SOUTH DAKOTA SCIENCE AND TECHNOLOGY AUTHORITY

REQUEST FOR PROPOSAL
Underground Asbestos Removal
Contract #2020-08

The South Dakota Science and Technology Authority (SDSTA) is seeking proposals to remediate asbestos containing materials (ACM) at the Sanford Underground Research Facility (SURF), located in Lead, South Dakota.

1.0 SCOPE

ACM materials have been identified underground and include (but not limited to) aging and often rusted pipe insulation/coating. The pipe ranges in size from 2-inch to 6-inch. The pipe may occur in a variety of settings that are elevated, near water sumps (cut-outs in rock of the floor), and in and near shafts and rock walls. Work requires the selected contractor to cut the designated pipe into ten 10-foot sections or smaller, isolating the asbestos and placing the asbestos covered pipe that is a mixture of friable/non-friable or ACM in labeled and sealed bags. SDSTA personnel will remove the bags from the underground and place them in a contractor provided (surface) roll-off dumpster for proper disposal at a landfill approved for the disposal for ACM. The amount of pipe to be removed consists of approximately 500 feet of length that spans from the 4100 level Yates station down the main drift that spans approximately 2900 linear feet. The contractor will be required to provide all necessary tools and equipment to complete the job. It is important that sections be cut to the specifications of SURF for ease of transport and disposal.

The SURF Underground workings are accessed by a shaft that hoists a cage, or semi-open elevator. The cage is lowered and raised at specific times of the day. Important cage times for this project are: (These cages times are important for scheduling access to the various underground project sites/levels).

Down	UP
6:30 AM	4:00 PM
7:00 AM	4:30 PM
7:30 AM	5:00 PM

The contractor will be required to have one or more crew members guide trained, usually a three day process. In addition, SURF will provide necessary logistical transport of all removed material from the underground, equipment and tools to and from the job-site, and all personnel to and from the job-site. Listed cage times will not deviate unless there is prior approval from the project manager. SDSTA personnel will assist with underground pipe movement to the cage from the job-site. The selected contractor will be required to have four-hour safety training prior to going underground. This training will be provided by SDSTA. SDSTA will provide underground Personal Protective Equipment (PPE) that includes a self-rescuer, lights and a mine belt; all other required PPE will be supplied by the contractor, such as safety toe boots, reflective vest, safety glasses, gloves, and hard hat. Note: personnel underground must not wear shorts or cut-off sleeves.

2.0 PROPOSAL INSTRUCTIONS

The awarded contract will be based on a low price technical acceptable procurement. Your proposal should be provided in digital format, as a pdf file, with standard letter size format. Proposals must contain the following:

2.1 Contact information, including an email address, for the Contractor's designated contact person who can receive and distribute Request for Proposal (RFP) information.

2.2 Contractor description and evidence of qualifications to address the scope described in this document. Provide three examples of projects performed that demonstrate the qualifications and competence for each of the disciplines/requested areas of expertise.

2.3 Resumes for all key project staff to include:

- Experience with similar relevant projects.
- Qualifications, including training and certification.

2.4 Provide a description of your safety program and quality control (QC) programs. Explain how your safety and QC programs will be implemented for this project.

2.5 Safety records for the past three years (incident/injury records, OSHA 300 logs and EMR data)

2.6 Exceptions to the draft contract or other RFP materials. Disclose any existing relationships and previous work with SDSTA at SURF.

2.7 SDSTA requests that the contractor submits the following items for this work:

1. Labor billing rates for employees *who will* perform work.
2. Unit material costs (tape, glue, glove-bags, small tools specific to asbestos removal, etc.) to perform expected work. Assume the contractor will provide all tools and equipment necessary for the project.
3. Estimated project schedule.
4. Process to remove asbestos pipe.

All offerors are required to attend a site visit **February 28th, from 8:30 a.m.-12:00 a.m. MT** at SURF, 630 East Summit Street, Lead South Dakota. Pre-registration is required, email mbaumann@sanfordlab.org by close of business **February 24th, 2020** to receive instructions and directions. Only companies represented at the site visit will be eligible to submit proposals.

Please direct all questions in writing to Michele Baumann at mbaumann@sanfordlab.org by close of business **March 6th, 2020**. Questions and answers will be posted as an amendment to this RFP by 2:00 p.m. MT **March 11th, 2020**.

Submit one electronic copy (.pdf format) of the proposal no later than 2:00 p.m. **March 18th, 2020**, to: mbaumann@sanfordlab.org. Late submissions will not be accepted.

The proposal period may be extended at the discretion of SDSTA based on the quantity and/or complexity of questions. Any notices of extension of time to respond will be distributed to all prospective offeror by SDSTA.

All communications regarding this procurement between RFP release and contract award shall be directed by email to mbaumann@sanfordlab.org. Communications with other SDSTA staff regarding this procurement in advance of the contract award are not allowed.

3.0 GENERAL REQUREMENTS

The asbestos pipe removal project involves several requirements that are set by the SDSTA and must be completed.

1. All contractor personnel must attend 1 day in-class safety training that is provided on-site by SDSTA.
2. Contractor will be required to have a minimum of one crew member to be guide trained by attending an additional 3-day safety training provided by SDSTA. Note, the person being trained must be present at the job location at all times when work crews are at the job location.
3. Contractor will be required to perform a Job Hazard Analysis (JHA), that will be reviewed/approved by SDSTA Project Manager prior to beginning work.
4. All contractor personnel are required to wear and use the proper PPE while on site.
5. Contractor must supply SDSTA with a basic project schedule once contract has been approved.
6. All deliveries and waste pickups made by the contractor must be coordinated with SDSTA Project Manager at least one week prior to delivery/pickup.
7. Contractor is responsible for transporting all materials and tools needed to complete the project to the headframe. SDSTA will transport materials and tools to the job site location.
8. Contractor will be responsible for supplying all equipment and materials necessary to complete the SOW.
9. Contractor will adhere to a 4-day work week that is represented by an every other four day weekend, with Friday and Monday as no access days.
10. Contractor must work within the schedule cage times for the Yates Shaft for travel to and from the job site:

Down	UP
6:30 AM	4:00 PM
7:00 AM	4:30 PM
7:30 AM	5:00 PM

11. Contractor must ensure equipment and loads are less than 10,00 pounds and will fit on the Yates cage.
12. Contractor must coordinate all underground loads with SDSTA prior to arrival.
13. Contractor and SDSTA Project Manager will hold a weekly progress meeting.

3.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)
EPA 560/5-85-024 (1985, 2015 revised) Guidance for Controlling Asbestos-Containing Materials in Buildings (Purple Book)

OSHA AND CODE OF FEDERAL REGULATIONS
29 CFR 1926.103 OSHA Respiratory Protection
29 CFR 1926.1101 OSHA Asbestos
40 CFR 763 Asbestos

3.2 DEFINITIONS

3.2.1 ACM
Asbestos Containing Materials (asbestos greater than 1 percent).

3.2.2 Area Sampling
Sampling of asbestos fiber concentrations which approximates the concentrations of asbestos in the theoretical breathing zone but is not actually collected in the breathing zone of an employee.

3.2.3 Asbestos
The term asbestos includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, and actinolite asbestos and any of these minerals that has been chemically treated or altered. Materials are considered to contain asbestos if the asbestos content of the material is determined to be at least 1 percent.

3.2.4 Asbestos Fibers
Those fibers having an aspect ratio of at least 3:1 and longer than 5 micrometers as determined by National Institute for Occupational Safety and Health (NIOSH) Method 7400.

3.2.5 Asbestos Permissible Exposure Limit
0.1 fibers per cubic centimeter of air as an 8-hour time weighted average measured in the breathing zone as defined by 29 CFR 1926.1101 or other Federal legislation having legal jurisdiction for the protection of workers health.

3.2.6 Contractor
The Contractor is that individual, or entity to perform the herein listed work.

3.2.7 Encapsulants
Specific materials in various forms used to chemically or physically entrap asbestos fibers in various configurations to prevent these fibers from becoming airborne.

3.2.8 Friable Asbestos Material
1 percent asbestos containing material that can be crumbled, pulverized, or reduced to powder by hand pressure when dry.

3.2.9 Glove bag Technique
Those asbestos removal and control techniques put forth in 29 CFR 1926.1101 Appendix G.

3.2.10 Job Hazard Analysis or JHA
Job Hazard Analysis will suffice as the Asbestos Abatement Plan provided that the JHA includes all the elements required of the Asbestos Abatement Plan.

3.2.11 Nonfriable Asbestos Material

Material that contains asbestos in which the fibers have been immobilized by a bonding agent, coating, binder, or other material so that the asbestos is well bound and will not normally release asbestos fibers during any appropriate use, handling, storage or transportation. It is understood that asbestos fibers may be released under other conditions such as demolition, removal, or mishap.

3.2.12 Personal Sampling
Air sampling which is performed to determine asbestos fiber concentrations within the breathing zone of a specific employee, as performed in accordance with 29 CFR 1926.1101.

3.3 REQUIREMENTS

3.3.1 Description of Work

The work covered by this section includes the handling and control of asbestos containing materials and describes some of the resultant procedures and equipment required to protect workers, the environment and occupants of the building or area, or both, from contact with airborne asbestos fibers. The work also includes the disposal of any asbestos containing materials generated by the work. More specific operational procedures shall be outlined in the Asbestos Hazard Abatement Plan called for elsewhere in this specification. (Under normal conditions non-friable or chemically bound materials containing asbestos would not be considered hazardous; however, this material may release airborne asbestos fibers during construction, demolition, and removal and therefore must be handled in accordance with the removal and disposal procedures as specified herein.) Provide negative pressure enclosure techniques as outlined in this specification. All asbestos removal work shall be supervised by a competent person as specified herein.

3.3.2 Employee Training

Contractors will submit certificates, prior to the start of work but after the main abatement submittal, signed by each employee indicating that the employee has received training in the proper handling of materials and wastes that contain asbestos in accordance with 40 CFR 763; understands the health implications and risks involved, including the illnesses possible from exposure to airborne asbestos fibers; understand the use and limits of the respiratory equipment to be used; and understand the results of monitoring of airborne quantities of asbestos as related to health and respiratory equipment as indicated in 29 CFR 1926.1101 on an initial and annual basis.

3.3.3 Permits, Licenses, and Notifications

The contractor will notify the state of South Dakota in writing 10 working days prior to commencement of work.

3.3.4 Environment, Safety and Health Compliance

3.3.5 Hazard Communication

The Project Manager will be provided Safety Data Sheets (SDS) for all chemicals brought to the site. These chemicals must be approved by the Sanford Lab EHS Department before use.

3.3.6 Asbestos Hazard Abatement Plan (maybe a JHA)

An asbestos abatement plan shall be developed by the contractor. This plan shall be developed in consultation with a PQP

3.3.7 Landfill Approval

ACM materials may dispose of only at landfills approved to accept such materials.

3.4 SUBMITTALS

The following submittals are required for this project:

SD-03 Product Data
Safety Data Sheets (SDS) for all chemicals

SD-06 Test Reports
Air Sampling Results;
Asbestos Disposal Quantity Report;
Clearance Sampling;

SD-07 Certificates
Asbestos Hazard Abatement Plan;
Contractor license (if applicable)
PQP credentials
Employee training records;
Waste shipment records
Notification to State of intended work

SD-11 Closeout Submittals
Clearance Certificate (as necessary)

3.5 QUALITY ASSURANCE

3.5.1 Private Qualified Person Documentation (PQP)
Submit the name, address, and telephone number of the (PQP) selected to prepare the Asbestos Hazard Abatement Plan,

3.5.2 Contractor's License

If a contractor is to perform abatement work, contractor shall have current South Dakota asbestos contractor's license.

3.5.3 Air Sampling Results

The contractor will complete fiber counting and provide results to the PQP for review within 48 hours of the "time off" of the sample pump. Notify the Project Manager immediately of any airborne levels of asbestos fibers in excess of the acceptable limits

4.0 EXECUTION

4.1 EQUIPMENT

4.1.1 Outer Protective Clothing

The contractor will provide personnel exposed to asbestos with disposable "non-breathable," or reusable "non-breathable" whole body outer protective clothing, head coverings, gloves, and foot coverings. Provide disposable plastic or rubber gloves to protect hands.

4.1.2 Glove bag

Use approved (asbestos removal) glove bags (as needed)

4.1.3 Personal Decontamination Unit

The Contractor will provide a temporary, negative pressure unit (where designated by the PQP)

4.1.4 Eye Protection

Provide goggles to personnel engaged in asbestos abatement operations when the use of a full-face respirator is not required.

4.1.5 Warning Signs and Labels

Provide warning signs at all approaches to asbestos control areas. Locate signs at such a distance that personnel may read the sign and take the necessary protective steps required before entering the area. Provide labels and affix to all asbestos materials, scrap, waste, debris, and other products contaminated with asbestos.

4.1.6 Local Exhaust System (if specified by the PQP)

Provide a local exhaust system in the asbestos control area in accordance with 29 CFR 1926.1101 that will provide at least four air changes per hour inside of the negative pressure enclosure.

4.2 WORK PROCEDURE

Perform asbestos related work in accordance with 29 CFR 1926.1101, 40 CFR 61-SUBPART M, and as specified herein. Use wet or, dry removal procedures, appropriate encapsulation procedures as listed in the asbestos hazard abatement plan and negative pressure enclosure techniques. Personnel shall wear and utilize protective clothing and equipment as specified herein. Eating, smoking, drinking, chewing gum, tobacco, or applying cosmetics shall not be permitted in the asbestos work or control areas. Personnel of other trades not engaged in the removal and demolition of asbestos containing material shall not be exposed at any time to airborne concentrations of asbestos unless all the personnel protection and training provisions of this specification are complied with by the trade personnel.

4.2.1 Asbestos Control Area Requirements

4.2.2 Removal Procedures

Wet asbestos material with a fine spray of [amended water] [a specific wetting agent such as light oil or foam] during removal, cutting, or other handling so as to reduce the emission of airborne fibers. Remove material and immediately place in 6 mil plastic disposal bags. Remove asbestos containing material in a gradual manner, with continuous application of the amended water or wetting agent in such a manner that no asbestos material is disturbed prior to being adequately wetted. Where unusual circumstances prohibit the use of 6 mil plastic bags, submit an alternate proposal for containment of asbestos fibers to the Project Manager for approval.

4.2.3 Sealing Contaminated Items Designated for Disposal

Remove contaminated architectural, mechanical, and electrical appurtenances such as venetian blinds, full-height partitions, carpeting, duct work, pipes and fittings, radiators, light fixtures, conduit, panels, and other contaminated items designated for removal by completely coating the items with an asbestos lock-down encapsulant at the demolition site before removing the items from the asbestos control area. These items need not be vacuumed. The asbestos lock-down encapsulant shall be tinted a contrasting color. It shall be spray-applied by airless method. Thoroughness of sealing operation shall be visually gauged by the extent of colored coating on exposed surfaces. Lock-down encapsulants shall comply with the performance requirements specified herein.

4.2.4 Air Sampling

Sampling of airborne concentrations of asbestos fibers shall be performed in accordance with 29 CFR 1926.1101 and as specified herein. Sampling performed in accordance with 29 CFR 1926.1101 shall be performed by the PQP. Sampling performed for environmental and quality control reasons shall be performed by the PQP unless otherwise specified, use NIOSH Method 7400 for sampling and analysis.

4.2.5 Sampling During Asbestos Work

The PQP shall provide personal and area sampling as indicated in 29 CFR 1926.1101 and governing environmental regulations. In addition, provided the same type of work is being performed, provide area sampling at least once every work shifts close to the work

4.2.6 Sampling After Final Clean-Up (Clearance Sampling)

Provide area sampling of asbestos fibers using aggressive air sampling techniques as defined in the EPA 560/5-85-024] and establish an airborne asbestos concentration of less than 0.01 fibers per cubic centimeter after final clean-up but before removal of the enclosure or the asbestos work control area. After final cleanup and the asbestos control area is dry but prior to clearance sampling, the PQP [and] NC shall perform a visual inspection in accordance with ASTM E1368 to ensure that the asbestos control and work area is free of any accumulations of dirt, dust, or debris. The asbestos fiber counts from these samples shall be less than 0.01 fibers per cubic centimeter or be not greater than the background, whichever is greater. Should any of the final samples indicate a higher value, the Contractor shall take appropriate actions to re-clean the area and shall repeat the sampling and [TEM] analysis at the Contractor's expense.

4.2.7 Encapsulant Check

Prior to removal of plastic barriers and after pre-clearance clean-up of gross contamination, the PQP shall conduct a visual inspection of all areas affected by the removal or encapsulation in accordance with ASTM E1368. Inspect for any visible fibers and to ensure that encapsulants were applied evenly and appropriately.

4.2.8 Site Inspection

While performing asbestos engineering control work, the Contractor shall be subject to on-site inspection by the Project Manager who may be assisted by or represented by safety or industrial hygiene personnel. If the work is found to be in violation of this specification, the Project Manager or his representative will issue a stop work order to be in effect immediately and until the issue is resolved. All related costs including standby time required to resolve the violation shall be at the Contractor's expense.

4.3 CLEAN-UP AND DISPOSAL

4.3.1 Housekeeping

Essential parts of asbestos dust control are housekeeping and clean-up procedures. Maintain surfaces of the asbestos control area free of accumulations of asbestos fibers. Give meticulous attention to restricting the spread of dust and debris; keep waste from being distributed over the general area. Use HEPA filtered vacuum cleaners. Do not blow down the space with compressed air unless area is under negative pressure, permitted by Third-Party Consultant and ambient monitoring outside the space is performed. When asbestos removal is complete, all asbestos waste is removed from the work-site, and final clean-up is completed, the Project Manager will attest that the area is safe before

4.3.3 Disposal of Asbestos

4.3.3.1 Procedure for Disposal

Collect asbestos waste, asbestos contaminated water, scrap, debris, bags, containers, equipment, and asbestos contaminated clothing which may produce airborne concentrations of asbestos fibers and place in sealed fiber-proof, waterproof, non-returnable containers (e.g. securely tied, double plastic bags 6 mils thick, cartons, drums or cans). Wastes within the containers must be adequately wet in accordance with 40 CFR 61-SUBPART M. Affix a warning and Department of Transportation (DOT) label to each container including the bags or use at least 6 mils thick bags with the approved warnings and DOT labeling preprinted on the bag. The name of the waste generator and the location at which the waste was generated shall be clearly indicated on the outside of each container. Prevent contamination of the transport vehicle (especially if the transport vehicle is a rented truck likely to be used in the future for non-asbestos purposes). These precautions include lining the vehicle cargo area with plastic sheeting (similar to work area enclosure) and thorough cleaning of the cargo area after transport and unloading of asbestos debris is complete. Dispose of waste asbestos material at an Environmental Protection Agency (EPA) or State-approved asbestos landfill.