



**ABATEMENT OF ASBESTOS CEMENT PIPING GUIDELINES AND PROCEDURES
CITY OF CONCORD WATERLINES - VARIOUS QUANTITIES
VARIOUS LOCATIONS
CONCORD, NORTH CAROLINA**

PROJECT SUMMARY

PROJECT NAME: Abatement of Asbestos Cement Water Piping

PROJECT LOCATION: Various Locations; Concord, North Carolina

OWNER: City of Concord
Post Office Box 308
Concord, North Carolina 28026-0308

CLIENT CONTACT: Enrique Blat, P.E. or Carolina Garcia-Zaragoza, P.E.

DATE: 3 December 2019

SCOPE OF WORK: Periodic abatement of varying lengths (9 to 13 linear feet) of asbestos cement pipe and coupling collars.

Guidelines for the asbestos abatement procedures are attached.

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NC Asbestos Project Designer #40459



GENERAL PROJECT GUIDELINES

A. GENERAL

1. The asbestos abatement contractor (Contractor) will be a licensed general contractor in either the specialty interior, building, unclassified, or asbestos categories by the North Carolina Licensing Board of General Contractors and limited for the bid amount.
2. The Contractor shall be responsible for visiting the site, prior to bidding, to confirm the scope of the work. Any quantities provided by the Owner (City of Concord) are done so as approximations. No additional contract price adjustments will be allowed due to variances between actual quantities and the estimated quantities listed herein. Should additional ACM be discovered during abatement activities, which was not previously identified, the contractor shall immediately notify the Owner.
3. The Contractor shall furnish and is responsible for all costs including but not limited to: permit fees, containment preparation, labor, materials, services, insurance, bonding, and equipment necessary to perform and complete the asbestos abatement/removal and disposal of all asbestos containing materials in accordance with the plans and specifications, applicable EPA and OSHA regulations, and any applicable state and local government regulations.
4. The Contractor has and assumes the responsibility of proceeding in such a manner that he offers his employees and others a workplace free of recognized hazards causing or likely to cause death or serious injury. The Contractor shall be responsible for performing this abatement and disposal so that airborne asbestos fibers levels do not exceed established protective levels.
5. The Contractor will be responsible for all costs, including additional visits and analytical fees, should the Owner's air monitoring firm determines that the Contractor failed a visual clearance inspection.

B. PERSONNEL

1. Supervisor
 - a. All supervisors shall be currently accredited by the NC HHCU for asbestos abatement.
 - b. All supervisors on the project shall have a minimum of two years experience in the administration and supervision of asbestos abatement projects including



work practices, protective measures for building and personnel, disposal procedures, etc.

- c. One supervisor shall be provided for every ten (10) workers at the project site during work hours. A minimum of one supervisor shall be present at the project site during all work hours.
- d. The Contractor shall have at least one employee on the job, per shift, in either a foreman or supervisor's position, who is bilingual in the appropriate languages when employing workers who do not speak fluent English.
- e. A minimum of one accredited supervisor per company shall have attended a 24-hour respiratory protection course and provide appropriate documentation of such.

2. Worker

- a. All workers shall be currently accredited as such by the NC HHCUC.

3. Competent Person

- a. A competent person, as defined in the OSHA Asbestos Standard, 29 CFR 1926.1101, employed by the Contractor must be outside the work area at all times to monitor activity, ensure containment security, provide information to visitors, and provide access for authorized persons to the work area.

4. Employees

- a. The Contractor is responsible for the behavior of workers within his employment. If at any time during the contracted work, or any of the Contractor's employees are judged to exhibit behavior unfitting for the area or judged to be a nuisance by the Building Owner or the Building Owner's representative, the Contractor shall immediately remove them from the project site.
- b. The contractor shall be responsible for compliance with the following behavior:
 - (i) Under no circumstances will alcohol, drugs, firearms, tobacco, tobacco products or any other type of controlled substances be permitted on the project site.



- (ii) All workers are restricted to the area of asbestos abatement work.
 - (iii) All vehicles must be parked in the area designated by the Building Owner.
 - (iv) All workers must conform to the following basic dress code when in the public area of the work site: long pants and shirts with sleeves, i.e., no tank tops, no shorts, etc.
 - (v) The Contractor is responsible for disposal of all materials brought to the project site/work site by his employees including drink cans, bottles, wrappers, or other food containers.
- c. Failure to adhere to these rules could result in criminal or civil prosecution and/or removal from the project site.

C. SUBMITTALS

1. Upon Award of Contract

The successful contractor will submit one copy of the following documents prior to the start of work or within five days of the award of the contract for review and approval by the Owner. A copy of the submittals shall also be kept at the project site for review by the Owner or appropriate regulatory agency at the work site in a clean room or on-site office of the contractor. The submittals will contain, at a minimum, the following information:

- A. A summary of the company's training program and/or a list of EPA approved training certification courses that the company's employees have attended.
- B. A summary of the company's written respiratory protection program which is in compliance with OSHA regulations and other applicable state or local regulations.
- C. Statement indicating the company has an established medical surveillance program in compliance with 29 CFR 1926.1101. The statement should also include documentation that all personnel participate in the medical surveillance program.
- D. If the length of the pipe to be abated is one hundred and sixty linear feet or greater (≥ 160 lin. ft.), a copy of the Asbestos Permit Application and Notification for Demolition/Renovation (NC DENR Form 3768) must be submitted to the NC HHCUC. The contractor will provide a copy of the notification to the City of Concord at the time the Form 3768 is submitted to the NC HHCUC. Upon receipt of the approved



permit, the Contractor shall provide a copy of the approved permit to the City of Concord. The permit will be present at the work site during the removal activities.

- E. Provide documentation for all employees that will be involved in the abatement/removal activities at the work site. The documentation should include the name of each individual, their position, their accreditation, social security number, and copy of the most recent certificate.
- F. Documentation signed by each worker acknowledging their participation in the company's employee medical surveillance program.
- G. Documentation for each worker reflecting their most recent fit test records and completion date of most recent respiratory protection program.
- H. Copy of most recent Initial Exposure Assessment as required by the OSHA Construction Asbestos Standard, 29 CFR 1926.
- I. Name, location, and applicable permit of asbestos waste disposal site. A contact name and phone number for the facility shall also be provided.
- J. Proposed project schedule including anticipated start date, set-up time, anticipated dates of work, number of shifts per day, anticipated completion date, etc.
- L. Provide required Certificates of Insurance with the Owner listed as an additional party.

2. Post-Job

Upon completion of the scope of work, the Contractor shall submit a complete set of post-job submittals to the Owner. Request for final payment will not be approved until the post-job submittal package has been reviewed and approved by the Owner and the Owner's representative. The post-job submittal should include at a minimum:

- A. Affidavits: Provide Contractor's affidavit of payment of debts and claims, affidavit of release of liens, and consent of the surety company to final payment.
- B. Manifest: Provide North Carolina Asbestos Waste Shipment Record (NCDENR 3787) receipt from asbestos waste disposal site which acknowledges the Contractor's delivery(s) of waste material. Include date, name of waste transporter, quantity of material delivered, and signature of authorized representative of disposal site.
- C. Daily Logs: Submit copies of all daily logs showing the following: name of all persons entering the work site, date, entering and leaving time, company or agency represented, reason for entering, employee's daily air monitoring data as



required by the OSHA Standard, written comments by inspectors, APD, or other persons.

TEMPORARY FACILITIES

A. WATER SERVICE

1. The Contractor will need to supply a source of water at the work site, if needed. The Contractor bears all expense of getting water to the work site areas. The Contractor shall be responsible for ensuring that the waterline(s) that they are using are properly maintained and protected and do not leak or break. Any damage due to water shall be corrected at the Contractor's expense to the City of Concord's satisfaction.
2. After completion of use, waterlines, connections, and fittings shall be removed without damage or alteration to existing water piping and equipment.

C. ELECTRICAL SERVICE

1. The Contractor will need to supply a source of electricity at the work site, if needed. The Contractor bears all expense of providing electricity to the work site areas and decontamination locations.
2. The Contractor will comply with all applicable NEMA, NEC, and UL standards and governing state and local regulations for materials and layout of temporary electrical service.
3. If utilized, the Contractor will provide receptacle outlets equipped with ground fault circuit interrupters, reset button, and pilot light for plug-in connections of power tools and equipment.
4. If needed, the Contractor will provide a weatherproof, grounded temporary electric power service and distribution system of sufficient size, capacity, and power characteristics to accommodate performance of work during the abatement/removal period.
5. Install temporary lighting adequate to provide sufficient illumination for safe work and traffic conditions in every work area. If needed, the contractor will provide the services of an electrician, on a standby basis, to service electrical needs during the abatement process.



D. FIRST AID

1. A minimum of one first aid kit shall be located in the clean room of the decontamination unit. Additional first aid kits, as the Contractor feels is adequate or is required by law, shall be located throughout the work area.

E. FIRE EXTINGUISHERS

1. The Contractor shall comply with the applicable recommendations of NFPA Standard 10 – “Standard for Portable Fire Extinguishers”. Locate fire extinguishers where they are most convenient and effective for their intended purpose but provide not less than one extinguisher in each work area or floor level.

F. TOILET FACILITIES

1. The Contractor shall provide temporary toilet facilities to be used by the Contractor’s employees.

G. PARKING

1. The Contractor’s employees will park only in areas designated by the City of Concord.

H. SITE SECURITY

1. The Contractor is responsible for maintaining security in the work areas at all times during work hours at the work site. The Contractor is responsible for securing the work areas at the end of the work day.

I. STORAGE

1. The Contractor shall supply temporary storage for all equipment and materials for the duration of the project. Storage facilities and dumpster(s) will be maintained in areas designated by the City of Concord.

J. HEATING/COOLING

1. The Contractor shall provide adequate heating and cooling in the work areas if needed to perform his work as appropriate.



WORK AREA CLEARANCE

A. GENERAL

1. Notification and scheduling of the final clearance after the abatement is complete is the responsibility of the Contractor.

B. AIR MONITORING

1. Air monitoring will not be required during the abatement process.

C. FINAL CLEARANCE TESTING

1. After the abatement is completed, the City of Concord may request a visual clearance of the work area by the Asbestos Project Designer (APD). In the event, a visual clearance, the APD will be retained by the City of Concord and will submit a report to the City of Concord.

GENERAL ABATEMENT PROCEDURES

- Excavate overburden material to within four (4) to six (6) inches of the top of the pipe section to be removed and replaced
- Using hand tools, excavate overburden materials to a depth of approximately four (4) to six (6) inches below the top of the pipe along the length of the pipe to be removed including the pipe coupling collars
- Wrap length of pipe to be removed with 6 mil plastic to within twelve (12) to eighteen (18) inches of the collar couplings and place supports beneath the pipe to maintain stability of the pipe while removing the coupling collars
- Place glovebags at the coupling collars and remove the coupling collars; remove glovebags and place in 6 mil bags and remove from excavation for proper disposal
- Wrap ends of pipe with 6 mil plastic and remove pipe section from excavation for proper disposal
- Transport ACM from site and dispose of abated ACM at approved facility