCRA Toxicity Characteristic Leaching Procedure (TCLP) limits
- HUD total lead concentration of 0.5% by weight or 5,000 milligrams per kilogram (mg/kg) (not risk based; identifies a lead-based paint)
- EPA National Emission Standard for Hazardous Air Pollutants (NESHAP) for Asbestos (1% by weight) in 40 CFR 61.140-157
- Standards for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no EPA regulations or standards for airborne mold contaminants.

Applicable Laws

This section summarizes laws & regulations that would be applicable to the proposed cleanup.

<u>Lead</u>

Applicable codes, regulations, and laws that govern lead remediation/cleanup work and transport/disposal of lead-contaminated wastes include the following:

1. Code of Federal Regulations (CFR) Publications:
    a. OSHA 29 CFR 1926.62 Construction Industry Standard (1994)
    b. OSHA 29 CFR 1926.500 Guardrails, Handrails, and Covers
    c. OSHA 29 CFR 1910.134 Respiratory Protection
    d. OSHA 29 CFR 1910.145 Specifications for Accident Prevention Signs and Tags
    e. OSHA 29 CFR 1917.152 Hot Work
    f. EPA 40 CFR 61 Subpart A, General Provisions
        i. 40 CFR 61 Subpart M NESHAP

ii. 40 CFR 260-269 RCRA, Subtitle C

2. American National Standard Institute (ANSI) Publications:
    a. Z88.2-1980 Practices for Respiratory Protection National Institute for Occupational Safety and Health (NIOSH)

Asbestos

Applicable codes, regulations, and laws that govern lead remediation/cleanup work and transport/disposal of lead-contaminated wastes include the following:

1. Code of Federal Regulations (CFR) Publications:
    a. OSHA 29 CFR 1926.1101 Construction Industry Standard (1994)
    b. OSHA 29 CFR 1926.500 Guardrails, Handrails, and Covers
    c. OSHA 29 CFR 1910.134 Respiratory Protection
    d. OSHA 29 CFR 1910.145 Specifications for Accident Prevention Signs and Tags
    e. EPA 40 CFR 61 Subpart A General Provisions
    f. EPA 40 CFR 61 Subpart M National Emission Standard for Hazardous Air Pollutants
    g. EPA 40 CFR 763.120, 121 Asbestos Abatement Projects
    h. EPA 40 CFR 763 Subpart E AHERA, Asbestos-containing Materials in Schools
2. American National Standard Institute (ANSI) Publications:
    i. Z9.2-1979 Fundamentals Governing the Design and Operations of Local Exhaust Systems
    j. Z88.2-1980 Practices for Respiratory Protection National Institute for Occupational Safety and Health (NIOSH) Revised Recommended Asbestos Standard
3. Environmental Protection Agency (EPA):
    k. 560/5-85-024 Guidance for Controlling Friable Asbestos-Containing Materials in Buildings
4. State Requirements:
    l. Chapter 74 Administrative Rules of Montana
    m. Applicable sections of the Asbestos Work Practices and Procedures Manual, (2005)

DRAFT Analysis of Brownfield Cleanup Alternatives (ABCA)
Julene Redneck Site
Northern Cheyenne Indian Reservation
Lame Deer, Rosebud County, Montana

Introduction and Background

The Northern Cheyenne Tribe (NCT) Environmental Protection Department (EPD) prepared this draft Analysis of Brownfields Cleanup Alternatives (ABCA) in anticipation of the NCT's application for a U.S. EPA Brownfields cleanup grant for the Julene Redneck site. The draft ABCA was developed following completion of a Phase II Environmental Site Assessment (ESA) at the property. The site is located in Lame Deer, the cultural and administrative center of the Northern Cheyenne Indian Reservation.

The site, whose address is 119 Blackhorse Street, is located southwest of the NCT headquarters, west of Cheyenne Avenue, and East of Lame Deer Creek in a residential neighborhood. A partially burned single-story building is located on the site. The building footprint is approximately 600 square feet; the date of building construction is unknown. The log-framed building is abandoned, dilapidated, and lacks a roof. The predominantly burned interior of the building contains vegetation and debris. The property is served by city water and sewer utilities. The last known site land use was residential; the site was named for its last known resident. The property is unfenced, and the site represents a public safety hazard and a health threat for local residents and workers.

No known Phase I ESAs have been completed at the site. A Phase II ESA was conducted in 2019 to evaluate building materials that may contain asbestos or lead-based paint (LBP). The final Phase II ESA report, published in June 2019, indicated that twelve building materials were sampled and submitted to a laboratory for asbestos analysis. The assessment confirmed the presence of asbestos in exterior caulking on the partially-burned structure. Seven painted surfaces were tested for lead; two painted surfaces on the ends of the logs were found to contain lead. Potential human exposure pathways to these materials include inhalation of asbestos fibers, inhalation of LBP, and ingestion of LBP. The ESA recommended oversight of building demolition by an accredited asbestos contractor to ensure proper removal, containerization, and disposal of all onsite building materials. Lead concentrations in building materials would not preclude landfill disposal if the buildings are completely demolished. The NCT plans to demolish the remains of the building, transport the wastes offsite for disposal, and reuse the property as a home site for a tribal member.

<u>Cleanup Alternatives</u>

The NCT considered three cleanup alternatives for the Julene Redneck site. Under the first alternative, the "no action," alternative the site would not be cleaned up. The site and onsite structure would remain dilapidated and underutilized, a risk to human health, and a physical safety hazard. No new community assets would be created. The NCT has the ability to implement this alternative, because no activities would be carried out. Although no costs would be incurred in associated with implementation of the "no action" alternative, community benefits would not be realized and the area would remain blighted. Treatment of injuries or health problems resulting from unauthorized uses of the site would result in unexpected costs. This alternative is therefore not considered reasonable or effective because the

redevelopment goal for the site would not be realized, and protection of human health would not be achieved.

The second alternative would result in the abatement of asbestos in the onsite structure followed by renovation and reuse of the building as a residence. Under this scenario, contractors that may perform renovation or restoration of the building would need to be informed of the presence of LBP, proper work methods, waste testing and disposal requirements, and worker training or certifications necessary to carry out the work. Consideration would need to be given to the presence of LBP with respect to the means of renovation and potential future occupants (specifically children).

The second alternative is not reasonable nor effective because the building is already in such a poor structural condition that a renovation would be unlikely to result in a sound finished residence. The total estimated cost to complete the combined asbestos removal/demolition, as presented in the Phase II ESA, is $13,191. The estimated cost to complete renovations following abatement is difficult to determine based on the poor condition of the building. The total cost to implement this alternative would likely be higher than the third alternative (below), and insufficient funds are currently available to rebuild the existing structure. The NCT may not be able to implement this alternative in its entirety due to likely problems with the structural integrity of the building.

The third alternative would involve the removal of asbestos waste inside the structure combined with building demolition and transport of the waste to a licensed facility. The total estimated cost to complete asbestos abatement, as presented in the Phase II ESA, is $13,191. Lead sampling indicates that if the building is demolished and disposed of in its entirety, the waste stream generated may be disposed of in a Montana Class II landfill as a non-hazardous waste. The anticipated cost to remove and dispose of remaining building materials is estimated to be approximately $21,000. The site of the former structure would then be available for use as a new home site for a tribal member. Under this scenario, the site would be free from public safety hazards and human health concerns.

The NCT prefers the third alternative. This alternative is reasonable and effective because it 1) allows for the safe use of the site as a residential home site; 2) will prevent injuries resulting from trespassing; 3) will not involve uncertainty regarding the soundness of the existing structure; and 4) is likely more cost effective than the second alternative. The total cost to implement this alternative is higher than the first (no-action) alternative but lower than the second (renovation) alternative. Based on the Phase II ESA cost estimate, the NCT will be able to complete the cleanup/demolition using EPA grant funds.

<u>Proposed Cleanup (Recommended Alternative) and Revitalization Plan</u>

The preferred alternative is the third option discussed above: removal of asbestos waste during building demolition, transport of the wastes to a licensed facility, and redevelopment of the site for a tribal residence. Activities already completed in anticipation of site cleanup include: administrative and programmatic oversight; procurement of a technical consultant; preparation of a Quality Assurance Project Plan (QAPP); preparation of a site-specific Sampling and Analysis Plan (SAP); completion of a Phase II ESA Report of Findings; preparation of a Community Outreach Plan; and development of a pre-cleanup site fact sheet. The remaining tasks include removal of asbestos waste during building demolition using industry standard methods; transportation to and disposal of wastes at an approved and licensed facility; and preparation of a final cleanup report. This cleanup plan aligns well with the redevelopment plan

advanced by community members in Lame Deer, who would like to see the site developed as a residence for a tribal member.

Climate Change and Severe Weather Events

The EPA requires a discussion of whether climate change could impact the cleanup alternatives proposed above. According to the NOAA National Centers for Environmental Information, climate changes predicted for Montana include:

- Continued increases in mean annual air temperatures;
- Increased soil moisture loss during dry periods;
- Increased intensity of droughts;
- Fewer very cold days in the winter;
- Increased springtime precipitation that could result in severe flooding; and
- Increased frequency of wildfire occurrence and severity.

The proposed cleanup project would not be impacted to a significant degree by any of the climatic changes described above in ways that would differ from impacts sustained were the "no action" alternative to be implemented. The site is not in a floodplain and none of the alternatives involve subsurface remediation that would be impacted by increased flooding.

Cleanup Standards

This section summarizes standards for cleanup of asbestos and lead-based paint.

- The NCT will assume oversight responsibility for the site during the abatement process and will work with EPA, the State of Montana, and Qualified Environmental Professionals as needed.
- RCRA Toxicity Characteristic Leaching Procedure (TCLP) limits
- HUD total lead concentration of 0.5% by weight or 5,000 milligrams per kilogram (mg/kg) (not risk based; identifies a lead-based paint)
- EPA National Emission Standard for Hazardous Air Pollutants (NESHAP) for Asbestos (1% by weight) in 40 CFR 61.140-157
- Standards for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no EPA regulations or standards for airborne mold contaminants.

Applicable Laws

This section summarizes laws & regulations that would be applicable to the proposed cleanup.

<u>Lead</u>

Applicable codes, regulations, and laws that govern lead remediation/cleanup work and transport/disposal of lead-contaminated wastes include the following:

1. Code of Federal Regulations (CFR) Publications:
    a. OSHA 29 CFR 1926.62 Construction Industry Standard (1994)
    b. OSHA 29 CFR 1926.500 Guardrails, Handrails, and Covers
    c. OSHA 29 CFR 1910.134 Respiratory Protection
    d. OSHA 29 CFR 1910.145 Specifications for Accident Prevention Signs and Tags

e. OSHA 29 CFR 1917.152 Hot Work
f. EPA 40 CFR 61 Subpart A, General Provisions
    i. 40 CFR 61 Subpart M NESHAP
    ii. 40 CFR 260-269 RCRA, Subtitle C

2. American National Standard Institute (ANSI) Publications:
    a. Z88.2-1980 Practices for Respiratory Protection National Institute for Occupational Safety and Health (NIOSH)

Asbestos

Applicable codes, regulations, and laws that govern lead remediation/cleanup work and transport/disposal of lead-contaminated wastes include the following:

1. Code of Federal Regulations (CFR) Publications:
    a. OSHA 29 CFR 1926.1101 Construction Industry Standard (1994)
    b. OSHA 29 CFR 1926.500 Guardrails, Handrails, and Covers
    c. OSHA 29 CFR 1910.134 Respiratory Protection
    d. OSHA 29 CFR 1910.145 Specifications for Accident Prevention Signs and Tags
    e. EPA 40 CFR 61 Subpart A General Provisions
    f. EPA 40 CFR 61 Subpart M National Emission Standard for Hazardous Air Pollutants
    g. EPA 40 CFR 763.120, 121 Asbestos Abatement Projects
    h. EPA 40 CFR 763 Subpart E AHERA, Asbestos-containing Materials in Schools
2. American National Standard Institute (ANSI) Publications:
    i. Z9.2-1979 Fundamentals Governing the Design and Operations of Local Exhaust Systems
    j. Z88.2-1980 Practices for Respiratory Protection National Institute for Occupational Safety and Health (NIOSH) Revised Recommended Asbestos Standard
3. Environmental Protection Agency (EPA):
    k. 560/5-85-024 Guidance for Controlling Friable Asbestos-Containing Materials in Buildings
4. State Requirements:
    l. Chapter 74 Administrative Rules of Montana
    m. Applicable sections of the Asbestos Work Practices and Procedures Manual, (2005)

DRAFT Analysis of Brownfield Cleanup Alternatives (ABCA)
Old Chamber of Commerce Site
Northern Cheyenne Indian Reservation
Lame Deer, Rosebud County, Montana

Introduction and Background

The Northern Cheyenne Tribe (NCT) Environmental Protection Department (EPD) prepared this draft Analysis of Brownfields Cleanup Alternatives (ABCA) in anticipation of the NCT's application for a U.S. EPA Brownfields cleanup grant for the Old Chamber of Commerce site. The draft ABCA was developed following completion of a Phase II Environmental Site Assessment (ESA) at the property. The site is located in Lame Deer, the cultural and administrative center of the Northern Cheyenne Indian Reservation.

The site, whose address is 29 Blackstone Street, is located north of U.S. Highway 212, and west of the Northern Cheyenne Tribal Court. The property is located in a mixed-use residential and commercial area. A two-story commercial building of approximately 1,500 square feet, a log cabin, and three picnic shelters are located on the site. The principal building, formerly used as the Lame Deer Chamber of Commerce, was reportedly constructed in the 1930s. The site is located within the Lame Deer central business district, and has been identified as the location of a planned homeless shelter. The property is served by city water and sewer utilities as well as electrical and phone services. Both the principal onsite structure and the cabin are abandoned and currently represent public safety hazards. The property is unfenced, and the site's structures are health threats for local residents and workers.

A Phase I ESA published in August 2019 identified asbestos-containing building materials and lead-based paint (LBP) as potential environmental concerns for the site. A Phase II ESA published in September 2019 evaluated these possible contaminants. Asbestos-containing building materials were identified in the principal Old Chamber building and in the onsite cabin, including vinyl floor tiles (VFT), mastic or adhesive associated with the VFTs, caulking around a roof exhaust vent of the Old Chamber building, and a sprayed-on texture in the cabin. Three paints on the Old Chamber building are considered LBP, including the white paint applied to interior plaster walls, the white paint on wood window casings, and the red paint present on exterior wood siding. The white paint on interior plaster walls and wood window casings of the cabin also tested positive for lead. Surface soil samples collected around the perimeter of the Old Chamber building where there is exterior LBP contained lead at elevated concentrations. Potential human exposure pathways to these materials include inhalation of asbestos fibers, inhalation of LBP, ingestion of LBP, and ingestion of lead in soil. The ESA recommended abatement (removal) of asbestos and possible abatement of LBP. The NCT plans to reuse the building as a homeless shelter.

<u>Cleanup Alternatives</u>

The NCT considered three cleanup alternatives for the Old Chamber of Commerce Building site. Under the first alternative, the "no action," alternative the site would not be cleaned up. The site and onsite structure would remain dilapidated and underutilized, a risk to human health, and a physical safety hazard. No new community assets would be created. The NCT has the ability to implement this alternative, because no activities would be carried out. Although no costs would be incurred in associated with implementation of the "no action" alternative, community benefits would not be realized and the area would remain blighted. Treatment of injuries or health problems resulting from unauthorized uses of the

site would result in unexpected costs. This alternative is therefore not considered reasonable or effective because the redevelopment goal for the site would not be realized, and protection of human health would not be achieved.

The second alternative would include abatement of asbestos in the onsite structure followed by demolition of the building, transport of the waste to a licensed facility, and site redevelopment with new construction. Since LBP was found on the buildings, contractors that may perform demolition of the buildings must be made aware of the presence of LBP, proper work methods, and waste testing and disposal requirements. Lead sampling indicates that if the building were to be demolished and disposed of in its entirety, the waste stream would be considered a hazardous waste, which would result in elevated disposal costs. The total estimated cost to complete onsite abatement work, as presented in the Phase II ESA, is $71,765. The anticipated cost to remove and dispose of remaining building materials is estimated to be approximately $140,000. The site of the former structure would then be available for redevelopment as a homeless shelter at a substantial capital cost.

The second alternative is not reasonable nor effective because it does not allow for redevelopment of the site without the need for substantial capital investment. The total estimated cost to complete abatement, as presented in the Phase II ESA, is $71,765. The total cost to implement this alternative would be higher than the third alternative (below), and insufficient funds are currently available to build a new structure. The NCT may not be able to implement this plan in its entirety due to the high total cost of site reuse.

The third alternative would result in the abatement of asbestos, and possibly lead, in the Old Chamber structure followed by renovation and reuse of the existing building. The total estimated cost to complete abatement is $71,765. The estimated cost to complete renovations following abatement is approximately $60,000. Under this scenario, consideration would need to be given to the presence of LBP with respect to the means of renovation, potential future occupants (specifically children), and the future use of the building. Contractors performing renovation or restoration would need to be made aware of the presence of LBP, proper work methods, waste testing and disposal requirements, and required worker training and certifications. Depending on these factors, additional LBP testing and/or abatement may also be required.

The NCT prefers the third alternative. This alternative is reasonable and effective because it 1) allows for the safe use of the site as a homeless shelter, an important public amenity in Lame Deer; 2) will prevent injuries resulting from trespassing; 3) will not require funds for redevelopment of the site with new construction; and 4) is more cost effective than the second alternative. The total cost to implement this alternative is higher than the first (no-action) alternative but lower than the second (renovation) alternative. Based on the Phase II ESA cost estimate, the NCT will be able to complete abatement using EPA grant funds in anticipation of renovation.

Proposed Cleanup (Recommended Alternative) and Revitalization Plan

The preferred alternative is the third option discussed above: abatement of asbestos, and possibly lead, in the onsite structure in anticipation of building renovation and reuse as a homeless shelter. Activities already completed in anticipation of site cleanup include: administrative and programmatic oversight; procurement of a technical consultant; preparation of a Quality Assurance Project Plan (QAPP); preparation of a site-specific Sampling and Analysis Plan (SAP); completion of Phase I and Phase II ESA Reports of Findings; preparation of a Community Outreach Plan; and development of a pre-cleanup site

fact sheet. The remaining tasks include abatement of asbestos using industry standard methods; transportation to and disposal of wastes at an approved and licensed facility; and preparation of a final cleanup report.

This cleanup plan (homeless shelter) aligns well with the redevelopment vision advanced by community members in Lame Deer. This facility will serve Lame Deer residents as well as members of outlying communities on the Northern Cheyenne Indian Reservation.

Climate Change and Severe Weather Events

The EPA requires a discussion of whether climate change could impact the cleanup alternatives proposed above. According to the NOAA National Centers for Environmental Information, climate changes predicted for Montana include:

- Continued increases in mean annual air temperatures;
- Increased soil moisture loss during dry periods;
- Increased intensity of droughts;
- Fewer very cold days in the winter;
- Increased springtime precipitation that could result in severe flooding; and
- Increased frequency of wildfire occurrence and severity.

The proposed cleanup project would not be impacted to a significant degree by any of the climatic changes described above in ways that would differ from impacts sustained were the "no action" alternative to be implemented. The site is not in a floodplain and none of the alternatives involve subsurface remediation that would be impacted by increased flooding.

Cleanup Standards

This section summarizes standards for cleanup of asbestos and lead-based paint.

- The NCT will assume oversight responsibility for the site during the abatement process and will work with EPA, the State of Montana, and Qualified Environmental Professionals as needed.
- RCRA Toxicity Characteristic Leaching Procedure (TCLP) limits
- HUD total lead concentration of 0.5% by weight or 5,000 milligrams per kilogram (mg/kg) (not risk based; identifies a lead-based paint)
- EPA National Emission Standard for Hazardous Air Pollutants (NESHAP) for Asbestos (1% by weight) in 40 CFR 61.140-157
- Standards for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no EPA regulations or standards for airborne mold contaminants.

Applicable Laws

This section summarizes laws & regulations that would be applicable to the proposed cleanup.

<u>Lead</u>
Applicable codes, regulations, and laws that govern lead remediation/cleanup work and transport/disposal of lead-contaminated wastes include the following:

1. Code of Federal Regulations (CFR) Publications:
    a. OSHA 29 CFR 1926.62 Construction Industry Standard (1994)
    b. OSHA 29 CFR 1926.500 Guardrails, Handrails, and Covers
    c. OSHA 29 CFR 1910.134 Respiratory Protection
    d. OSHA 29 CFR 1910.145 Specifications for Accident Prevention Signs and Tags
    e. OSHA 29 CFR 1917.152 Hot Work
    f. EPA 40 CFR 61 Subpart A, General Provisions
        i. 40 CFR 61 Subpart M NESHAP
        ii. 40 CFR 260-269 RCRA, Subtitle C
2. American National Standard Institute (ANSI) Publications:
    a. Z88.2-1980 Practices for Respiratory Protection National Institute for Occupational Safety and Health (NIOSH)

<u>Asbestos</u>

Applicable codes, regulations, and laws that govern lead remediation/cleanup work and transport/disposal of lead-contaminated wastes include the following:

1. Code of Federal Regulations (CFR) Publications:
    a. OSHA 29 CFR 1926.1101 Construction Industry Standard (1994)
    b. OSHA 29 CFR 1926.500 Guardrails, Handrails, and Covers
    c. OSHA 29 CFR 1910.134 Respiratory Protection
    d. OSHA 29 CFR 1910.145 Specifications for Accident Prevention Signs and Tags
    e. EPA 40 CFR 61 Subpart A General Provisions
    f. EPA 40 CFR 61 Subpart M National Emission Standard for Hazardous Air Pollutants
    g. EPA 40 CFR 763.120, 121 Asbestos Abatement Projects
    h. EPA 40 CFR 763 Subpart E AHERA, Asbestos-containing Materials in Schools
2. American National Standard Institute (ANSI) Publications:
    i. Z9.2-1979 Fundamentals Governing the Design and Operations of Local Exhaust Systems
    j. Z88.2-1980 Practices for Respiratory Protection National Institute for Occupational Safety and Health (NIOSH) Revised Recommended Asbestos Standard
3. Environmental Protection Agency (EPA):
    k. 560/5-85-024 Guidance for Controlling Friable Asbestos-Containing Materials in Buildings
4. State Requirements:
    l. Chapter 74 Administrative Rules of Montana
    m. Applicable sections of the Asbestos Work Practices and Procedures Manual, (2005)

DRAFT Analysis of Brownfield Cleanup Alternatives (ABCA)
Former Tribal Office Building Site
Northern Cheyenne Indian Reservation
Lame Deer, Rosebud County, Montana

Introduction and Background

The Northern Cheyenne Tribe (NCT) Environmental Protection Department (EPD) prepared this draft Analysis of Brownfields Cleanup Alternatives (ABCA) in anticipation of the NCT's application for a U.S. EPA Brownfields cleanup grant for the Former Tribal Office Building site. The draft ABCA was developed following completion of a Phase II Environmental Site Assessment (ESA) at the property. The site is located in Lame Deer, the cultural and administrative center of the Northern Cheyenne Indian Reservation.

The site, whose address is 19 Cheyenne Avenue, is located north of U.S. Highway 212, southwest of the Northern Cheyenne Tribal Court, and southeast of the NCT law enforcement complex. The dates of original construction and of the addition are unknown. The overall building footprint is approximately 1,500 square feet. A small addition was constructed at some point on the western side of the building. The property is served by city water and sewer utilities as well as electrical and phone services. The building was formerly occupied by offices of the NCT, but is abandoned and has become dilapidated. The site is abandoned and the structure is in poor condition. The property is unfenced, and the site represents a public safety hazard and a health threat for local residents and workers.

No known Phase I ESAs have been completed at the site. A Phase II ESA was conducted in early 2019 to evaluate building materials that may contain asbestos or lead-based paint (LBP). The final Phase II ESA report, published in June 2019, indicated that a total of 17 building materials were sampled and submitted to a laboratory for asbestos analysis. Four building materials were found to contain asbestos: 1) gray vinyl sheet flooring and mastic; 2) vinyl floor tile; 3) drywall, tape and joint compound; and 4) window glazing. The first two materials contained greater than 1% asbestos, which will require special abatement considerations. A field survey using an X-Ray Fluoresence (XRF) device identified six painted surface that contained lead. Some of the LBP was found on exterior surfaces (siding, window casings, wall casings, plaster footings). Interior paint on some of the walls, doors, and door casings also contained lead. Potential human exposure pathways to these materials include inhalation of asbestos fibers, inhalation of LBP, and ingestion of LBP. The ESA recommended abatement (removal) of asbestos and possible abatement of LBP. The NCT plans to demolish the building and reuse the site as either public green space with picnic tables and/or a parking lot.

<u>Cleanup Alternatives</u>

The NCT considered three cleanup alternatives for the Former Tribal Office Building site. Under the first alternative, the "no action," alternative the site would not be cleaned up. The site and onsite structure would remain dilapidated and underutilized, a risk to human health, and a physical safety hazard. No new community assets would be created. The NCT has the ability to implement this alternative, because no activities would be carried out. Although no costs would be incurred in associated with implementation of the "no action" alternative, community benefits would not be realized and the area would remain blighted. Treatment of injuries or health problems resulting from unauthorized uses of the site would result in unexpected costs. This alternative is therefore not considered reasonable or effective because

the redevelopment goal for the site would not be realized, and protection of human health would not be achieved.

The second alternative would result in the abatement of asbestos in the onsite structure followed by renovation and reuse of the building. Under this scenario, consideration would need to be given to the presence of LBP with respect to the means of renovation, potential future occupants (specifically children), and the future use of the building. Contractors performing renovation or restoration would need to be made aware of the presence of LBP, proper work methods, waste testing and disposal requirements, and required worker training and certifications. Depending on these factors, additional LBP testing and/or abatement may also be required. Depending on the specific renovation plan, additional testing may be required subject to the anticipated renovation waste stream.

The second alternative is not reasonable nor effective because it does not allow for the continued use of the structure without the need for substantial capital investment. The total estimated cost to complete asbestos abatement, as presented in the Phase II ESA, is $28,250. The estimated cost to complete renovations following abatement is approximately $105,000. The total cost to implement this alternative would be higher than the third alternative (below), and insufficient funds are currently available to rebuild the existing structure. The NCT may not be able to implement this plan in its entirety due to the high total cost of site reuse, which would include renovation costs not eligible for Brownfields funding.

The third alternative would involve abatement of asbestos in the structure followed by building demolition and transport of the waste to a licensed facility. The total estimated cost to complete asbestos abatement, as presented in the Phase II ESA, is $28,250. Lead sampling indicates that if the building is demolished and disposed of in its entirety, the waste stream generated may be disposed of in a Montana Class II landfill as a non-hazardous waste. The anticipated cost to remove and dispose of remaining building materials is estimated to be approximately $29,000. The site of the former structure would then be available for use as a green space and/or a parking lot that would serve the adjacent court and the law enforcement complex. In both cases, the site would be free from public safety hazards and human health concerns.

The NCT prefers the third alternative. This alternative is reasonable and effective because it 1) allows for the safe use of the site as a green space and/or parking lot; 2) will prevent injuries resulting from trespassing; 3) will not require funds for renovation of the existing structure; and 4) is more cost effective than the second alternative. The total cost to implement this alternative is higher than the first (no-action) alternative but lower than the second (renovation) alternative. Based on the Phase II ESA cost estimate, the NCT will be able to complete abatement using EPA grant funds in anticipation of demolition.

Proposed Cleanup (Recommended Alternative) and Revitalization Plan

The preferred alternative is the third option discussed above: abatement of asbestos in the onsite structure in anticipation of building demolition and site reuse. Following abatement, the building will be ready for demolition and the site can then be reused as green space and/or parking lot. Activities already completed in anticipation of site cleanup include: administrative and programmatic oversight; procurement of a technical consultant; preparation of a Quality Assurance Project Plan (QAPP); preparation of a site-specific Sampling and Analysis Plan (SAP); completion of a Phase II ESA Report of Findings; preparation of a Community Outreach Plan; and development of a pre-cleanup site fact sheet. The remaining tasks include

abatement of asbestos using industry standard methods; transportation to and disposal of wastes at an approved and licensed facility; and preparation of a final cleanup report.

This cleanup plan aligns well with the redevelopment vision advanced by community members in Lame Deer. Elements of the site reuse plan include green space and/or a parking lot. These facilities will serve existing tribal office in central Lame Deer.

Climate Change and Severe Weather Events

The EPA requires a discussion of whether climate change could impact the cleanup alternatives proposed above. According to the NOAA National Centers for Environmental Information, climate changes predicted for Montana include:

- Continued increases in mean annual air temperatures;
- Increased soil moisture loss during dry periods;
- Increased intensity of droughts;
- Fewer very cold days in the winter;
- Increased springtime precipitation that could result in severe flooding; and
- Increased frequency of wildfire occurrence and severity.

The proposed cleanup project would not be impacted to a significant degree by any of the climatic changes described above in ways that would differ from impacts sustained were the "no action" alternative to be implemented. The site is not in a floodplain and none of the alternatives involve subsurface remediation that would be impacted by increased flooding.

Cleanup Standards

This section summarizes standards for cleanup of asbestos and lead-based paint.

- The NCT will assume oversight responsibility for the site during the abatement process and will work with EPA, the State of Montana, and Qualified Environmental Professionals as needed.
- RCRA Toxicity Characteristic Leaching Procedure (TCLP) limits
- HUD total lead concentration of 0.5% by weight or 5,000 milligrams per kilogram (mg/kg) (not risk based; identifies a lead-based paint)
- EPA National Emission Standard for Hazardous Air Pollutants (NESHAP) for Asbestos (1% by weight) in 40 CFR 61.140-157
- Standards for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no EPA regulations or standards for airborne mold contaminants.

Applicable Laws

This section summarizes laws & regulations that would be applicable to the proposed cleanup.

<u>Lead</u>
Applicable codes, regulations, and laws that govern lead remediation/cleanup work and transport/disposal of lead-contaminated wastes include the following:

1. Code of Federal Regulations (CFR) Publications:

a. OSHA 29 CFR 1926.62 Construction Industry Standard (1994)
b. OSHA 29 CFR 1926.500 Guardrails, Handrails, and Covers
c. OSHA 29 CFR 1910.134 Respiratory Protection
d. OSHA 29 CFR 1910.145 Specifications for Accident Prevention Signs and Tags
e. OSHA 29 CFR 1917.152 Hot Work
f. EPA 40 CFR 61 Subpart A, General Provisions
    i. 40 CFR 61 Subpart M NESHAP
    ii. 40 CFR 260-269 RCRA, Subtitle C

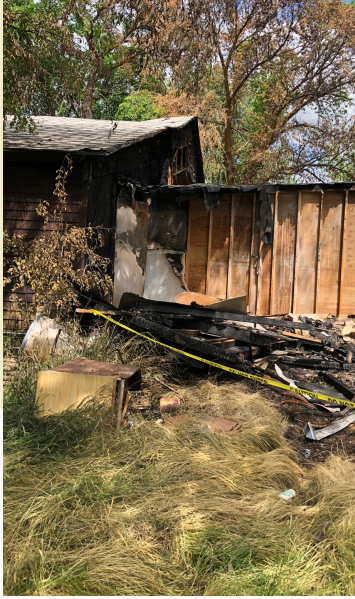
2. American National Standard Institute (ANSI) Publications:
    a. Z88.2-1980 Practices for Respiratory Protection National Institute for Occupational Safety and Health (NIOSH)

<u>Asbestos</u>

Applicable codes, regulations, and laws that govern lead remediation/cleanup work and transport/disposal of lead-contaminated wastes include the following:

1. Code of Federal Regulations (CFR) Publications:
    a. OSHA 29 CFR 1926.1101 Construction Industry Standard (1994)
    b. OSHA 29 CFR 1926.500 Guardrails, Handrails, and Covers
    c. OSHA 29 CFR 1910.134 Respiratory Protection
    d. OSHA 29 CFR 1910.145 Specifications for Accident Prevention Signs and Tags
    e. EPA 40 CFR 61 Subpart A General Provisions
    f. EPA 40 CFR 61 Subpart M National Emission Standard for Hazardous Air Pollutants
    g. EPA 40 CFR 763.120, 121 Asbestos Abatement Projects
    h. EPA 40 CFR 763 Subpart E AHERA, Asbestos-containing Materials in Schools
2. American National Standard Institute (ANSI) Publications:
    i. Z9.2-1979 Fundamentals Governing the Design and Operations of Local Exhaust Systems
    j. Z88.2-1980 Practices for Respiratory Protection National Institute for Occupational Safety and Health (NIOSH) Revised Recommended Asbestos Standard
3. Environmental Protection Agency (EPA):
    k. 560/5-85-024 Guidance for Controlling Friable Asbestos-Containing Materials in Buildings
4. State Requirements:
    l. Chapter 74 Administrative Rules of Montana
    m. Applicable sections of the Asbestos Work Practices and Procedures Manual, (2005)

Environmental Protection Department
Brownfields Multi-site Cleanup grant



Community Meeting & Discussion

Nov. 13th/ 4pm-6pm
NC Tribal Chambers

everyone is invited to attend, questions and comments will be heard and meal will be served

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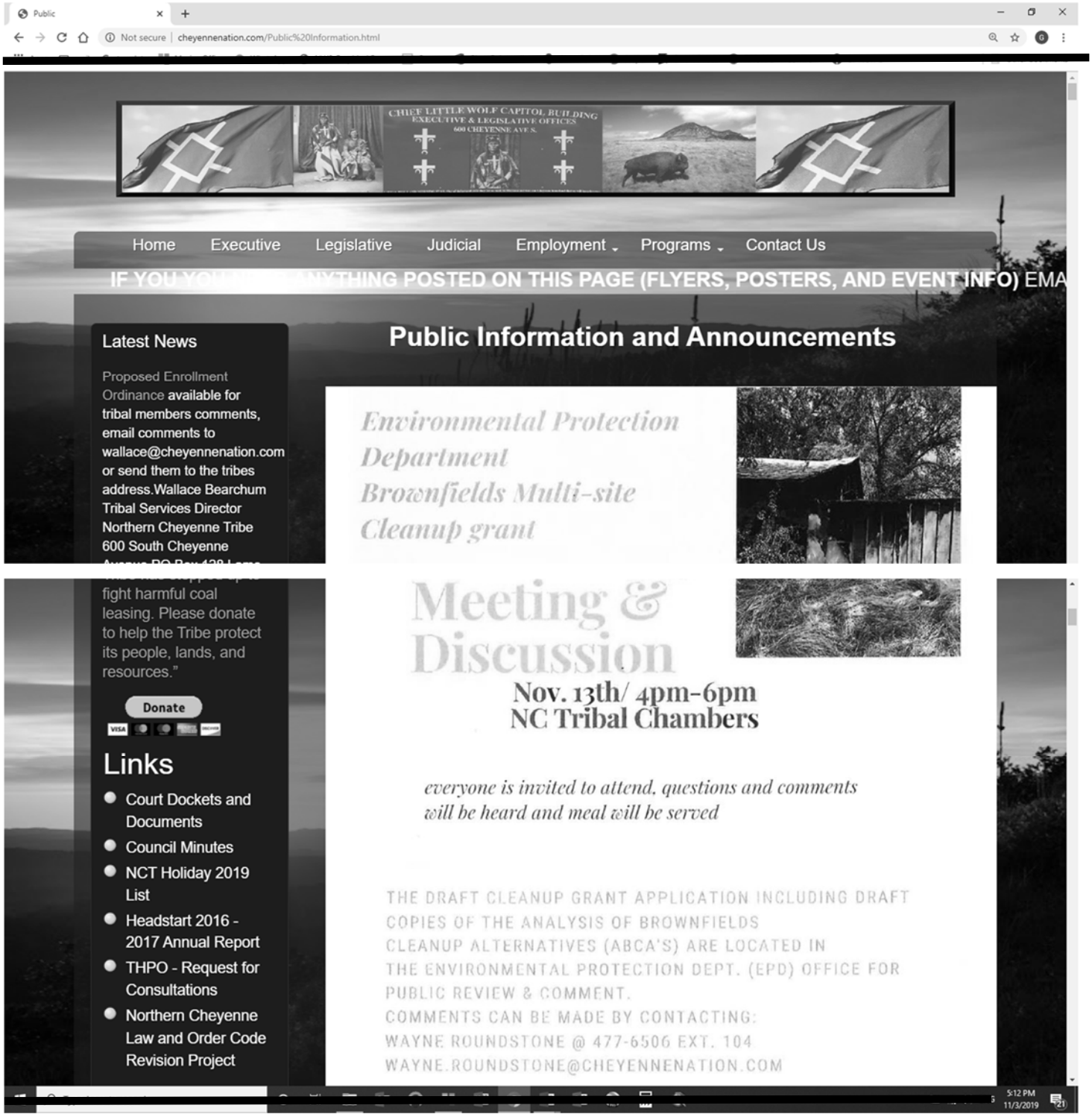
THE DRAFT CLEANUP GRANT APPLICATION INCLUDING DRAFT COPIES OF THE ANALYSIS OF BROWNFIELDS CLEANUP ALTERNATIVES (ABCA'S) ARE LOCATED IN THE ENVIRONMENTAL PROTECTION DEPT. (EPD) OFFICE FOR PUBLIC REVIEW & COMMENT.
COMMENTS CAN BE MADE BY CONTACTING:
WAYNE ROUNDSTONE @ 477-6506 EXT. 104
WAYNE.ROUNDSTONE@CHEYENNENATION.COM



November 3, 2019

Community Meeting Summary
November 13, 2019 Brownfields Cleanup Grant Public Meeting

A community meeting was held by the Environmental Protection Department (EPD) and The Natural Resources Department 11/13/2019 from 4pm- 6pm in the Tribal Chambers. The meeting was held to give the general public an update on our program(s) and to discuss the upcoming Multi-site Brownfields Cleanup Grant application to be submitted to the EPA by the EPD.

The EPD delivered a power point presentation explaining the current Assessment grant and the application for the multi-site cleanup grant. The draft application and draft Analyses of Brownfields Cleanup Alternatives (ABCAs) were available at the meeting. The sites selected for cleanup were discussed, and public comments were encouraged. After the presentation questions and comments were taken from community members and responses were given by the Northern Cheyenne Tribe.

Northern Cheyenne Tribe
Department of Environmental Protection
P.O. Box 128
Lame Deer, Mt 59043

Wayne Roundstone
Brownfield Coordinator

Wayne.Roundstone@cheyennenation.com
Phone: 406-477-6506
Ext: 110

Morgan Taylor - 5/2 - 4/93 white goods

Patricia Ramos - "Cleanup on Air Force housing would put alot of people out on the street. How will they be accomodated.

Crazy Heart Vehicle Cleanup.
Car inside first pond - Rhyal Rowland

Pam Abeyta - she resides in an Air Force house, would like her home tested.

updated lists for all sites on Reservation

Ethlene Shoulderblade - Cleanup. Junk yard -
Junk yard on Res.

Responses to Comments
November 13, 2019 Brownfields Cleanup Grant Public Meeting

Comment #1: what about pickup of white goods that are left outside?
Response #1: white goods are usually picked up when we have a community cleanup, which we try to carry out every 4 months.

Comment #2: Cleanup of the Air Force Housing site would put a lot of people on the street. How will they be accommodated?
Response #2: The NCT will work with the Housing Authority or other entity to address housing needs during the cleanup.

Comment #3: What will happen with the Crazyhead Springs vehicle cleanup?
Response #3: The Environmental Protection Department will ground truth the site, document if necessary, and take appropriate action. The Crazyhead site is not being considered for cleanup as part of the current grant application.

Comment #4: A resident of an Air Force house that was not included in the assessment would also like to participate.
Response #4: Our existing assessment grant can be used to evaluate this site, but it is not being included in the cleanup grant application.

Comment #5: A member of the public is interested in viewing the updated Brownfields inventory.
Response #5: An updated list for all potential Brownfield sites can be accessed by visiting the Environmental Protection Department office. The list will eventually be posted on the Northern Cheyenne Tribe's website.

Comment #6: What is the status of junkyards on the Reservation?
Response #6: Junkyards on the Reservation will be assessed in the future.

Northern Cheyenne Tribe
Department of Environmental Protection
P.O. Box 128
Lame Deer, Mt 59043

Wayne Roundstone
Brownfield Coordinator

Wayne.Roundstone@cheyennenation.com
Phone: 406-477-6506
Ext: 110

Northern Cheyenne Environmental Department

Multi-Site Cleanup Grant Community Discussion

Northern Cheyenne Tribal Chambers

4pm-6pm

Sign in sheet:

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  Phone: 406 477-8529 mesg

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  Phone:

- Name: John Kills Night
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  Email:
  Phone:

- Name: Imogene White Dirt
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  Email:
  Phone:

- Name: Michael W. [illegible]
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  Phone: 784-0048

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  Email:
  Phone: 477-5529

ATTACHMENT D

HARDSHIP WAIVER REQUEST

Hardship Waiver Request

The Northern Cheyenne Tribe requests a waiver of the requirement to contribute 20 percent of the total cost of the cleanup funds required for sites in Lame Deer, Montana. The inability of our tribe to obtain a waiver would eliminate the possibility of cleaning up these sites, which lie in the middle of our tribe's central community. For the reasons described below, the proposed project cannot proceed if the cost share waiver request is denied.

Statistics for the Lame Deer census-designated place are listed in the table below and compared with other geographies. The poverty rate in Lame Deer is almost 40 percent which is well above equivalent figures for Rosebud and Big Horn counties, Montana, and the nation. The Reservation is located in Rosebud and Big Horn counties. The local unemployment rate is 28.2 percent, and the per capita income is $13,791. The unemployment rate is significantly higher (and the median household income is lower) than the surrounding counties, the state of Montana, or the U.S. as a whole. The per capita income is approximately half that of the state of Montana.

We expect that within three years the Colstrip coal-fired power plant will shutter two of its four generating stations. Since many tribal members work at this facility, job losses for our community are imminent. In addition, the Northern Cheyenne Indian Reservation is a "persistent poverty" jurisdiction according to the U.S Census Bureau.

	Lame Deer	Northern Cheyenne Indian Reservation	Rosebud County	Big Horn County	Montana	United States
Population[1]	2,188	4,951	9,292	13,295	1,029,862	321,004,407
Percent of Population < 18 years[1]	34.6	38.0	28.9	33.6	22.0	22.9
Unemployment Rate[2]	28.2	27.2	8.6	15.9	4.8	6.6
Poverty Rate[2]	39.8	36.5	19.1	26.8	14.4	14.6
Percent Minority[1]	97.5	95.0	43.8	72.3	13.4	38.5
Percent American Indian[1]	96.3	92.8	38.4	67.4	8.2	1.7
Median Household Income[2]	$39,722	$41,824	$54,709	$47,276	$50,801	$57,652
Per Capita Income[2]	$13,791	$13,182	$23,832	$17,905	$28,706	$31,17

[1]Data are from the 2013-2017 American Community Survey Selected Population Characteristics data profile and are available on American FactFinder at http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_17_5YR_DP05&src=pt

[2]Data are from the 2013-2017 American Community Survey Selected Economic Characteristics data profile and are available on American FactFinder at http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_17_5YR_DP03&src=pt

Persistent Poverty Statistics – Northern Cheyenne Poverty Rate					
	1990**	**2000**	**2010**	**2014**	**2017**
Northern Cheyenne*	NA	46.1%	34.8%	44.5%	36.5%
Rosebud County	20.4%	22.4%	18.8%	20.5%	19.1%
Big Horn County	35.3%	29.2%	25.9%	30.6%	26.8%

*Source: 2013-2017 American Community Survey 5-Year Estimates. All other data from: Persistent Poverty Statistics, KSU TAB Resources, https://www.ksutab.org/?ResponseView=TABResourceDownloadView&id=1257 (compiled by Indiana Business Center using data from www.census.gov). ** = Data specific to the Reservation not available. The Reservation is located in Rosebud and Big Horn Counties.

Many of our residents live in substandard housing, and many residential structures lack basic necessities such as storm windows, insulation, and adequate heat. More than six individuals live in many of our households. Approximately 83 families are on the waiting list for low-income housing and 390 families are on the general housing waiting list.

The Northern Cheyenne Tribe does not tax the residents of the reservation and has limited tribal resources. Almost all of our tribal departments are struggling and most of our funding comes from grants. Funding that does arrive to our various departments typically must only be expended on grant-specific items, and funds often cannot be shared between departments due to grant restrictions. We have no funding sources other than grants that could be brought to bear to clean up the sites included in this application.

We are planning to contribute some in-kind staff hours as a leveraged resource for the cleanup using our EPA brownfields 128(a) funding. However, we are already operating in triage mode and simply do not have the financial resources to support the planned cleanup project to the extent required for the cost-share.

OMB Number: 4040-0004
Expiration Date: 12/31/2019

Application for Federal Assistance SF-424

* 1. Type of Submission:
- [ ] Preapplication
- [x] Application
- [ ] Changed/Corrected Application

* 2. Type of Application:
- [x] New
- [ ] Continuation
- [ ] Revision

* If Revision, select appropriate letter(s):

* Other (Specify):

* 3. Date Received: 12/02/2019

4. Applicant Identifier: Northern Cheyenne Tribe-EPD

5a. Federal Entity Identifier:

5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name: Northern Cheyenne Environmental Protection Department

* b. Employer/Taxpayer Identification Number (EIN/TIN):

* c. Organizational DUNS: 0011185740000

d. Address:

* Street1: PO Box 128
Street2:
* City: Lame Deer
County/Parish: Rosebud
* State: MT: Montana
Province:
* Country: USA: UNITED STATES
* Zip / Postal Code: 59043-0128

e. Organizational Unit:

Department Name: Environmental Protection Depar

Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix: Mrs.
* First Name: Charlene
Middle Name: W.
* Last Name: Alden
Suffix:

Title: Director

Organizational Affiliation:

* Telephone Number: 406-477-6506
Fax Number: 406-477-8294

* Email: charlene.alden@cheyennenation.com

Application for Federal Assistance SF-424

*** 9. Type of Applicant 1: Select Applicant Type:**

I: Indian/Native American Tribal Government (Federally Recognized)

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

Environmental Protection Agency

11. Catalog of Federal Domestic Assistance Number:

66.818

CFDA Title:

Brownfields Assessment and Cleanup Cooperative Agreements

*** 12. Funding Opportunity Number:**

EPA-OLEM-OBLR-19-07

* Title:

FY20 GUIDELINES FOR BROWNFIELD CLEANUP GRANTS

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment | Delete Attachment | View Attachment

*** 15. Descriptive Title of Applicant's Project:**

Northern Cheyenne Clean-up grant

Attach supporting documents as specified in agency instructions.

Add Attachments | Delete Attachments | View Attachments

Application for Federal Assistance SF-424

16. Congressional Districts Of:

* a. Applicant: MT-01 * b. Program/Project: MT

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment | Delete Attachment | View Attachment

17. Proposed Project:

* a. Start Date: 10/01/2020 * b. End Date: 09/30/2022

18. Estimated Funding ($):

* a. Federal	364,500.00
* b. Applicant	10,000.00
* c. State	0.00
* d. Local	0.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	374,500.00

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

☐ a. This application was made available to the State under the Executive Order 12372 Process for review on .

☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.

☒ c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**

☐ Yes ☒ No

If "Yes", provide explanation and attach

Add Attachment | Delete Attachment | View Attachment

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: Mrs. * First Name: Charlene

Middle Name: W

* Last Name: Alden

Suffix:

* Title: Director

* Telephone Number: 406-477-6506 Fax Number: 406-477-8294

* Email: charlene.alden@cheyennenation.com

* Signature of Authorized Representative: Charlene W Alden * Date Signed: 12/02/2019