

REQUEST FOR PROPOSALS

DRAINAGE PUMP STATION 13 ASBESTOS ABATEMENT



Proposal Due Date: October 16, 2020

Proposal Due Time: 11:00 a.m.

Sewerage and Water Board of New Orleans

Special Projects

NOTE TO PROPOSERS:

- 1) Submit the separate set of Proposal Forms with all required information as your Proposal.
- 2) Retain the complete set of Specifications and Contract Documents for your file.

REQUEST FOR PROPOSALS

DRAINAGE PUMP STATION 13 ASBESTOS ABATEMENT

The Sewerage & Water Board of New Orleans (SWBNO) is seeking a qualified firm to provide asbestos abatement services at Drainage Pump Station 13 located 4201 Tall Spruce, New Orleans, 70131. Therefore, SWBNO is issuing this Request for Proposal (RFP) to contract highly reliable contractors and consultants who can perform environmental services in accordance with appropriate regulations and methods promulgated by the United States Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the National Institute for Occupational Safety and Health (NIOSH), the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE), the American Conference of Industrial Hygienists (ACGIH) and the American Industrial Hygiene Association (AIHA). These services will be utilized to produce high-quality deliverables associated with the SWBNO's dedication toward environmental compliance, water quality protection, and storm water management.

Proposer shall have an active Commercial License with Specialty Class for Asbestos Removal and Abatement issued by the Louisiana State Licensing Board for Contractors, license # shall be displaced on the outside of your submittal envelop.

RFP will be available **September 14, 2020** for download at the following website: https://www2.swbno.org/business_bidspecifications.asp.

Inquiries and/or Requests for Clarification are due to SWBNO Erin Weaver, Purchasing Analyst, **on September 28, 2020, 2020 not later than 5:00 p.m.** via email to eweaver@swbno.org. All responses will be posted by **October 2, 2020 not later than 5:00 p.m.**

A **mandatory pre-submittal conference** for this RFP will be held on **September 24, 2020 @ 9:30 a.m.** via Microsoft Teams:

[Join Microsoft Teams Meeting](#) +1 504-224-8698 United States, New Orleans (Toll) Conference ID: 451 158 104#

Proposals will be due **October 16, 2020 not later than 11:00 a.m.** to the SWBNO at the office of its Purchasing Agent, 625 St. Joseph Street, Room 133, New Orleans, Louisiana 70165. Faxed submittals will not be accepted. Bid reading to follow. Only names of companies will be read. Call information for Proposal reading:

[Join Microsoft Teams Meeting](#) +1 504-224-8698 United States, New Orleans (Toll)

Conference ID: 728 391 769#

A mandatory site visit will be held on September 25, 2020 at 9:30 a.m. Drainage Pump Station 13 located 4201 Tall Spruce, New Orleans, 70131. An addendum will be sent to all firms attending the mandatory pre-submittal meeting notifying the time of the site visit.

Due to the COVID-19 Public Health Emergency declared by Governor John Bel Edwards in Proclamation Numbers 41, 33, 32, 30, 27, and 25 JBE 2020, electronic proposal delivery may be utilized for this RFP.

If choosing to submit electronically, proposals must be received by electronic copy to the **RFP-Proposals@swbno.org** on or before **October 16, 2020, 11:00 am CST**. Proposers e-mailing their proposals should allow sufficient time to ensure receipt of their proposal by the time specified.

The proposal package must be emailed to: **RFP-Proposals@swbno.org** with the Subject Line: marked “**DRAINAGE PUMP STATION 13 ASBESTOS ABATEMENT**”. If the file size of the email submission exceeds server requirements, the email submission may be broken into smaller emails with “Part 1 of ___” included at the end of each original Subject Line (e.g. RFP# marked “**DRAINAGE PUMP STATION 13 ASBESTOS ABATEMENT**” Proposal Submission – [Proposer Name] – Part 1 of 3).

SWBNO assumes no liability for assuring accurate/complete e-mail transmission and receipt. The responsibility solely lies with each Proposer to ensure their proposal is received at the specified email address prior to the deadline for submission. Proposals received after the deadline, corrupted files, and incomplete submissions (e.g. Part 1 and Part 2 of 3 are received, but Part 3 is not) will not be considered.

Respondents must complete all required attachments and submit along with electronic proposal submission.

*Note: SWBNO has elected to use LaPAC, the state’s online electronic bid posting and notification system, in addition to its standard means of advertising this requirement. LaPAC is resident on State Purchasing’s website at <https://wwwcfprd.doa.louisiana.gov/OSP/LaPAC/dspBid.cfm?search=department&term=181> and is available for vendor self-enrollment. In that LaPAC provides an immediate e-mail notification to subscribing bidders that a solicitation and any subsequent addenda have been let and posted, notice and receipt thereof is considered formally given as of their respective dates of posting dates. Though not required if receiving solicitation and addenda notices from LaPAC, SWBNO will mail addenda to all vendors contacting our office and requesting to be put on our office Vendor Listing for this solicitation.

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REQUEST FOR PROPOSALS

Asbestos Remediation

PART I. ADMINISTRATIVE INFORMATION

1.1 Request for Proposals

The Sewerage & Water Board of New Orleans (SWBNO) is seeking a qualified firm to provide asbestos abatement services at Drainage Pump Station 13 located 4201 Tall Spruce, New Orleans, 70131. Therefore, SWBNO is issuing this Request for Proposal (RFP) to contract highly reliable contractors and consultants who can perform environmental services in accordance with appropriate regulations and methods promulgated by the United States Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the National Institute for Occupational Safety and Health (NIOSH), the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE), the American Conference of Industrial Hygienists (ACGIH) and the American Industrial Hygiene Association (AIHA). These services will be utilized to produce high-quality deliverables associated with the SWBNO's dedication toward environmental compliance, water quality protection, and storm water management.

1.2 Proposal Preparation

Proposals submitted for consideration should follow the format and order of presentation provided in Part III, Proposal Content.

1.3 Meetings, Questions, and Answers

A mandatory pre-submittal conference for this RFP will be held on **September 24, 2020 at 9:30 a.m.** Via Microsoft Teams.

[Join Microsoft Teams Meeting](#) +1 504-224-8698 United States, New Orleans (Toll)

Conference ID: 451 158 104#

At this meeting, staff will discuss the scope of work, submittal requirements and respond to questions from the attendees. As the Board staff will not be available to respond to individual inquiries regarding the project scope outside of this pre-submittal conference, it is strongly recommended that interested firms send a representative to the pre-submittal conference.

A mandatory site visit will be held on September 25, 2020 at 9:30 a.m. at Drainage Pump Station 13 located 4201 Tall Spruce, New Orleans, 70131.

1.4 Submission of Proposals

Proposers that meet the requirement of this RFP and are experienced in these areas as described within the RFP are invited to submit a proposal to: The Sewerage & Water Board of New Orleans (SWBNO) Purchasing Department, 625 St. Joseph Street, Room 133, New Orleans, LA 70165, or if submitting electronically send to RFP-Proposals@swbno.org not later than the said due date and time.

If not submitting electronically, submit six (6) copies (total of seven) of the Proposal, and one (1) electronic version (CD or flash drive) in a sealed envelope with your contractor's license on the outside of your submittal envelop.

Proposals, amendments, and any other information received after this date and time will not be considered.

The one (1) copy marked ORIGINAL shall contain a cover letter with original signature of person(s) authorized to contractually bind the Prospective groups. The cover letter shall also include an affirmation that there is not a conflict of interest of the Proposer and the proposed team in performing work for the Sewerage and Water Board of New Orleans or identify any possible conflicts that might impair their ability to perform if awarded the contract, including any familiar or business relationships that the Proposer and the proposed team have with SWB and its employees.

Proposals received, in whole or in part, after this date and time will not be considered. A proposal may be rejected if it is conditional or incomplete, deemed non-responsive, or if it contains any alterations of form or other irregularities of any kind. The SWBNO may reject any or all Proposals and may waive any immaterial deviation in a Proposal. The SWBNO waiver of immaterial defect shall in no way modify the RFP or excuse the prospective group from full compliance with all requirements if selected and engaged.

Proposers are solely responsible for the timely delivery of their proposals. The SWBNO will not acknowledge by mail or telephone timely receipt of proposals.

1.5 Changes, Addendum, or Withdrawal of Proposals

Any changes or addenda to a proposal must be submitted in writing, signed by an authorized representative of the proposer, cross-referenced clearly to the relevant proposal section, and received by SWBNO prior to the proposal due date and time. All changes and addenda must meet all requirements for the proposal. Any proposer choosing to withdraw its proposal must submit a written withdrawal request to SWBNO prior to the proposal due date and time.

1.6 RFP Schedule Summary

The events and dates summarized in Table 1 represent milestones in SWBNO's RFP process; however, SWBNO reserves the right to deviate from this schedule.

Table 1. RFP Schedule Summary

Event	Date	Local Time
Mandatory Pre-submittal Conference via Telephone Conference	September 24, 2020	9:30 a.m.
Mandatory Site Visit	September 25, 2020	9:30 a.m.
Deadline for SWBNO receipt of written questions from prospective proposers	September 28, 2020	5:00 p.m.
Responses to questions/clarification	October 2, 2020	5:00 p.m.
Proposal due date and time	October 16, 2020	11:00 a.m.
Evaluation Committee meeting, open to public	TBD	TBD
Board approval of evaluation committee recommendation	TBD	During Board Meeting, begins 9 am

PART II. GENERAL INFORMATION

2.1 Overview of the SWBNO

The SWBNO operates and maintains infrastructure through Orleans Parish to provide safe drinking water to support fire protection and the public health of all residents, improve sewerage collection services to support public safety and sanitation, and more effectively collect and convey stormwater out of the City of New Orleans to reduce the risk from flood events. The SWBNO remains diligent in improving public safety for the citizens of New Orleans continuously at a reasonable cost to the community.

The Sewerage & Water Board of New Orleans (SWBNO) is seeking a qualified firm to provide asbestos abatement services at Drainage Pump Station 13 located 4201 Tall Spruce, New Orleans, 70131. Therefore, SWBNO is issuing this Request for Proposal (RFP) to contract highly reliable contractors and consultants who can perform environmental services in accordance with appropriate regulations and methods promulgated by the United States Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the National Institute for Occupational Safety and Health (NIOSH), the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE), the American Conference of Industrial Hygienists (ACGIH) and the American Industrial Hygiene Association (AIHA). These services will be utilized to produce high-quality deliverables associated with the SWBNO's dedication toward environmental compliance, water quality protection, and storm water management.

2.2 Services to be Provided

2.2.1 General Requirements for all Projects

2.2.1.1 SWBNO is seeking proposals for various activities associated with the remediation of asbestos-containing materials (ACM). In addition to the mandatory tasks, safety requirements and facility requirements outlined within this RFP, all work is to be conducted in accordance with all City, State and Federal regulatory requirements, including, without limitation, those outlined herein.

2.2.1.2 The successful Proposer will remediate ACM from SWNBO facilities on an as-needed basis. Additionally, the successful Proposer will remove and properly dispose of all ACM from SWBNO facilities on an as-needed basis. SWBNO will arrange for disposal of lead materials from SWBNO facilities.

2.2.1.3 Proposers may submit proposals for the remediation of one, two, or all of the materials identified.

2.2.1.4 SWBNO's Environmental Affairs Department contracts asbestos assessments and will provide copies of the assessment results when requesting remediation services. SWBNO also contracts directly with a third-party air monitoring firm for

completion of asbestos remediation oversight and air monitoring services. As a result, these services are NOT requested as part of this RFP.

2.2.1.5 The use of subcontractors for any part of the remediation work is acceptable. Proposers shall identify the subcontractors in the proposal.

2.2.1.6 The SWBNO expects the successful Proposer to be available for ACM remediation within two (2) weeks of notice by the SWBNO. The successful Proposer must provide a schedule of events as well as work crew member names and contact information on a per project basis as soon as possible. SWBNO prefers that this information be provided no less than 48 hours prior to the start of a project.

2.2.1.7 The successful Proposer must have personnel available to complete pre-project meetings to tour the proposed worksite, discuss the scope of work, review work procedures and safety measures, determine necessary resources (including those to be supplied by SWBNO), and identify the regulatory compliance plan and air monitoring requirements for the project. As noted above, SWBNO separately contracts an air monitoring firm to oversee and monitor asbestos and lead remediation projects; a representative of SWBNO's air monitoring firm is typically in attendance at the pre-project meetings as well as the SWBNO project manager and other relevant SWBNO personnel. Following a request for services by SWBNO, the successful Proposer must prepare a proposal detailing the scope of services, applicable unit costs, and estimated total costs for the project for SWBNO's review and approval; the proposals shall be provided in a reasonable timeframe as not to delay the SWBNO project.

2.2.1.8 The successful Proposer will obtain and maintain, at its sole cost and expense, all permits, licenses, certificates of authority, approvals and inspections required by federal, state and local supervisory agencies for the performance of the services to be provided and will assure that the designated transfer stations and the designated disposal facilities possess all necessary permits, licenses, etc. The successful Proposer will identify the name and location of the disposal facility, and provide proof that the facility has the appropriate permits and licenses.

2.2.1.9 Upon SWBNO's authorization to proceed, the successful Proposer will commence remediation of the applicable ACM from SWBNO facilities according to regulations specified in LDEQ's Asbestos Project Requirements, Environmental Protection Agency (EPA) National Emission Standards for Hazardous Air Pollutants (NESHAPS) regulations and also using methods mandated by U.S. Department of Labor Occupational Safety and Health Administration (OSHA) Standards defined in 29 CFR 1926.1101.

2.2.1.10 All notifications must be placed with the City of New Orleans prior to conducting any asbestos remediation activities. The SWBNO project manager must

be provided with a copy of the notification at the time that it is provided to the City of New Orleans.

2.2.1.11 The successful Proposer will supply all manpower, equipment and supervision to complete the agreed upon scope of work. Subcontracted manpower, equipment, and vehicles may be utilized provided that subcontractors are authorized by SWBNO.

2.2.1.12 SWBNO will provide the successful Proposer with water and electricity for on-site use (unless otherwise specified), as well as labor for blanking off tanks and lock-out of utilities where ongoing project work affects active Plant operations or other SWBNO facilities. The successful Proposer will be required to provide their own additional on-site support facilities (such as office trailers, portable toilets, dumpsters, high lifts, and scaffolding, portable showers, etc.) for use as needed. All waste water generated must be containerized and sampled for determination of treatment and/or disposal options prior to conducting any discharge and/or off-site disposal activities. Waste water that has been characterized as safe for placement to a sanitary sewer may be discharged using the SWBNO facility infrastructure pending review of analytical data and approval from SWBNO.

2.2.1.13 The successful Proposer will provide SWBNO with twenty-four (24) hours' notice prior to removing any asbestos or hazardous material for off-site disposal.

2.2.1.14 All materials will be removed and transported from SWBNO facilities for off-site disposal or treatment in accordance with all applicable federal, state and local laws, rules and regulations, including those specified in the section entitled "Disposal Facility Requirements".

2.2.1.15 The successful Proposer will provide SWBNO with a legible, complete copy of all manifests properly identifying all materials and wastes being removed for off-site disposal. Each manifest must include all required EPA identification numbers and addresses for all disposal and transfer facilities utilized as needed.

2.2.1.16 After remediation activities are complete, the successful Proposer will remove all equipment, materials and debris associated with the ACM remediation from the worksite. The successful Proposer is responsible to transport and dispose of asbestos-containing waste.

2.2.2 Safety Requirements

2.2.2.1 The successful Proposer shall comply with all applicable SWBNO training and health & safety requirements.

2.2.2.2 At a minimum, successful Proposer shall provide site workers with a hard hat, safety glasses, and ANSI-approved steel-toed footwear. Fire retardant coveralls or clothing are required at certain SWBNO facilities.

2.2.2.3 By submitting its proposal, each Proposer warrants that it is aware of and understands the possible hazards which are presented to persons, property, and the environment in the performing of transportation, storage, and sample handling for analysis. The successful Proposer will transport, store, remediate and dispose of such materials in full compliance with all applicable governmental laws, regulations and orders. The successful Proposer's personnel and subcontractors engaged in onsite work at SWBNO facilities or SWBNO project locations must have training pursuant to applicable OSHA requirements.

2.2.2.4 The successful Proposer must provide a copy of their company's health and safety plan to the SWBNO for review prior to commencement of any work. All Proposers shall provide the Proposer's OSHA Injury Rate for calendar year 2018 with their proposal.

2.2.3 Sample Disposal Requirements

The LDEQ regulates the disposal of non-hazardous and hazardous waste under the authority of the Federal Resource Conservation and Recovery Act (RCRA) and the United States Environmental Protection Agency (U.S. EPA).

The following sections from the Code of Federal Regulations (CFR), Rules and Regulations of the Louisiana Environmental Regulatory Code (ERC) Title 33:Part III, and laws of the ERC are pertinent to the classification, transportation, and disposal of all wastes associated with this RFP:

- 29 CFR Part 1910.120 U.S. Dept. of Labor OSHA Hazardous Waste Operations and Emergency Response Regulations
- 29 CFR Part 1926.52 K (I) (ii) U.S. Dept. of Labor OSHA Regulations on Hazard Placards
- 40 CFR Part 61 National Emission Standards on Hazardous Air Pollutants
- 40 CFR Parts 239 to 258 U.S. EPA Solid Waste Regulations
- 40 CFR Parts 260-279 U.S. EPA Hazardous Waste Management Regulations
- 40 CFR Part 302 U.S. EPA Hazardous Materials Release Requirements
- 49 CFR Parts 100-199 U.S. DOT Hazardous Materials Regulations
- Louisiana Air Quality Regulations, Chapters 27 and 51

2.2.4 Transportation Requirements

All shipments of regulated waste or recyclable material, whether hazardous or non-hazardous, offered for transportation and off-site disposal must be transported exclusively via an approved, fully permitted, and licensed transporter. Transporters shall comply with all applicable requirements for the transportation of regulated or recyclable material to the destination facility.

2.2.5 Off-Site Disposal Requirements

The successful Proposer will dispose of all lab samples in a prudent manner and the successful Proposer or agents' signature on the chain of custody form will transfer ownership of all submitted samples to the Proposer.

All hazardous waste transported off-site for off-site disposal must be received and properly disposed of exclusively via a fully permitted hazardous waste management facility that is authorized to accept and achieve final disposition of the waste stream offered.

The successful Proposer must contact the destination facility and obtain written authorization for each type of regulated or recyclable waste stream slated for off-site disposal, treatment, storage, or recycling prior to removing the regulated waste or recyclable material from a SWBNO facility, whether hazardous or non-hazardous. The authorization shall indicate the destination facility is permitted to accept the type and quantity of material offered by the SWBNO, and is capable and willing to accept, dispose, treat, store, and/or recycle the material according to applicable Federal, State and City regulations.

2.2.6 Disposal Facility

Upon the date of submission of a proposal to this RFP, all proposed transporter(s), transfer station(s), and disposal facility(ies) to be utilized shall have the requisite environmental permits or licenses. From the commencement date of the contract between SWBNO and the successful Proposer and continuing throughout the term of such contract, the transporter(s), transfer station(s), and disposal facility(ies) shall maintain compliance with all applicable existing and future federal, state and local laws, ordinances, rules, regulations, and requirements. The Successful Proposer shall certify the above to SWBNO and, upon request, provide evidence of such compliance.

The disposal facility(ies) may be a landfill, a recycling facility, or a resource recovery facility. In any case, the disposal facility(ies) shall be designed to provide the maximum environmental protection and the least environmental impact practicable. Specifically, if the disposal facility(ies) is a landfill it must be designed and operated in accordance with applicable federal, state and local environmental regulatory requirements but in no case to a lesser standard than those stated in the Part 258 Standards under RCRA Subtitle D. If the disposal facility(ies) is a resource recovery or waste-to-energy facility it must be designed and operated in accordance with applicable federal, state and local environmental regulatory requirements but in no case to a lesser standard than those stated in the Section 111(d) Emission Guidelines for Municipal Waste Combustors under the Clean Air Act Amendments.

The SWBNO may schedule visits to the disposal facility(ies) to be utilized by Proposers so that SWBNO can inspect such proposed facility. During the facility visits, Proposers must ensure that appropriate personnel are available to answer any SWBNO questions.

2.2.7 Permitting

The Contractor shall furnish SWBNO with copies of all applicable licenses, permits, authorizations, certificates, and manifests necessary to lawfully fulfill the obligations defined.

2.2.8 Incident Report

The Contractor shall provide a report that describes the clean-up activities associated with the cleanup including:

- Location
- Material
- Estimated quantity of material
- Time and date of remedial action
- Remedial action taken
- Follow up remedial actions
- Transport and disposal manifests
- Photograph

2.3 Contract Terms and Compensation

A contract period of twelve (12) months is scheduled with initiation of the contract period following approval by the SWBNO Board of Directors (Board) and issuance of Notice to Proceed.

The tentative date is scheduled for (Date) and will end (Date). SWBNO expects the work to be completed within six (6) months.

In the event of a Hurricane, the SWBNO will give the Contractor 48 hours to clean and remove equipment for the Building to give the SWBNO employees full access to Pump Station.

The Board shall contact the contracted firm when asbestos monitoring is required. The successful Proposer shall prepare proposals and provide the requested services in a reasonable timeframe as not to delay the SWBNO project or the resolution of any Citations levied by a regulatory agency against the SWBNO. SWBNO expects that the successful Proposer will provide proposals for professional services within ten (10) working days of the request for services, and that the work can be scheduled within ten (10) working days of the SWBNO's acceptance of the proposal. Depending upon the project, the SWBNO may need the proposals or work schedule to be expedited; the successful Proposer shall make every effort to accommodate the SWBNO's scheduling needs. However, it is possible that a contractor would not be requested to conduct any Sewerage and Water Board asbestos monitoring during the contract period.

The SWBNO shall insist that the work performed and supplies furnished shall be of the highest quality. The Board reserves the right to stop work if it appears to be in the best interest of the Board. The Contractor shall give a thirty (30) day warranty on all work performed under this contract on parts, labor and materials.

The SWBNO reserves the right to solicit contractors for spill cleanup work through the normal competitive bid process in cases where it is deemed appropriate.

2.4 Payment

The SWBNO shall pay Contractor in accordance with the contracted prices. The Contractor will invoice the agency monthly (or at such time as a task order has been delivered or placed into production) at the billing address designated by the agency. Payments will be made by the Agency within approximately thirty (30) calendar days after receipt of a properly executed invoice, and approval by the Chief of Environmental Affairs or her designee. Invoices submitted without the referenced documentation will not be approved for payment until the required information is provided.

2.5 Scope of Work

See Attachment C. Terracon Asbestos Abatement Specifications and Asbestos Survey Report.

2.5.1 Abatement/Cleaning

1) Abatement Contractor must adhere to all Federal, State and Local regulations related to asbestos removal and cleaning. Regulations include LDEQ's Asbestos Project Requirements, Environmental Protection Agency (EPA) National Emission Standards for Hazardous Air Pollutants (NESHAPS) regulations and also using methods mandated by U.S. Department of Labor Occupational Safety and Health Administration (OSHA) Standards defined in 29 CFR 1926.1101. The following must be provided prior to commencement of work:

1. Copy of project notification to applicable regulatory agencies to include the City of New Orleans
2. Projected project schedule, in accordance with those schedules established at the pre-bid meeting. The projected schedule is subject to change at SWBNO's request. Reasonable accommodation may be applicable for additional mobilizations required by the SWBNO.
3. Supervisor and worker roster including: valid, updated asbestos worker and supervisor training certificates; medical authorizations; and respirator fit test documentation for all workers assigned to completion of the project.
4. Copy of State of Louisiana Asbestos Contractor Business License.
5. Proof of Contractor insurance naming the Owner and Consultant as additionally insured.
6. Safety Data Sheets (SDS) for all chemicals to be used on the project.

2) Work shall be conducted during scheduled working hours 7:00am through 5:00pm Monday through Friday, unless otherwise agreed to in writing by the Owner. Contractor must submit sign-in sheet to SWBNO Operator each morning within 30 minutes of arrival to job site.

Work will begin on South End of Building and proceed across the building to the North End until complete.

- 3) Work will begin with the series of electrical panels on the South end of the building. This work must be completed in 3 days and cannot be performed during a rain event. SWBNO will provide an electrician to engage lockout/tagout prior to commencement of this work.
- 4) Containment set up must be completed in 1 Day for Electrical Panel Cleaning.
- 5) Cleaning of the area and encapsulation must be completed in 1 day for Electrical Panel Cleaning.
- 6) Clearance sampling must be completed in 1 Day with samples driven to CA Laboratory in Baton Rouge with Same-Day Turnaround for Electrical Panel Cleaning.
- 7) All surfaces within the building shall be HEPA vacuumed and wet-wiped to remove all surface contamination and asbestos residues.
- 8) If the SWBNO needs any equipment (drums, dollies, hand pumps, etc.), Contractor will be responsible for pre-cleaning the equipment for SWBNO use and moving the equipment outside of the containment area.
- 9) Isolate all work areas using required signs and barrier tape.
- 10) Contractor shall construct a rigid three (3) chamber decontamination unit, as defined by applicable regulations, to provide access and egress to the work area. The decontamination chamber shall be accessible to all employees working within contained areas.
- 11) Provide all workers with proper personnel protection including but not limited to: double layer tyvek suits, gloves, eye protection, hardhats, work boots, etc.
- 12) Minimum worker respiratory protection shall be half-face, negative pressure respirators equipped with P-100 filters for all removal work on this project. If at any time PCM Daily air samples begin to come back above the exposure limits, workers should switch to PAPR respirators.
- 13) Containments will be set up by section, beginning at the South end of the building and working toward the North end, until the entire building is clean and has passing TEM air results following visual Inspections by NV5.
- 14) Pre-Clean of all critical barriers (Fans and Vents) with HEPA Vacuums and Wet Wipes prior to sealing off with poly and putting critical in place. This must be inspected visually by NV5 prior to sealing them off.
- 15) There are currently 2 Containments in place – Pump D-4 and Pump D-5. Upon receiving the clearance results for Pump D-5, the wall between the 2 pumps will be removed, leaving in place 1 large containment over the 2 pumps. This will remain in place, and clean air will be pumped into the contained area. The consultant will provide regular scheduled air sampling in this area. The contractor will immediately clean/decontaminate these areas if sampling indicates contamination of the area. Filtration of incoming makeup air may be suggested.
- 16) Polyethylene (6-mil) tunnels will be built “As-Needed” for the SWBNO personnel to access equipment. The amount and location of the tunneling will be determined

when needed. Where necessary, such tunnels will be constructed of lumber supports (2"x2" minimum) and polyethylene.

- 17) When the large containment that is surrounding a smaller containment is cleared, the smaller containment may be removed, but the large containment must be kept in place. Clean air will continuously be pumped into the large contained area.
- 18) Flame Retardant Reinforced Poly must be used throughout the duration of all work.
- 19) Prior to sealing off sections, SWBNO must be notified to confirm that equipment in the area is acceptable to seal. If there is equipment within the area that the SWBNO will need access to, this equipment must be cleaned first via HEPA vacuuming and wet-wiping.
- 20) Scaffolding – A scaffold will need to be built for each containment section so that the building can be cleaned from Top to Bottom. At the beginning stages of completion of the current containment, scaffolding may begin for the next section. Once Clearance results have passed, the scaffold for the section must be removed from the cleared section, only leaving the scaffolding wall from the first containment that meets the second containment.
- 21) Once the first containment has passed the TEM air sampling results, the wall between containment 1 and containment 2 can be removed, leaving it 1 large containment area with clean air being pumped inside.
- 22) Ensure that all abated/cleaned areas are free of dust, debris, particulate or other residues.
- 23) A visual inspection will be performed by NV5 Supervisor once fine cleaning is completed. When the Visual Inspection passes, TEM air samples will be collected by an NV5 Supervisor and sent to an accredited laboratory for analysis.
- 24) If necessary, TEM Microvac surface samples may be collected to confirm there is no asbestos-contaminated dust remaining.
- 25) If at any time, the TEM clearance samples do not pass the 1st time, the Contractor will be responsible for the additional cleaning and costs associated with TEM analysis.
- 26) There are sections within the building with damaged fiberglass insulation on piping. This fiberglass insulation may not be able to be cleaned properly. It is recommended that the damaged fiberglass insulation be removed by the Contractor during the work. The S&WB would be responsible for making the final decision on if the insulation is to be removed or left in place. Note: as clearance sampling is to be performed via TEM, removal of fiberglass will not affect sample results.
- 27) ACM and contaminated materials if stored onsite prior to proper disposal shall be placed in waste containers properly labeled as required by 29 CFR 1926.62
- 28) All materials will be removed and transported from SWBNO facilities for off-site disposal or treatment in accordance with all applicable federal, state and local laws, rules and regulations, including those specified as *Disposal Facility Requirements*.
- 29) The Contractor will provide SWBNO with a legible, complete copy of all manifests properly identifying all materials and wastes being removed for off-site disposal.

Each manifest must include all required EPA identification numbers and addresses for all disposal and transfer facilities utilized as needed.

- 30) After remediation activities are complete, the Contractor will remove all equipment, materials and debris associated with the ACM remediation from the worksite. The Contractor is responsible to transport and dispose of asbestos-containing waste.

2.5.2 Waste Disposal

The Contractor must utilize clear 6 mil thick leak-tight polyethylene bags for containment of ACM in accordance with EPA NESHAPS regulations, OSHA 29 CFR 1926 and the U.S. Department of Transportation Hazardous Waste Hauling Regulation. The Contractor must label all waste items bagged or wrapped in polyethylene. These labels will be in accordance with OSHA 29 CFR 1926 and the U.S. Department of Transportation Hazardous Waste Hauling Regulation HM-181.

The LDEQ regulates the disposal of non-hazardous and hazardous waste under the authority of the Federal Resource Conservation and Recovery Act (RCRA) and the United States Environmental Protection Agency (U.S. EPA).

The following sections from the Code of Federal Regulations (CFR), Rules and Regulations of the Louisiana Environmental Regulatory Code (ERC) Title 33:Part III, and laws of the ERC are pertinent to the classification, transportation, and disposal of all wastes associated with this RFP:

- 29 CFR Part 1910.120 U.S. Dept. of Labor OSHA Hazardous Waste Operations and Emergency Response Regulations
- 29 CFR Part 1926.52 K (I) (ii) U.S. Dept. of Labor OSHA Regulations on Hazard Placards
- 40 CFR Part 61 National Emission Standards on Hazardous Air Pollutants
- 40 CFR Parts 239 to 258 U.S. EPA Solid Waste Regulations
- 40 CFR Parts 260-279 U.S. EPA Hazardous Waste Management Regulations
- 40 CFR Part 302 U.S. EPA Hazardous Materials Release Requirements
- 49 CFR Parts 100-199 U.S. DOT Hazardous Materials Regulations
- Louisiana Air Quality Regulations, Chapters 27 and 51

2.5.3 Transportation Requirements

All shipments of regulated waste or recyclable material, whether hazardous or non-hazardous, offered for transportation and off-site disposal must be transported exclusively via an approved, fully permitted, and licensed transporter. Transporters shall comply with all applicable requirements for the transportation of regulated or recyclable material to the destination facility.

2.5.4 Off-site Disposal Requirements

All hazardous waste transported off-site for off-site disposal must be received and properly disposed of exclusively via a fully permitted hazardous waste management facility that is authorized to accept and achieve final disposition of the waste stream offered.

The successful Proposer must contact the destination facility and obtain written authorization for each type of regulated or recyclable waste stream slated for off-site disposal, treatment, storage, or recycling prior to removing the regulated waste or recyclable material from a SWBNO facility, whether hazardous or non-hazardous. The authorization shall indicate the destination facility is permitted to accept the type and quantity of material offered by the SWBNO, and is capable and willing to accept, dispose, treat, store, and/or recycle the material according to applicable Federal, State and City regulations.

2.5.5 Disposal Facility

All proposed transporter(s), transfer station(s), and disposal facility(ies) to be utilized shall have the requisite environmental permits or licenses. From the commencement date of the contract between SWBNO and the successful Proposer and continuing throughout the term of such contract, the transporter(s), transfer station(s), and disposal facility(ies) shall maintain compliance with all applicable existing and future federal, state and local laws, ordinances, rules, regulations, and requirements.

The disposal facility(ies) may be a landfill, a recycling facility, or a resource recovery facility. In any case, the disposal facility(ies) shall be designed to provide the maximum environmental protection and the least environmental impact practicable. Specifically, if the disposal facility(ies) is a landfill it must be designed and operated in accordance with applicable federal, state and local environmental regulatory requirements but in no case to a lesser standard than those stated in the Part 258 Standards under RCRA Subtitle D. If the disposal facility(ies) is a resource recovery or waste-to-energy facility it must be designed and operated in accordance with applicable federal, state and local environmental regulatory requirements but in no case to a lesser standard than those stated in the Section 111(d) Emission Guidelines for Municipal Waste Combustors under the Clean Air Act Amendments.

2.5.6 Materials

2.5.6.1 Plastic (Polyethylene) Sheeting: Provide 6-mil thickness or greater polyethylene fire retardant reinforced sheeting as specified in sizes to minimize the frequency of joints.

2.5.6.2 Tape: Provide two inch or wider duct tape capable of sealing joints of adjacent sheets of polyethylene and for attachment of polyethylene sheets to finished or unfinished surfaces of dissimilar materials. Duct tape shall be capable of adhering under both dry and wet conditions, including use of amended water.

2.5.6.3 Spray Cement: Provide aerosol based spray cement specifically formulated to stick tenaciously to sheet polyethylene.

2.5.6.4 Surfactant: Provide a 50-percent polyoxyethylene ether and 50-percent polyoxyethylene ester, or equivalent and mix with water to provide a concentration of one-ounce surfactant to 5 gallons of water.

2.5.6.5 Waste containers utilized during the project shall be properly labeled as required by 29 CFR Part 1926.62.

2.5.6.6 Warning signs as required by 29 CFR 1926.1101 shall be utilized during asbestos removal activities, as applicable.

2.5.6.7 Fire Extinguishers shall be present and available on-site. All fire extinguishers shall have been properly inspected within one year prior to the work, and shall be rated for Classes A, B & C. **Other Materials:** Provide all other materials, such as lumber, nails and hardware, which may be required to construct and dismantle the regulated area.

2.5.6.8 Construct scaffolding where needed and in accordance with applicable standards. Coat the floor of scaffolding with two layers of 6-mil polyethylene sheeting. HEPA vacuum and wet wipe all scaffolding. Check the dropcloth, scaffold and surrounding areas for debris presence and clean accordingly.

2.5.6.9 Contractor shall install negative air equipment in sufficient quantities to ensure that negative pressure of at least 0.02 inches of water is maintained in all containment areas. The contractor shall maintain a recording manometer equipped with an alarm, at all times asbestos removal work is in progress. Should the manometer indicate negative pressure of less than 0.02 inches of water within the containment area, work shall stop until negative pressure has been re-established.

2.6 Proposal Costs

Costs for developing Proposals and participating in the selection process are entirely the responsibility of the prospective group and shall not be charged to the SWBNO. There is no expressed or implied obligation for the SWBNO to reimburse prospective group for any expense incurred in preparing proposals or participating in the selection process in response to this request.

2.7 Minimum Qualifications and Requirements

2.7.1 The successful Proposer must conduct all asbestos-related activities described in this RFP in accordance with the current LDEQ Asbestos Control Regulation. This Regulation provides for the establishment of certain standards, procedures and other requirements for the remediation, enclosure or encapsulation of asbestos or any other activity which disturbs or damages asbestos.

2.7.2 The successful Proposer must utilize clear 6 mil thick leak-tight polyethylene bags for containment of ACM in accordance with EPA NESHAPS regulations, OSHA 29 CFR 1926 and the U.S. Department of Transportation Hazardous Waste Hauling Regulation.

2.7.3 The successful Proposer must follow guidance provided by SWBNO's asbestos project designer to ensure that work is completed to the satisfaction of SWBNO. In addition, the successful Proposer must cooperate to allow for performance of oversight and air sampling activities.

2.7.4 The successful Proposer must label all waste items bagged or wrapped in polyethylene. These labels will be in accordance with OSHA 29 CFR 1926 and the U.S. Department of Transportation Hazardous Waste Hauling Regulation HM-181.

2.7.5 The successful Proposer is required to designate regulated ACM remediation areas, implement and conduct exposure assessment and monitoring, and utilize PPE for protection of asbestos workers conducting ACM remediation in accordance with OSHA 29 CFR 1926.1101 and 40 CFR Part 61. The successful Proposer must supply and post warning placards in areas where the ACM is being removed or staged; the placards utilized should be in accordance with OSHA 29 CFR 1926.1101 (k) (1). In addition, the successful Proposer must utilize appropriate PPE according to SWNBO Safety Requirements as noted above.

2.7.6 The successful Proposer must utilize ladders with slip-protection, scaffolding and aerial lift equipment as needed for ACM and lead remediation. All ladders used will be in accordance with 29 CFR Part 1926.1053, all scaffolding will be in accordance with 29 CFR Part 1926.451, and all aerial lifts will be in accordance with 29 CFR Part 1926.453.

2.7.7 The successful Proposer is required to use adequate fall protection when working on structures that require the contractor to work at elevated heights of 6 feet above the ground or higher. The fall protection equipment utilized should be in accordance with OSHA 29 CFR 1926.502.

2.7.8 Any other materials or personnel deemed necessary for the contractor to complete the scope of work should be identified on additional line items in Attachment C.

2.7.9 All workers will be experienced in the work required to perform the services that are the subject of this RFP. References of previous experience will be provided in the proposal.

2.7.10 All Contractors and Subcontractors that handle hazardous materials and wastes must utilize personnel with active Federal Hazardous Waste Operations and Emergency Response (HAZWOPER) certifications.

2.7.11 All Contractors and Subcontractors that transport hazardous or non-hazardous materials for offsite disposal must hold applicable State and Federal certifications, permits and/or licensing.

2.7.12 All Contractors and Subcontractors conducting off-site storage, disposal or treatment of waste must utilize a facility that is appropriate for the waste being stored, disposed or treated, and must be a facility that is licensed and permitted to store, treat or dispose of the

waste, materials or hazardous substances in good standing with all applicable City, State, and Federal regulations, certifications and codes.

2.7.13 Prior to the commencement of services hereunder, Proposer will provide SWBNO with verification that a criminal background check for the previous seven (7) years has been completed for each person performing services hereunder, and that no criminal history was found.

2.7.14 Proposer will utilize a labor force that will not lead to any stoppages, picketing or other labor disturbances. Proposer's indemnification pursuant to this RFP will include any claims or losses arising from any labor disturbance.

2.7.15 Proposer shall have an active Commercial License with Specialty Class for Asbestos Removal and Abatement issued by the Louisiana State Licensing Board for Contractors. Contractor License # must be marked outside of the envelop.

The Proposer shall have a current LDEQ certified Asbestos Supervisor with a current certificate to supervise this project. The certification of this individual shall remain valid throughout the length of this project. Documentation of the certification for this individual shall be submitted with your proposal. See link below.

<https://internet.deq.louisiana.gov/portal/divisions/asbestos/asbestos-contractor-supervisors>

2.8 Information

All reports, surveys, tables, charts, diagrams, product recordings and other data (including electronic, audio and video) or documentation prepared or compiled by Proposer in connection with the performance of its obligations under the contract, shall be the sole and exclusive property of the SWBNO. Proposer shall retain in its files, sufficiently detailed working papers relevant to its engagement with the SWBNO. Proposer further agrees that its working papers will be held in the strictest confidence and will not be disclosed or otherwise made available to outside sources, except as required by law, without the written consent of the SWBNO.

2.9 Commencement Conference to Discuss Overall Contract

Within five (5) calendar days of SWBNO's Notice to Proceed, a commencement conference meeting or conference call shall be held between the Contractor's key personnel (which can include key subcontractor staff as applicable) and SWBNO to discuss the commencement of the project and answer any questions regarding the project. The conference will be held at SWBNO Carrollton Water Plant and SWBNO/Contractor will jointly prepare an agenda. The Contractor shall come to the conference prepared to request clarification of any issues not clearly understood by him. The conference is not anticipated to exceed two (2) hours.

2.10 Insurance Requirements

Contractor shall maintain at his own expense and in good standing, such insurance as will protect the Board, the City of New Orleans, their officers, officials, employees, boards, commissions, and

volunteers, and the Contractor himself, from and against any and all claims or damages to public or private property or personal injury, including death, to employees or the public, which may arise from any operations under this contract or any of its subcontracts. The coverage shall contain no special limitations on the scope of protection afforded to the Board or the City. Both the Board and the City shall appear as "Additional Insured" on all Commercial General Liability and Business Automobile Insurance. Any failure to comply with reporting provisions of the policy shall not affect coverage provided to the Board and the City, their officers, officials, employees, boards and commissions, and volunteers. The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

If this transaction requires the Contractor or subcontractor's employees to enter the Board's facilities or job sites, a senior employee of the Contractor and/or any subcontractor will review the Board's Safety Orientation Notice (Notice), and will explain this Notice to every employee who will enter Board facilities. This Notice is included as a part of the specifications for this contract.

Contractor and its insurers shall agree to waive all rights of subrogation, except on their Professional Liability Policy, against the Board, the City, and their officers, officials, employees, boards and commissions, and volunteers for losses arising from work performed by the Contractor for the Board and the City. Each insurance policy required by this contract shall be endorsed to state that coverage shall not be suspended, voided or canceled by either party, or reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail, return receipt requested, that has been given to the Risk Manager of the Board. In general, insurance is to be placed with insurers with a Best's rating of at least A- V, although this requirement may be reviewed and modified by the Risk Manager of the Board in the best interest of the Board. The Risk Manager may also consider performing such review upon written request from Contractor. Contractor shall furnish the Board with certificates of insurance affecting coverage required by this contract. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

The certificates of insurance are to be received and approved by the Risk Manager of the Board before work commences. In the event of a claim, Contractor shall make applicable insurance policies available for review by the Board. Contractor shall retain its rights to restrict disclosure of Contractor's proprietary information.

The following are the types of insurance policies and the minimum limits of insurance coverage which shall be maintained by Contractor during the entire term of the Contract:

a) **WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY**

INSURANCE, as will protect him from claims under Workers' Compensation Laws. The Workers' Compensation section of the policy shall afford statutory limits and be in accordance with all Louisiana Workers' Compensation Statutes. The Employers' Liability limit shall not be less than \$1,000,000 each accident for bodily injury by accident and \$1,000,000 each employee/policy limit for bodily injury by disease. Whenever any vessel or floating equipment is involved, the insurance shall afford coverage under the Federal Longshoremen's and Harbor Workers' Act, and shall also include protection for injuries and/or death to Masters and Members of the crews of vessels with statutory limits in accordance with the Jones Act.

b) **COMMERCIAL GENERAL LIABILITY INSURANCE**, with a limit of not less than \$1,000,000 each occurrence and \$2,000,000 general aggregate, including Explosion, Collapse, and Underground Property Damage Hazards. The Products-Completed Operations aggregate limit shall not be less than \$1,000,000 each occurrence. The general aggregate limit shall apply separately to this project.

c) **BUSINESS AUTOMOBILE INSURANCE**, which shall cover liability arising from any auto (including owned, hired, and non-owned vehicle). The limit of liability shall not be less than \$1,000,000 combined with each accident for all injuries, property damage, and/or death resulting from one occurrence.

d) **ERRORS AND OMISSIONS/PROFESSIONAL LIABILITY INSURANCE**, whichever is applicable to the particular profession or service to be provided, with limit of not less than \$1,000,000 each Claim, with a \$2,000,000 annual aggregate, **without** any restrictive “negligent act, negligent error, or negligent omission” clause, and sufficient to protect the Contractor, the Board, and the City, for a five (5) year period from completion of this contract, against any and all claims which may arise from the Contractor’s negligent performance of work described herein.

In addition, Contractor shall be required to furnish to the Risk Manager of the Board all copies of investigative reports with regard to any and all claims filed with the Contractor and his insurance carriers relative to the contract, with the exception of claims filed against his Workers' Compensation Insurance. Such reports shall include date, location, and description of loss as well as amounts of settlements or judgments in order that annual aggregate limits may be monitored by the Board for Contractor's compliance with these specifications.

The furnishing of insurance as provided above shall not relieve Contractor of its responsibility for losses not covered by insurance. Prior to the signing of the contract, evidence of all such applicable insurance satisfactory to the Board shall be filed with the Risk Manager of the Board. All policies shall be in insurance companies authorized to do business in Louisiana and shall remain in full force and effect until the final completion of the work and acceptance thereof by the authority of the Board. Contractor and/or his insurer shall notify the Risk Manager of the Board at least thirty (30) days in advance of any insurance coverage to be canceled or of any insurance coverage that will expire. Contractor shall simultaneously furnish the Board evidence of new coverage to be effective the same day and hour of the expired or canceled coverage. In the event Contractor fails to submit this evidence of new coverage five (5) days prior to cancellation date or expiration date of any policy or policies, the Board will obtain the required coverage to become effective on date of cancellation or expiration of said policies. The cost of such new coverage shall be at the expense of Contractor and any expenditure incurred by the Board of this coverage will be deducted from any balance due to Contractor.

2.11 Right to Audit

The Board shall have the right to audit by its personnel or its authorized representative at all reasonable times any and all records pertaining to the administration of this contract by the contractor, including its records of any subcontractor(s) employed on the contract. Such records shall be made

and kept by the contractor in accordance with generally accepted accounting principles and practices. Records shall include, but are not limited to, accounting records, daily reports, correspondence and subcontract files (hard copies as well as computer readable data, if it can be made available). Records subject to audit shall also include but not be limited to those records necessary to evaluate and verify direct and indirect costs (including overhead allocations) as they may apply to cost and/or change order requests associated with this contract. The Board also reserves the right to interview employees, make photocopies, and inspect any and all records at a reasonable time for a minimum of three (3) years after completion of the project or formal acceptance of the contract by the Board. Contractors shall be required to retain such files of the project as described herein for a minimum of three (3) years after completion of the project or formal acceptance of the contract by the Board.

2.12 Disadvantaged Business Enterprise Policy

It is the policy of the Board to encourage all vendors/contractors to identify and use S&WB certified DBE vendors to the fullest extent possible, even when a definitive DBE participation goal has not been established by the Board for a specific contract. **For this project, there is no DBE participation required.**

Contractor agreeing to use its best efforts to carry out this policy by utilizing the current listings of approved DBE vendors available at the Board's website at www.swbno.org, or link to https://www.swbno.org/business_disadvantagedbusinessprogram.asp

PART III. PROPOSAL CONTENT

3.1 Proposal Content

Proposals submitted in response to this RFP should include as much detail as practical to provide a straightforward, clear, and concise description of the proposer's ability to meet the requirements of the RFP. The proposer should demonstrate his understanding of the SWBNO's requirements. Each proposer is solely responsible for the accuracy and completeness of its proposal.

3.2 Instructions to Proposers

Proposals must be prepared in English on 8 ½ x 11 inch paper with tabbed indexes separating the following eight (8) completed sections in the following order.

3.2.1 Cover Sheet

Complete the proposal cover sheet (RFP Attachment A). **Proposals lacking a cover sheet shall be disqualified.**

3.2.2 Table of Contents

Proposals should include a Table of Contents to facilitate locating the information included.

3.2.3 Approach and Methodology

Proposals should include enough information to satisfy evaluators that the Proposer has the appropriate experience, knowledge and qualifications to perform the scope of services as described herein. Proposers should respond to all requested areas.

The Proposer should:

- Provide Proposer's understanding of the nature of the project and how its proposal will best meet the needs of the SWBNO.
- Define its functional approach in providing the services.
- Define its functional approach in identifying the tasks necessary to meet requirements.
- Describe the approach to Project Management and Quality Assurance.
- Provide a sample Project Work Plan that reflects the approach and methodology, tasks and services to be performed, deliverables, timetables, and staffing.
- Each proposer must include your firm's response time to Orleans Parish, Louisiana. This should include response time for both incident assessment and actual mobilization to the scene with the appropriate resources to complete the response. Please include a description of equipment listed in the *Schedule of Prices* and its location.
- Present innovative concepts for consideration.
- Define its functional approach in developing a detailed design reflecting the most

effective means of accomplishing system functions within the agency's existing infrastructure.

- Define its strategy for project team organization and task assignments.
- Define its approach to identifying issues, the tracking mechanism used to track issues through to the issue resolution, and the process to develop recommendations for resolutions. Topics addressed should include:
 - Issue identification
 - Issue tracking
 - Issue review and prioritization
 - Issue analysis
 - Recommendation for issue resolution
 - Issue escalation
- Explain how individual task and services requested by the SWBNO will be performed (this should take into account project phasing, prioritizing, documentation, use of tools, technologies, etc.)

3.2.4 Company Background and Experience

In this section of the proposal, each Proposer should describe successful company experience that is relevant to the proposed tasks listed in Section 2.2, *Services to be Provided*. Both government and privately-sponsored work may be included. Experience in or around the Greater New Orleans area is preferred, please include if applicable.

Each proposer should describe projects undertaken by their company during the past three (3) years. Experience gained through joint ventures by their company may be included only if the company sponsored the joint venture. In the event that the company has not done business under its present organizational name and status for three (3) years, other corporate experience brought to the company through mergers or similar corporate creations may be added.

The proposer's experience should be submitted in the tabular format provided in RFP Attachment B, *Relevant Experience*. The table may be enlarged or duplicated as necessary. For each listed project, the proposer should provide:

- (1) The name and address of the client
- (2) The name and telephone number of the client's contact person;
- (3) The starting and ending dates of the project (contract term);
- (4) Response time;
- (5) The total dollar amount of the project; and
- (6) A brief description of the project.

Each proposer may include as many entries as they desire; however, only complete entries shall be considered. Because the SWBNO may contact a representative sample of the listed clients as references for the proposer during the evaluation process, the proposer should verify that all client telephone numbers are current.

3.2.5 Personnel Qualifications and Experience

In this section, each proposer should describe the qualifications and experience of all key personnel assigned to this project. Résumés, including education, background, accomplishments, and any other pertinent information must be included for each to document the following areas:

- Managing and performing Hazardous Spill remediation to include containment, cleanup, disposal services, and reporting
- Familiarity with equivalent processes should be described, giving examples of recent projects.
- Performing site remediation and closure feasibility assessments
- Experience on the uses of alternative or innovative technologies
- Proven ability

3.2.6 Proposed Subcontractors

All subcontractors intended to perform the work described in Section 2.2, *Services to be Provided*, must be identified. All work not identified as being performed by a subcontractor shall be attributed to the work of the prime contractor. The identity of each proposed subcontractor must also be included on the *Proposal Cover Sheet* (RFP Attachment A). Any subcontractor arrangements other than those listed in the proposal shall require prior approval by the SWBNO. **There is no DBE participation required for this project.**

Proposers must:

- (1) Identify each proposed subcontractor (company name and address);
- (2) Describe the aspects of the proposed services to be performed by the proposed subcontractor;
- (3) Describe the proposed subcontractor's experience and qualifications for performing these services;
- (4) State whether the proposed subcontractor's work is covered by the proposer's insurance and liability guarantees or by the proposed subcontractor's own insurance and liability guarantees; and
- (5) Include a letter of agreement or some other form of written commitment from each proposed subcontractor demonstrating their willingness to perform these services;

3.2.7 Price Proposal (Schedule of Prices)

Each proposer must prepare his price proposal using the SWBNO's price proposal form, *Schedule of Prices* (RFP Attachment C), provided for this purpose. No other format is acceptable. **Proposals not including this form, correctly completed, shall be disqualified.** If the proposer identifies deficiencies or errors in this form, he is obligated to bring this information to the attention of the SWBNO. The SWBNO will review the information and issue any correction as an amendment to the solicitation.

To complete the *Schedule of Prices*, each proposer shall provide unit rates or lump sums for the tasks listed, hourly and daily proposed rates. All proposed rates shall be all-inclusive, and shall include all wages/salaries, equipment, materials, supplies, incidentals and expendables, duplication/copying, communications, postage and handling, air express, shipping and handling, all applicable taxes, premiums for all bonds and insurance, permits, licenses, contractor employee training costs, all costs for replacing any personnel, all overheads, general and administrative costs, and profit. The cost of all required insurance or other liability guarantees must be included within the proposer's proposal price as part of his unit rates and may not be separately proposed or billed.

Proposer is advised that this contract is not exclusive and that no minimum quantity of work is guaranteed.

3.3 Proposal Format

Proposals submitted for consideration should follow the format and order of presentation provided in Part III, Sections 3.1 and 3.2. Each volume of the proposal should be typed and securely bound. Pages of the technical proposal should be numbered consecutively, and each section should be marked by a labeled page divider. Proposals should be prepared simply, legibly, and economically. Elaborate binders, color pictures, and promotional material are neither necessary nor desired.

PART IV. PROPOSAL EVALUATION AND SELECTION

Proposals that pass the preliminary screening and mandatory requirements review will be evaluated based on information provided in the Proposal. The Selection Committee composed of SWBNO technical personnel will evaluate and rank the proposals using the criteria and scoring as follows:

EVALUATION CRITERIA	MAXIMUM SCORE
Technical Proposal <ul style="list-style-type: none">• Company Background and Experience – 125 Points• Approach and Methodology – 150 Points• Proposed Staff Qualifications – 125 Points	400
Cost	100
TOTAL SCORE	500

Note: A minimum score of 200 points for a Technical Proposal must be obtained for a Proposal to be considered acceptable for contract award. Cost points will not be included in the 200 point calculations. Any Proposal failing to receive the minimum score of 200 points at the end of the Detailed Evaluation of Technical Proposals will not be evaluated further and will be ineligible for award.

The Proposal will be evaluated in light of the material and substantiating evidence presented to the SWBNO, not on the basis of what may be inferred.

The scores for the Cost and Technical Proposals will be combined to determine the overall score. The Proposer with the highest overall score will be recommended for award. The Selection Committee will report its comments and recommendations to the Purchasing Department. After a provider is selected, SWBNO and the provider begin negotiations to establish a fair and reasonable price for the services. If a price cannot be agreed upon, SWBNO terminates negotiations with the provider and commences negotiation with the next most-qualified provider. This process continues until a fair and reasonable “pricing” is agreed upon.

4.1 Cost Evaluation

Prices proposed by the Proposers shall be submitted on the Schedule of Prices furnished in Attachment C. This includes personnel and equipment pricing. Prices proposed shall be firm.

The information provided in response to this section will be used in the Financial Evaluation to calculate lowest evaluated cost. A sealed cost model shall be used for evaluation purposes.

The Proposer with the lowest sum of total cost shall receive 100 points. Other proposers shall receive cost points based upon the following formula:

$$CCS = (LPC/TCP \times 100)$$

Where: CCS = Computed Cost Score (points) for Proposer being evaluated
 LPC = Lowest Proposed Sum of Total Cost of all Proposers
 TCP = Sum of Total Cost of Proposer being evaluated

The Sum of the Total Cost for each Proposer shall be used for the cost evaluation.

4.2 Technical Proposal

The following criteria are of importance and relevance to the evaluation of this RFP and will be used by the Selection Committee in the evaluation of the technical proposal. Such factors may include but are not limited to:

- **Company Background and Experience (125 points)**

Proposer should include information required per this RFP which will support financial strength and stability, experience with related services and products, existing customer satisfaction, demonstrated technical support, etc. Experience will be key evaluation criteria. Proposer should list all relevant work experience and qualifications of the Proposer, proposed staff, and subcontractors relevant to the RFP. The Proposer shall list at least three (3) references with Company Name, name, email address, and phone numbers of contact

persons. These references shall be of sufficient size, complexity, and similarity to this RFP to allow judgment on the Proposer's ability to implement its proposal. The references of the Proposer may be researched and contacted. Additionally, the Proposer's past performance with the SWBNO may be used in the evaluation process. See Section 3.2.4 *Company Background and Experience*.

- **Approach and Methodology (150 points)**

The information submitted for review should include enough information to satisfy evaluators that the Proposer has the appropriate experience, knowledge and qualifications to perform the scope of services. Any work to be performed by subcontractors shall also be identified. Other available requirements include quality assurance planning, reporting, billing capabilities, emergency service, complaint handling, innovative concepts, and support. Approach and Methodology will be evaluated. See Section 3.2.3 *Approach and Methodology*.

- **Proposed Staff Qualifications (125 points)**

Proposer shall include descriptions of the Skills and Qualifications of Proposed Staff relative to the delivery of services requested in this RFP. These Skill and Qualifications will be evaluated. See Section 3.2.5 and 3.2.6 *Personnel Qualifications and Experience and Proposed Subcontractors*.

ATTACHMENTS TO THIS RFP:

- A. Proposal Cover Sheet
- B. Relevant Company Experience Form
- C. Unit Cost Proposal
- D. Asbestos Abatement Specifications and Asbestos Survey Report

Attachment A. Proposal Cover Sheet

Requisition Number: _____ Total Amount of Proposal: \$ _____

Project Title: _____

Proposer:

Company Name: _____

Company Address: _____

Proposer's Contact Person:

Name: _____ Title: _____

Address: _____

Telephone No.: (____) _____ FAX No.: ____ (____) _____

Subcontractors (add lines as necessary):

<u>Name</u>	<u>Written commitment attached (Y/N)</u>
_____	_____
_____	_____

I hereby certify that:

1. This proposal will remain in effect for at least ninety (90) days from _____.
2. I possess an established system of accounting and financial controls adequate to permit the effective administration of this contract or willingness to modify the present system to meet SWBNO requirements.
3. I will be ready and able to begin work within ten (10) days after contract award.
4. I am authorized to represent and can commit the organization to all provisions of this proposal.

Signature

Date

ATTACHMENT C. SCHEDULE OF PRICES

Please identify the unit costs and detection limits (where applicable) for the items listed below. Please utilize the extra lines as needed for identification of unit rates for any additional activities that require identification.

Item	Description	Unit of Measure	Unit Price	Total Units	Total Price
1	Project Manager (ACM)	Hour			
2	Project Manager (ACM) -overtime	Hour			
3	Project Manager (ACM) - holiday	Hour			
4	Accredited Asbestos Worker	Hour			
5	Accredited Asbestos Worker-overtime	Hour			
6	Accredited Asbestos Worker - holiday	Hour			
10	Laborer (ACM)	Hour			
11	Laborer (ACM) -overtime	Hour			
12	Laborer (ACM) - holiday	Hour			
16	Equipment Operator (ACM)	Hour			
17	Equipment Operator (ACM) -overtime	Hour			
18	Equipment Operator (ACM) - holiday	Hour			
22	Project Supervisor (ACM)	Hour			
23	Project Supervisor (ACM) -overtime	Hour			
24	Project Supervisor (ACM) - holiday	Hour			
10	Level A PPE	person/day			
11	Level B PPE	person/day			
12	Level C PPE	person/day			
13	Level D PPE	person/day			
14	Fire retardant clothing	each			
15	Tyvek Suit	each			
16	Disposable Boots	pair			
17	Disposable Sample Gloves (inner)	pair			
18	Nitrile Sample Gloves (outer)	pair			
19	Full-face Respirator	day			
20	Half-face Respirator	day			
21	Respirator Cartridges	set			
22	Scaffolding - 2 levels	day			
23	6-mil Polyethylene Bags	each			
24	19' Indoor Scissor Lift	day			
25	Z45 Outdoor 45' Scissor Lift	day			
26	Box Truck	day			
27	Laboratory Testing (Asbestos)	unit cost per sample analysis			

Attachment D. Asbestos Abatement Specifications and Asbestos Survey Report

Asbestos Abatement Specifications

**Drainage Pump Station 13
4201 Tall Spruce Drive
New Orleans, Louisiana**

October 10, 2019
Revised December 19, 2019
Terracon Project No. ET197047



Prepared for:
Sewerage & Water Board of New Orleans
New Orleans, Louisiana

Prepared by:
Terracon Consultants, Inc.
New Orleans, Louisiana

terracon.com

Terracon

Environmental



Facilities



Geotechnical



Materials



October 10, 2019
Revised December 19, 2019

Sewerage & Water Board of New Orleans
625 St. Joseph Street
New Orleans, Louisiana 70165

Attn: Ms. Ann Wilson

Re: **Asbestos Abatement Specification – REV 1**
Drainage Pump Station 13
4201 Tall Spruce Drive
New Orleans, Louisiana
Terracon Project No. ET197047

Dear Ms. Wilson:

The purpose of the attached Asbestos Abatement Specification is to serve as a guidance document for the selected contractor in abatement of identified asbestos-containing materials (ACM) and the cleaning of working areas throughout the Drainage Pump Station 13 in response to the fiber release episode that occurred at the subject site. These specifications should be used in conjunction with Terracon's *Asbestos Survey Report* dated August 15, 2019, Terracon Project No. ET197047.

Terracon Consultants, Inc. (Terracon) appreciates the opportunity to provide this service to the Sewerage & Water Board of New Orleans. If you have any questions regarding this document, please contact the undersigned at (504) 818-3638.

Sincerely,
Terracon Consultants, Inc.

Prepared By:

Steven M. Latiolais
Staff Industrial Hygienist

Reviewed By:

Zack L. Dial, PE
Asbestos Project Designer



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APPENDIX A – Definitions

APPENDIX B – Terracon’s Asbestos Survey Report

ASBESTOS ABATEMENT SPECIFICATION

**Drainage Pump Station 13
4201 Tall Spruce Drive
New Orleans, Louisiana
Terracon Project No. ET197047
October 10, 2019 – Revised December 19, 2019**

1.0 BIDDING REQUIREMENTS

1.1 Introduction

Terracon Consultants, Inc. (Terracon), on behalf of the Sewerage and Water Board of New Orleans (SWBNO) (Client), has prepared this Asbestos Abatement Specification (Specification), which addresses asbestos-containing materials (ACM) identified at Drainage Pump Station 13 located at 4201 Tall Spruce Drive in New Orleans, Louisiana.

Due to machinery malfunction which contained asbestos-containing materials (ACM), further testing identified asbestos fibers were present in dust samples collected in various areas throughout the facility. The following Work Plan should be considered a response action in connection with the remediation of interior work areas of the subject structure. It should be noted that Terracon performed two baseline sampling events throughout the facility's interior and exterior. One event with minimal machinery and site activity and the second during a routine maintenance check of all machinery. Each sampling event indicated fiber concentrations below the Louisiana Department of Environmental Quality (LDEQ) and United States Environmental Protection Agency (EPA) standard of 0.01 f/cc, indicating ambient air is below regulatory standards.

Subsequent sections of this Specification provide full details of materials, locations, and approximate quantities.

1.2 Contract Documents and Related Requirements

The term Contract Documents is defined as this Specification in addition to any, and all demolition and abatement documents provided by the owner. The Contract Documents between the Client and Terracon, or an abatement contractor retained by the Client, will conduct the work as defined below. The extent of work will also be performed in accordance with the related requirements, and conditions impacting the project. Related requirements and conditions include, but are not limited to: all applicable federal, state, and local codes and regulations, required notices and permits, restrictions on use of the property, requirements for partial owner occupancy during the work, and coordination of the work with other contractors and phasing of the work. Whenever

there is a conflict or overlap of the above references, or federal, state, and local regulations, the most stringent provisions apply.

1.3 General

The owner reserves the right to reject any, and all bids from abatement contractors. The owner reserves the right to waive any irregularities in the bids or bidding process if it is in the best interest of the owner to do so. The owner reserves the right to award this project to the lowest responsible bidder therefore, this project may not necessarily be awarded to the bidder with the lowest price. Previous performance with the owner may be one consideration in selecting the winning bidder.

The owner reserves the right to review and approve product, equipment, materials, and procedural submittals. Submittals to the owner must be at least five working days prior to the beginning of the hazardous materials abatement project, two copies of any waivers (in states or local jurisdictions where applicable) granted to the contractor by the state or local jurisdictions for review. The owner reserves the right to reject waivers, in whole or part, at their own discretion.

The owner reserves the right to terminate the contract for any reason, at any time. The owner agrees to pay for any portion of the contract previously performed by contractor according to percentage of work completed or established unit prices. Termination will not relieve the abatement contractor of any penalties, damages, fines, bonding, insurance, fees, etc. already assessed to the project. The owner reserves the right to hire an additional abatement contractor to complete the work under this solicitation if winning bidder fails to meet project milestones.

The owner agrees to assist the abatement contractor in every way feasible so that both may succeed on this project. Any major material changes from the scope of work and the specifications must be approved in advance and in writing by the owner.

The abatement contractor is solely responsible for site safety, site security, personal protection of workers and all work practices. The abatement contractor is solely responsible for adherence to these specifications and all relevant federal, state and local regulations. Any deficiencies noted will be brought to the attention of the owner and will be properly addressed by the abatement contractor at no additional expense to owner.

The abatement contractor, by submitting the bid, is stating that the abatement contractor understands their responsibilities under all federal, state, and local laws and regulations with regards to the work, and worker safety, including proper work practices, training, medical surveillance, etc.

The abatement contractor further understands that it is their responsibility to make any, and all

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October 10, 2019 ■ Terracon Project No. ET197047



supervisors and workers assigned to duties on the project for which this bid has been submitted aware of their duties under the contract documents, project specifications, other documents presented as part of this project and all federal, state, and local laws and regulations.

The abatement contractor agrees to transmit to the owner a copy of all notifications, waiver requests, certificates of workers participating on the project, waste disposal authorization, etc., and all other documents, that owner is legally required to maintain, with regard to this project.

The abatement contractor shall perform all asbestos abatement work under this solicitation. Simply, no sub-contracting is allowed for any removal work under this solicitation by the winning abatement contractor.

The abatement contractor awarded this project shall guarantee all work executed under this contract for a period of twelve months after the date of substantial completion. Special guarantee provisions, if any, specified elsewhere in this document shall take precedence. Neither final payment nor any provision of the contract documents shall relieve the abatement contractor of any responsibility for faulty materials or workmanship. The abatement contractor shall remedy any defect and pay for any damages to other work that appears within a period of twelve months from the date of completion.

The abatement contractor is responsible to call to the owner's attention, prior to signing a contract, any omissions or errors noted in the specifications or scope of work that is at variance with the intent of the bid documents, the project, or any federal, state, or local laws or regulations.

Exhibits will be provided for the approximate locations of identified asbestos containing materials (ACM). The exhibits will not be to scale, and not all features of the space will be included. The purpose of the exhibits will be to simply locate the general location and type of asbestos material to be removed. Some locations of asbestos (especially exterior material) may not be included on the exhibits. Carpets, wood or tiles over asbestos flooring material may not be included or indicated on the exhibits. It will be the abatement contractor responsibility to determine the work necessary to complete the required removals.

The specifications, scope of work, etc. are not intended to fully describe nor fully illustrate the material, labor, and equipment necessary to perform the work. These documents represent the owner's best estimate of the extent and presence of ACM to be removed during this project. It is the responsibility of the abatement contractor to determine the precise quantities for bidding purposes. No extra compensation will be allowed for differences between the best estimate and actual quantities of material identified in this specification to be removed. Nothing in this section may be interpreted as limiting the extent of the work that may otherwise be required by the contract

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documents. If additional work is determined to be required, it will be performed at the discretion of the owner, and only after written approval from the owner.

The listing or mention of any method of installation, erection, fabrication, or workmanship shall not operate to make Terracon an agent of the owner or abatement contractor but shall be for the sole purpose of setting a standard of quality for the finished work. Alternate methods may be approved in writing by the owner provided quality is not compromised.

Bidders shall inform themselves of the conditions under which the work is to be performed at the work-site and all obstacles which may be encountered during the work. Bidders shall also inform themselves of all other relevant matters concerning the work to be performed, and, the bidder, if awarded the contract, shall not be allowed any extra compensation by reason of any matter or thing concerning which the bidder might have fully informed themselves, but failed to do so prior to bidding.

It is understood that the bid provided will cover all abatement activities and expenses necessary to complete this project. Therefore, the bid shall include all charges for mobilization, labor, materials, hazardous materials removal/disposal expenses, reimbursables, etc., as needed to complete this project.

Federal, state, and local laws and regulations always supersede any contradictory information in the scope of work or specifications. The scope of work and bid requirements supersedes the specifications.

By signing a contract agreement with the owner, the successful bidder agrees to the following: "The cost of defending against any/all notices of violation, disputes, citations, fines, and any other writ issued from any government agency that also names the owner as respondents for abatement contractor failure to complete all work within federal, state and/or local laws and regulations will be borne by the abatement contractor. If the owner is listed as co-respondents for abatement contractor failure to complete all work within federal, state, and/or local laws and regulations, the owner will make claim against the abatement contractor to recover the costs of their defense. These costs include, but are not limited to, the owner's: time, lawyer's and attorney's fees, lawyer's and attorney's consultants, engineers, architects, and other professionals, all court costs, and all other costs associated with the defense of the owner." The abatement contractor agrees that any time a violation of federal, state, and/or local laws or regulation, or a variance from the contract documents, project specifications or other documents presented as part of this project is brought to their attention, such violation or variance will be corrected immediately. A violation or variance not corrected immediately may result in suspension of the abatement contractor by the owner from the work.

1.4 Liquidated Damages

Any change in the scheduled work start date or scheduled phased work start dates not previously agreed upon by the owner may result in liquidated damages which will be evaluated by the owner.

1.5 Abatement Contractor Requirements

All required engineering controls, negative pressure containments, critical barriers, critical and curtained openings, negative air machines, splash guards, decontamination units, signs, postings, etc. shall be in place and operational prior to potential or actual disturbance of any hazardous materials and remain intact, in place and operational until final air clearance is achieved.

The work completion schedule must be made with consideration for Terracon to collect and analyze required or recommended air samples for air clearance.

The abatement contractor shall ensure that after final visual and air clearances have been achieved that all clean up and equipment is removed from the work areas before leaving the work site.

Terracon will be on-site during all asbestos related work.

All operations will be conducted in accordance with the technical specification within this document, using industry standards and shall fully comply with all federal, state, and local regulations.

It is the abatement contractor's responsibility to thoroughly understand the significance of the provisions in this bid document and in the consequences of failure to perform within the perimeters as stated herein. The abatement contractor understands, accepts, and agrees that by entering into contract with the owner, that this document becomes a legal, enforceable contract between the owner and the abatement contractor for all provisions as stated above. The abatement contractor further agrees and understands that any direct damages, and applicable penalties will be deducted from their contract with the owner.

Furthermore, the abatement contractor failure to communicate the penalty requirements, as stated in this bid document, to their on-site personnel will not relieve the abatement contractor of paying any penalties.

2.0 SCOPE OF WORK

Estimated quantities of materials to be abated are described in Terracon's *Asbestos Survey Report* dated August 15, 2019, Terracon Project No. ET197047. A copy of Terracon's report is included in Appendix B. The quantities depicted in the report are for informational purposes only and are based on the best information available at the time these specifications were prepared. The abatement contractor shall verify the actual quantities to be abated. Nothing in this section may be interpreted as limiting the extent of the work that may be otherwise required by the contract documents.

The cleaning scope of work for this project is in connection with a fiber release episode that occurred within the subject structure. Work will include the cleaning of all working surfaces contained within the 20,000 square feet structure, including catwalks and platforms. The scope of work does not include vertical surfaces or horizontal surfaces that are not accessible by pump station personnel. The abatement contractor shall verify the actual quantities to be cleaned. Nothing in this section may be interpreted as limiting the extent of the work that may be otherwise required by the contract documents.

Terracon does not guarantee the complete accuracy of the drawings included in this document. Drawings are not to scale, do not show all walls or features, and do not show all floor coverings. The drawings simply show the general location of the ACM.

2.1 Extent of Work

The extent of work includes the abatement of regulated asbestos-containing materials (RACM) per Terracon's Asbestos Abatement Specifications, in accordance with applicable regulations. The RACM identified in Terracon's *Asbestos Survey Report* dated August 15, 2019, Terracon Project No. ET197047, includes the following:

- White 8" TSI between Pumps 5 & 6
- White 18" TSI between Pumps 4 & 5
- Gray 9"x9" striped floor tile and black mastic within Level 2 of the Office
- White sink bottom coating within Level 2 of the Office
- The clutch and brake pads associated with Pumps 4 and 5 are assumed ACM.

The work also includes the cleaning of all equipment and working surfaces in accordance with applicable regulations and this specification.

2.2 General

The abatement contractor shall furnish all tools, equipment, labor and materials for the proper removal and disposal of asbestos containing materials in accordance with all applicable asbestos regulations including but not limited to the National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 61, Subpart M, and any and all other asbestos regulations, statutes, rules, etc. by the applicable governing authority.

If the planned activities will make the identified ACM into RACM, the abatement contractor shall submit a Form AAC-2(a) upon receipt of a notice-to-proceed from the Client. The AAC-2(a) form must be either postmarked or hand delivered to the Louisiana Department of Environmental Quality (LDEQ) at least 10-working days prior to the scheduled dates of asbestos removal. After proper notification is received, the LDEQ will issue an Asbestos Disposal Verification Form (ADVF) to provide approval to begin abatement and to ensure that the ACM removed is disposed of properly. The ADVF must be on site during all abatement activities.

Cleaning activities will impact asbestos-contaminated debris material (ACDM), therefore the abatement contractor shall submit a Form AAC-2(a) upon receipt of a notice-to-proceed from the Client. The AAC-2(a) form must be either postmarked or hand delivered to the Louisiana Department of Environmental Quality (LDEQ) at least 10-working days prior to the scheduled dates of asbestos removal. After proper notification is received, the LDEQ will issue an Asbestos Disposal Verification Form (ADVF) to provide approval to begin asbestos related work and to ensure that waste and materials generated from the work are removed and disposed of properly. The ADVF must be on site during all asbestos related activities.

Terracon will provide project oversight of this project, final visual inspection to verify that all identified ACM is removed and air sampling throughout ACM disturbance of abated area. Terracon will work with the abatement contractor's supervisor to identify material required to be removed as per these specifications.

2.3 Tasks

Tasks appropriate to the extent of work are briefly summarized as follows:

- Pre-abatement activities, including pre-abatement meeting, inspection, notifications, permits, submittal approvals, preparations, emergency arrangements, and standard operating procedures.
- Abatement activities, including removal and disposal of ACM, recordkeeping, inspection and monitoring.
- Cleaning and decontaminating activities, including final inspection.

2.4 Abatement Contractor's Responsibilities

The abatement contractor will be responsible for the following:

- To comply with all federal, state and local regulations including but not limited to, Occupational Safety and Health Administration (OSHA) regulations under 29 Code of Federal Regulations (CFR) 1910.1001 and 1926.1101 and Chapter 51 of the ERC (LAC 33:III.Chapter 51 Subchapter M).
- Removal and disposal of all regulated materials and proper generation and distribution of waste shipment records and waste disposal manifest(s).
- That all persons engaged in the abatement activities of the project be properly trained and hold appropriate, valid state accreditations.
- All required local, state, and federal notifications and compliance.
- Maintaining all project records for as many years as required by local, state, and federal regulatory requirements.
- Personnel exposure monitoring as required by OSHA.
- The abatement contractor shall schedule the work on the project in such a manner to complete the work by the scheduled completion date. Coordination with Terracon, and the Client is critical.

The abatement contractor shall include documentation that proves they are a Louisiana Licensed Asbestos Abatement Contractor for all work periods. The abatement contractor shall ensure that all personnel who perform work on this project will have appropriate training and LDEQ certifications.

The abatement contractor can use any approved work practices to remove the identified ACM, as long as the work practices used are approved by regulatory authorities and these

specifications.

The abatement contractor will remove all hazardous materials and universal wastes including non-hazardous building materials necessary to access said hazardous materials.

Staging, waste load out, and dumpster placements shall be wherever best feasible to facilitate the project.

This completes Section 2 Scope of Work

3.0 TECHNICAL SPECIFICATION - ASBESTOS

3.1 Regulations

Asbestos removal shall be conducted according to all applicable federal, state, and local rules/regulations, including but not limited to Louisiana Administrative Code (LAC) Title 33, Part III Chapter 51 Subchapter M, Asbestos; National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 61, Subpart M; and Occupational Safety and Health Administration (OSHA) regulations under 29 Code of Federal Regulations (CFR) 1910.100 and 1926.1101.

3.2 Pre-Job Submittals

The abatement contractor shall submit a Form AAC-2(a) upon receipt of a notice-to-proceed from the Client. The AAC-2(a) form must be either postmarked or hand delivered to the Louisiana Department of Environmental Quality (LDEQ) at least 10 working days prior to the scheduled dates of asbestos removal. After proper notification is received, the LDEQ will issue an Asbestos Disposal Verification Form (ADVF) to provide approval to begin abatement and to ensure that the ACM removed is disposed of properly. The ADVF must be on site during all abatement activities.

If the identified ACM is not to be disturbed as part of the planned renovation the no notification is required to LDEQ prior to the commencement of work.

3.3 Asbestos Scope of Work

The scope of work should include all labor, materials, and equipment necessary for the complete removal of the identified ACM by competent persons who are trained, knowledgeable, qualified and licensed in the techniques of abatement, handling and disposal of asbestos-containing and asbestos-contaminated materials, and the subsequent cleaning of contaminated areas.

The abatement contractor is responsible for demarcating the regulated areas and other asbestos abatement areas referenced in Table 1 below and limiting access to authorized individuals only.

The abatement contractor shall be responsible for containment security throughout the abatement process and will furnish all labor, supervision, materials, services, insurance, equipment, lighting, emergency lighting necessary for the total removal of the areas of ACM as specified by this document. Electricity and water are available on-site.

This facility is an active and staffed drainage pump station. Coordination between the abatement contractor and SWBNO personnel will be required throughout the duration of the work.

**TABLE 1.0
 DRAINAGE PUMP 13
 SUMMARY OF ACM TO BE ABATED**

Material	Material Location	Quantity*
White 8" TSI	AC3's Exhaust Between Pumps 5 & 6	13 LF
White 18" TSI	Pumps 4 & 5 Exhausts	2 runs totaling 30 LF
Gray 9"x9" striped floor tile and black mastic	Office Level 2	250 SF
White sink bottom coating	Office Level 2 common area	1 Sink
Clutch and Brake Pads	Pumps 4 & 5	2 pads

*Quantities are estimated only. The abatement contractor must verify quantities for bidding purposes.

For more information including classification, condition, and lab results refer to Terracon's *Asbestos Survey Report* dated August 15, 2019, Terracon Project No. ET197047.

3.4 Quality Assurance

- The removal and handling of asbestos-containing or contaminated materials shall be performed by persons deemed a “competent person” with the proper training certified by federal, state and local regulation agencies.
- The abatement contractor is responsible to ensure that work proceeds to schedule. The abatement contractor shall complete this work so that at no time shall airborne asbestos, waste, or asbestos waste-water contaminate areas adjacent to work areas.
- Terracon is empowered by the owner to inspect adherence to work procedures and inspect for final cleanliness and completion.
- Terracon is empowered by the owner to order a shutdown of work when a leakage of asbestos-containing materials has occurred or is likely to occur. These conditions include, but not limited to, failure of negative pressure, inadequate wetting, and failure of critical barriers or decontamination units, water leaks, excessive airborne fiber levels in areas adjacent to work areas.
- Inspection and air monitoring services performed as a result of the abatement contractor’s failure to conform to specified procedures or level of cleanliness, as determined by the Terracon at the time of inspection, will be charged to the abatement contractor at no additional cost to the owner.
- All work involving electrical, mechanical, plumbing, etc. shall be performed by certified tradesman.

3.5 Materials

- Plastic Sheeting – To be of 0.15mm (6 mil) thick polyethylene, unless otherwise specified.
- Duct tape – To be suitable for sealing polyethylene to surfaces encountered under both wet and dry conditions, including amended water.
- Amended Water – To consist of water with non-ionic water surfactant added for the purpose of reducing surface tension to allow through wetting of asbestos fibers.
- Surfactant – A liquid material consisting of 50% polyoxyethylene ester and 50% polyoxyethylene ether mixed with water.

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- Disposal coveralls – To consist of full body coveralls with attached hoods, manufactured by DuPont TYVEK, or similar product.
- Warning labels and signs – To contain regulatory approved verbiage denoting entry and designated areas.
- Encapsulant – An encapsulant or adhesive meeting the regulatory requirements for encapsulating residual asbestos fibers.
- Glove Bag – An impervious plastic bag-like enclosure with glove-like appendages through which material and tools may be handled.
- Disposal Bag – To be of 0.15mm (6 mil) thick transparent polyethylene, unless otherwise specified

3.6 Tools and Equipment

- Spray Equipment – Equipment for the application of amended water or encapsulant.
- HEPA Vacuum equipment - Vacuum equipment equipped with High Efficiency particulate Absolute Air Filter capable of capturing and retaining 99.97% of fibrous materials 0.3 microns of larger.
- Removal Tools – Tools suitable for asbestos removal.

3.7 Personal Protection

Prior to beginning work, the abatement contractor shall instruct workers on using appropriate procedures for personal protection when performing abatement activities. Each worker shall be provided with personally issued and marked respiratory protection equipment approved by National Institute for Occupational Safety and Health (NIOSH). The minimum respiratory protection requirements for this project are half-mask air purifying respirators with P-100 cartridges. The abatement contractor is responsible for all safety protocols in accordance with applicable regulations and guidelines.

In addition to respiratory protection, disposable outer clothing shall be worn during abatement. Head covers, and gloves are also recommended for complete skin protection. All disposable protective clothing shall be discarded and disposed of as asbestos waste every time the wearer exits the work area to the outside through the decontamination facilities.

The abatement contractor shall not permit under any circumstances any person to enter the work areas without the appropriate protective clothing and equipment. Warning signs denoting the

danger of asbestos and lead abatement activities shall be posted on the exterior of the containment work area.

The abatement contractor is responsible for the cost of OSHA personal air sample collection and analysis. Results of OSHA required personal air sampling must be submitted to owner and Terracon within three working days of sample collection.

3.8 Consultant Inspections

The consultant will periodically inspect site conditions and work procedures associated with the removal process. In addition, the consultant will perform the following inspections:

- Pre-containment inspection of the work area prior to the disturbance of ACM
- Visual clearance inspection following clean-up activities but prior to tear down activities.

3.9 Work Area Preparation and Equipment

General – Regulated Areas

The abatement contractor shall seal off the perimeter of the work area to completely isolate abatement areas and to contain all airborne asbestos contamination created by abatement work. Cover all surfaces of the work area to protect them from cross contamination, to facilitate more efficient clean-up, and to protect the finishes from the asbestos abatement work. Should the area beyond the seal off limits become contaminated as a consequence of the work, the abatement contractor shall clean those areas in accordance with procedures described in this section at no additional cost to the owner.

Containments

Establish critical barriers at all points of the work area. Line walls and ceilings, as appropriate, with a minimum 6 mil plastic sheeting. Cover all openings (windows, doors ductwork, etc.) with 6 mil polyethylene sheeting. Ensure the plastic sheeting provides a continuous barrier that creates a seal and is maintained around penetrating objects, tears, and elsewhere as required.

As the ceilings within this space are in excess of 20 feet in height, the contractor may use means to build a free-standing containment capable of maintain negative pressure. The containment must have at least one 24" x 24" viewing window, viewing into the work area. Provide a worker decontamination area at the entrance of the work area consisting of a clean room, shower, and dirty room. Establish negative pressure in the work area with HEPA filtered negative air units. Direct exhaust flow of negative air units to the outside and maintain building security. Using HEPA

filtered negative air units, establish and maintain -0.02 inches of negative air pressure. One full air exchange every 15 minutes shall be required.

The total size and/or shape of the containment can be constructed at the discretion of the Abatement Contractor, but must be approved by Terracon and pump station personnel to ensure facility operations will be maintained during asbestos cleaning activities.

3.10 Removal

All Class I and II work (as defined by OSHA), shall be supervised by a competent person as defined in 29 CFR 1926.1101.

Removal will require coordination with SWBNO staff regarding operations both planned and unplanned. Control measures include containment with decontamination unit, negative air, half-face mask with P-100 filters, full-body Tyvek coveralls with hoods, proper wetting methods with amended water, and HEPA vacuuming.

3.10.1 Wetting Materials

- Use amended water for wetting of ACM prior to removal.
- Amended water: Provide water to which a surfactant has been added. Use a mixture of surfactant and water which results in wetting of the ACM and retardation of fiber release during disturbance of the material equal to or greater than that provided by the use of one ounce of a surfactant consisting of 50% polyoxethylene ester and 50% polyethylene ester mixed with five gallons of water.
- Removal encapsulant: Provide a penetrating type encapsulant designed specifically for removal of ACM. Use a material which results in wetting of the ACM and retardation of fiber release during disturbance of the material equal to or greater than that provided by water amended with a surfactant consisting of 50% polyoxethylene ester and 50% polyoxethylene ester mixed with five gallons of water.

3.10.2 Removal Method

Following OSHA Class I procedures, remove and dispose of all asbestos containing TSI and clutch pads. This TSI is associated with active machinery.

At the discretion of the SWBNO, TSI clad components may be sprayed with encapsulant, double-wrapped with 0.15mm (6 mil) thick polyethylene, disconnected from machinery, and transported to a ground level, auxiliary containment for gross removal using the control measures listed above.

OSHA Class II procedures shall be used in the removal all ACM floor tile, mastic, and sink.

3.10.3 Cleaning

The work will require coordination with SWBNO staff regarding operations both planned and unplanned. Control measures include containment with decontamination unit, negative air, half-face mask with P-100 filters, full-body Tyvek coveralls with hoods, proper wetting methods with amended water, and HEPA vacuuming.

For personnel protection, OSHA Class I procedures should be followed. The following methods shall be used:

- Initial HEPA vacuuming of the contained work space following by wet wiping of exposed surfaces. Amended water may be used for this procedure.
- Amended water: Provide water to which a surfactant has been added. Use a mixture of surfactant and water which results in wetting of the ACM and retardation of fiber release during disturbance of the material equal to or greater than that provided by the use of one ounce of a surfactant consisting of 50% polyoxethylene ester and 50% polyethylene ester mixed with five gallons of water.
- Once the contained work area is dry to the touch, it shall be HEPA vacuumed again prior to the application of a clear encapsulant on concrete walking surfaces. (The encapsulant may only be used at the SWBNO's discretion).
- Encapsulant: Water amended with a surfactant consisting of 50% polyoxethylene ester and 50% polyoxethylene ester mixed with five gallons of water.

3.11 Work Procedures Prior to Clearance Inspection

The following procedures should be followed prior to clearance sampling.

- Once removed, the ACM will be placed in a double walled, labeled, transparent container before being removed from the designated work area. Sufficient container will be a bag within a bag, such as the outer bag is labeled as contents contain asbestos.
- Removal of bagged ACM from the work area. All bagged ACM should be stored in a regulation approved disposal container.
- After abatement is complete, the abatement contractor shall conduct a visual inspection to ensure the work area is clean of all ACM debris. If the abatement contractor deems the area clean, Terracon shall perform a final visual inspection to confirm that abatement has

been completed and all surfaces are free of visible residue, dust, debris, and asbestos contaminated equipment and waste.

- Then a final visual inspection is confirmed by Terracon. Only, after approval by Terracon may the designated area may be removed and disposed with other potentially contaminated materials.

3.12 Air Monitoring

Air monitoring will be performed continuously during the course of abatement activities to monitor the quantity of asbestos fibers present in the ambient air. Terracon will provide all air monitoring services, with the exception of OSHA personal air monitoring. It is the responsibility of the abatement contractor performing abatement to perform OSHA personal air monitoring, to ensure that outlined concentration levels are not exceeded.

Phase Contrast Microscopy (PCM) analysis will be used to determine the concentration of asbestos fibers present in the air. The results are calculated by comparing the number of counted fibers to the volume of air passed through the cassette. Concentrations will be presented in number of fibers per cubic centimeter (f/cc). This data is used to show compliance with limits set by NIOSH, OSHA, and other regulatory agencies. The NIOSH 7400 method will be followed during the air monitoring services.

The consultant will be trained and certified air monitoring personnel to analyze the collected PCM cassettes on site daily. All analytical data gathered from air monitoring will be submitted as part of the final submittal report.

3.12.1 OSHA Personal Air Sampling

The abatement contractor is responsible for OSHA personal air monitoring. Personal air samples shall be collected daily for the purpose of determining an eight-hour time weighted average (TWA) by the abatement contractor during the asbestos removal process.

- Personal air samples shall be collected from the breathing zone of workers performing asbestos abatement representing full-shift exposure to determine the 8-hour TWA exposure in each work area as well as the short-term employee exposures representing 30-minute exposures for operations most likely to expose employees above the excursion limit in each work area.
- The sampling volume shall be 240 to 1,200 liters, with a flow rate of 0.5 to 2.5 liters per minute.

- Results of the OSHA personal air samples must be provided to the Client and Terracon within 3 working days.

3.12.2 Work Area Air Sampling

While abatement activities are being performed within the established work areas, air samples are to be collected to monitor the concentration of airborne asbestos fibers outside of the work areas. Air samples shall be collected continuously while abatement work is being performed. The fiber concentration outside the work areas shall not exceed LDEQ and EPA standard of 0.01 f/cc of air. PCM sampling will be conducted at a flow rate of 2.0 - 10.0 LPM, the sampling volume shall be greater than 400 liters. Samples shall be either analyzed on-site or submitted under proper chain of custody to LELAP accredited laboratory for PCM analysis.

The daily area air sampling scheme outlined below may be altered to best fit site situations.

The number of daily air samples will be at the discretion of the consultant and will be determined by daily work activities.

If fiber concentrations inside the containment exceed the 0.1 f/cc the consultant has the “stop work” authority to review current work procedures and provide recommendations. Recommendations include worker exposure protection level, proper PPE, review of abatement work activities (including wet method, removal method, and housekeeping), and ambient levels in case of a containment failure, tear, or leakage.

3.12.3 Final Air Clearance Sampling Via PCM

A minimum of five (5) clearance air samples will be collected in each work area. If results are in excess of 0.01 f/cc of air, the work area will be thoroughly cleaned and resampled at the expense of the Abatement Contractor. Following the successful completion of final visual observations and PCM clearance sampling, the air monitor will document all findings using the “Final Clearance Inspection Checklist.”

The Clearance air sampling scheme outlined below may be altered to best fit site situations.

- A minimum of five air samples will be taken inside each work area.
- The sampling volume shall be 1,200 - 1,800 liters with a flow rate of 2 to 12 liters per minute.
- The final clearance release criteria will be less than 0.01 f/cc for all five samples in accordance with the NIOSH 7400 Method.

3.13 Disposal

The abatement contractor shall comply with federal, state, and local regulations regarding the storage, transportation, and disposal of asbestos waste materials. All asbestos waste shall be double-bagged using the “goose-neck” technique and placed in a double lined dumpster or waste storage unit. Dumpsters and waste storage units shall be secured and checked daily. All asbestos waste storage units and dumpsters shall comply with all federal, state, and local regulations and be identified with signs and barriers.

Closeout Submittals

The abatement contractor will provide Owner with copies of the following:

- Copy of LDEQ Notification;
- Waste transporter's and landfill's licenses and permits;
- State of Louisiana Asbestos Abatement Contractor's Licenses;
- State of Louisiana Asbestos Supervisor's and Worker's licenses, medical examinations, and fit tests;
- Schedule of Work for owner's approval;
- Signed waste shipment manifests, trip tickets and disposal receipts;
- OSHA personnel sampling results;
- The consultant's daily reports, photos, and all air monitoring analytical results

Final payment may be withheld until all requested documents are received.

This completes Section 4 Technical Specification - Asbestos

**APPENDIX A
DEFINITIONS**

ACE: Asbestos Contaminated Element

ACM: Asbestos Containing Material

ACS: Asbestos Contaminated Soil

ACWM: Asbestos Contaminated Waste Material

AWDF: Asbestos Waste Decontamination Facility

Aerosol: A system consisting of particles, solid or liquid, suspended in air.

Aggressive Sampling: EPA defined clearance sampling method using air moving equipment such as fans and leaf blowers to stir the air.

Aggressive Method: Means removal or disturbance of a building material by sanding, abrading, grinding, or other method that breaks, crumbles, or disintegrates intact ACM.

Air Cell: This is a pre-formed, factory-made insulation normally used on pipes and duct-work. This corrugated cardboard almost always contains asbestos fibers combined with cellulose or refractory binder.

Air Sample Collection Filter: A membrane filter used to collect fibers/particulates which when processed is analyzed to determine fiber counts. The membrane is usually made of mixed cellulose material for Phase Contrast Microscopy (PCM), and polycarbonate or mixed cellulose for Transmission Electron Microscopy (TEM.)

Air Test: The collection and analysis of air samples for the presence of asbestos using either phase contrast microscopy or transmission electron microscopy for analysis.

Air Monitoring: The process of measuring the fiber content of a specific volume of air.

Amended Water: Water to which a surfactant has been added.

Asbestos: Asbestos is any one of a group of six similar minerals including chrysotile, crocidolite, amosite, actinolite, anthophyllite and tremolite.

Asbestos Contaminated Element (ACE): Building elements such as ceilings, walls, lights and duct-work that are contaminated with asbestos.

Asbestos Containing Material (ACM): Any material containing one percent (1%) or more by volume of asbestos of any type or mixture of types. This is a Federal standard. Stricter State standards may apply.

Asbestos Containing Waste Material (ACWM): Any material which is known to be, suspected of, or contaminated with asbestos which is to be removed from a work area for disposal.

Asbestos Waste Decontamination Facility (AWDF): Airlock system consisting of drum/bag washing facility and temporary storage area for cleaned containers. Used as exit for waste

and equipment leaving the abatement area. May be used in an emergency to evacuate personnel.

Authorized Person: Means any person authorized by the employer and required by work duties to be present in a regulated area.

Authorized Visitor: The owner or a representative of any federal, state and local regulatory or other agency having authority over the project.

Barrier: Any material that seals off the work area to inhibit the movement of fibers.

Breathing Zone: A hemisphere forward of the shoulders with a radius of approximately 6 to 9 inches.

Bridging Encapsulant: An encapsulant that forms a discrete layer on the surface of an in-place asbestos matrix.

Bulk Test: The collection and analysis of samples of suspected asbestos materials. A small amount, or bulk, of the material is physically removed from the structure and placed in a rigid airtight container for transportation to an accredited laboratory for analysis.

Category I Non-friable: (NESHAP definition) Category I non-friable ACM includes asbestos-containing gaskets, packings, resilient floor coverings, resilient floor covering mastic, and asphalt roofing products. Asbestos roofing products include built-up roofing, asphalt-containing single ply membrane systems, asphalt shingles, asphalt-containing underlayment felts, asphalt-containing roof coatings and mastics, and asphalt-containing base flashing. ACM roofing products that use other bituminous or resinous binders (such as tars or pitches) are also considered to be Category I ACM.

Category II Non-friable: (NESHAP definition) Category II are all other non-friable ACM, excluding Category I non-friable ACM.

Ceiling Concentration: The concentration of an airborne substance that shall not be exceeded.

Certified Industrial Hygienist (CIH): An industrial hygienist certified in comprehensive practice by the American Board of Industrial Hygiene.

Changing Area: Normally the first chamber of the Personnel Decontamination Facility, i.e., "clean room."

Class I Asbestos Work (OSHA): This means activities involving the removal of TSI and surfacing ACM.

Class II Asbestos Work (OSHA): This means activities involving the removal of ACM and/or PACM which is not thermal system insulation or surfacing material. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile, floor tile mastic, and asbestos cement product.

Class III Asbestos Work (OSHA): This means repair and maintenance operations, where ACM and/or PACM, including thermal system insulation and surfacing material, are likely to be disturbed.

Class IV Asbestos Work (OSHA): This means maintenance and custodial activities during which employees contact ACM and/or PACM and activities to clean up waste and debris containing ACM and/or PACM.

Clean Room: This means an uncontaminated room having facilities for the storage of employees' street clothing and uncontaminated materials and equipment.

Closely Resemble: This means that workplace conditions which have contributed to the levels of historic asbestos exposure and are no more protective than conditions of the current workplace.

Competent Person: This means a person properly trained and who is capable of identifying existing asbestos hazards in the workplace and selecting an appropriate control strategy for asbestos exposure and has the authority to take corrective measures to eliminate them, under requirements of 29 CFR 1926.1101

Count: Refers to "fiber count," or the average number of fibers greater than five micrometers in length per cubic centimeter of air.

Critical Barrier: This means one or more layers of plastic sealed over all openings into a work area or any other similarly placed physical barrier sufficient to prevent airborne asbestos in a work area from migrating to an adjacent area.

CPIH: Asbestos abatement contractor's professional industrial hygienist. Also known as the "Competent Person."

Decontamination Area: This means an enclosed area adjacent and connected to the regulated area consisting of an equipment room, shower area, and clean room, which is used for the decontamination of workers, waste materials, and equipment that are contaminated with asbestos.

Demolition: The wrecking or taking out of any load-supporting building structural component and any related razing, removing, or stripping of asbestos products.

Disposal Bag: Six (6) mil thick leak-tight plastic bag used for transporting asbestos-containing waste material from work and to disposal site. Each is labeled as follows:

Disturbance: This means any contact which releases fibers from ACM and/or PACM, or debris containing ACM and/or PACM.

Drum: A rigid, impermeable container made of cardboard, metal or plastic which can be sealed in an air and liquid tight manner.

EDF: Equipment Decontamination Facilities

Employee Exposure: This means that exposure to airborne asbestos that would occur if the employee were not using respiratory protection.

Encapsulant: A material that surrounds or embeds asbestos fibers in an adhesive matrix, to prevent release of fibers.

Encapsulation: Treatment of asbestos-containing materials with encapsulant.

Enclosure: The construction of an air-tight, impermeable, permanent barrier around asbestos-containing materials to control the release of asbestos fibers into the air.

Entrance Port: A name sometimes used for the main entrance airlock in an OSHA defined negative air containment area.

Equipment Room: This means a contaminated room located within the decontamination area that is supplied with impermeable bags or containers for the disposal of contaminated protective clothing and equipment.

f/cc: Abbreviation for fibers per cubic centimeter of air, a standard measurement unit used to measure the level of fiber concentration in the air.

Filter: A media component used in respirators to remove solid or liquid particles from the air breathed.

Friable Asbestos Containing Material: Material that contains more than one percent (1%) asbestos by weight that can be crumbled, pulverized, or reduced to powder by hand pressure.

Glovebag: This means an impervious plastic bag-like enclosure with glove-like appendages through which material and tools may be handled.

HEPA Filter: A high efficiency particulate air (HEPA) filter capable of trapping and retaining 99.97% of asbestos fibers greater than 0.3 microns in length.

HEPA Filter Vacuum Collection Equipment: HEPA filtered vacuum collection equipment with a filter system capable of collecting and retaining 99.97% of asbestos fibers greater than 0.3 microns in length.

High-Efficiency Filter: A filter which removes from air 99.97% or more of monodisperse dioctyl phthalate (DOP) particles having a mean particle diameter of 0.3 micrometers.

Industrial Hygienist (I.H.): A person who is professionally qualified by education, training, and experience to anticipate, recognize, evaluate and develop controls for occupational health hazards.

I.H. Technician: A person working under the supervisions of the I.H. with special training, experience, certifications and licenses required for the industrial hygiene work assigned to be performed.

Intact: This means that ACM and/or PACM has not crumbled, been pulverized, or otherwise deteriorated so that it is likely to remain bound with its matrix.

Lock-Back: Encapsulation of all surfaces in the regulated work area at the conclusion of ACM and/or PACM removal and before removal of primary barriers.

MCEF: Membrane Cellulose Ester Filter

Negative Exposure Assessment: This means a demonstration by the employer that employee exposure to airborne asbestos during an operation is expected to be consistently below the PELs.

Negative Pressure: Air pressure lower than surrounding areas, created by exhausting air from a sealed space such as a contained work area.

Negative Pressure Respirator: A respirator in which the air pressure inside the respiratory inlet covering is positive during exhalation in relation to the pressure of the outside atmosphere and negative during inhalation in relation to the air pressure of the outside atmosphere.

Negative Pressure Ventilation System: A local exhaust system, utilizing HEPA filtration capable of maintaining a negative pressure inside the work area and a constant air flow from adjacent areas into the work area and that exhausts that air through HEPA filters to air outside the work area.

NESHAP: National Emission Standards for Hazardous Air Pollutants

Non-friable Asbestos-Containing Material (NF-ACM): Material that contains more than one percent (1%) asbestos by weight but cannot be crumbled, pulverized, or reduced to powder by hand pressure when dry.

OSHA: Occupation Safety and Health Administration

Owner: The governmental or public body or authority, corporation, association, firm, or person with whom the contractor has entered into the agreement and for whom the work is to be provided and who is the authorized representative of the owner of the facility where the work is to be performed.

OV: Organic Vapor

PACM: OSHA acronym for "Presumed Asbestos Containing Material"

PAPR: Powered Air-Purifying Respirator

PCM: Abbreviation for Phase Contrast Microscopy. Phase contrast microscopy uses a light microscope for the purpose of counting fibers.

PDF: Personnel Decontamination Facilities

Penetrating Encapsulant: An encapsulant that is absorbed by the asbestos matrix without leaving a discrete surface layer.

Personal Air Sampling: Air sample collected with a special battery-powered, portable, low-volume pump unit which is fitted on the body of the monitored person. The collection device (filter cassette) is located within the individual's breathing zone.

Personal Monitoring: Sampling of the fiber concentrations within the breathing zone of an employee.

P.I.H.: Professional (qualified) I.H. who meets all the definition requirements of AIHA and OSHA of a "Competent Person" under 29 CFR 1926.1101, has completed at least three specialized courses on asbestos abatement, supervision, and management in EPA endorsed training programs, formal training in respiratory protection and waste disposal, and has a minimum experience of five (5) projects of similar complexity with this project of which at least three (3) projects, served as the supervisor, licensed when required by state or local regulations.

Plastic Sheeting: Barrier material not as strong as polyethylene.

PLM: Abbreviation for Polarized Light Microscopy with dispersion staining using light microscopy and refractive indices to identify type of asbestos present.

Polyethylene Sheeting: Strong, usually transparent plastic barrier material.

Positive/Negative Pressure Fit Check: A negative-pressure respirator fit check, performed by placing the palm of one hand over the exhalation valve and exhaling (positive pressure) and feeling for face piece-to-face fit leakage and covering the filters cartridges with the palms of the hand and inhaling (negative pressure) while feeling for face piece-to-face fit leakage.

Pressure Differential System: A system which restricts airflow from adjacent areas into work area and continuously re-filters air from the HEPA filtration machine. Minimal exhaust ventilation is utilized by maintaining a pressure differential of two hundredths of an inch (0.02") of water (H₂O.) using a manometer.

Project Designer: This means a person who has successfully completed training requirements for an asbestos abatement project designer established by 40 CFR 763.

Protection Factor: The ratio of the ambient concentration of an airborne substance to the concentration of the substance inside the respirator at the breathing zone of the wearer. The protection factor is a measure of the degree of protection provided by a respirator to the wearer.

QNFT: Quantitative Fit Test

RACM: EPA-NESHAP acronym for "Regulated Asbestos Containing Material"

Regulated Area: An area established by the employer to demarcate areas where Class I, II, and III asbestos work is conducted, and any other adjoining area where debris and waste from such asbestos work accumulate; and a work area within which airborne concentrations of asbestos exceed, or there is a reasonable possibility they may exceed, the permissible exposure limits (PEL.)

Removal: Means all operations (including demolition) where ACM and/or PACM is taken out or stripped from structures or substrates.

Removal Encapsulant: A penetrating encapsulant specifically designed for removal of ACM rather than encapsulation.

Renovation: The modifying of any existing structure, or portion thereof.

Repair: Overhauling, rebuilding, reconstructing, or reconditioning of, mechanical equipment, structures, or substrates, including encapsulation or other repair of ACM and/or PACM attached to mechanical equipment, structures, or substrates.

Respirator: A device designed to protect the wearer from the inhalation of harmful atmospheres.

RPP: Respiratory Protection Program

RPPC: Respiratory Protection Program Coordinator

SAR: Supplied Air Respirator

SCBA: Self Contained Breathing Apparatus

Sealant: Another name for encapsulating material. This term also refers to the paint which is used to cover brown-coat ceilings after asbestos surfaces have been removed.

Sealed Work Area: Refers to the work area after containment barriers and decontamination facilities have been erected and a negative pressure air system installed.

Showers: Shower stalls installed in the PDF and used as part of the decontamination process, required for every person leaving the sealed work area. Also used in the EDF to wash disposal bags.

S.O.P.: Standard Operating Procedures

Station Sample or Area Sample: Refers to air samples collected at a specific spot, or station, with high-volume air pumps.

Surfactant: A chemical wetting agent added to water to improve penetration, thus increasing the effective wetting properties of water when applied to asbestos containing materials.

Surfacing Material: This means material that is sprayed, troweled-on or otherwise applied to surfaces (such as acoustic plaster on ceilings, fireproofing materials on structural members, or other materials on surfaces for acoustic, fireproofing, decorative texturing, and other purposes).

Surfacing ACM: This means surfacing material which contains more than 1% asbestos.

TEM: Abbreviation for Transmission Electron Microscopy. TEM is used for the purpose of fiber counting and has the analytical capacity of specifically identifying asbestos fibers.

Thermal System Insulation (TSI): This means ACM and/or PACM containing greater than 1% asbestos that is applied to pipes, fittings, boilers, breech, tanks, ducts or other mechanical/structural components to prevent heat loss or gain.

Testing: One of two types of testing done in relation to asbestos: bulk and air testing.

Time Weighted Average (TWA): The average concentration of a contaminant in air during a specific time period.

VAT: Vinyl Asbestos Tile

Visible Emissions: Any emission containing particulate that is visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.

Wetting Agent: See Surfactant

Wet Cleaning: The process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, or other cleaning utensils which have been dampened with amended water.

Work Area: The area where asbestos-related work or removal operations are performed which is isolated to prevent the spread of asbestos dust, fibers, debris and entry by unauthorized personnel. Work area is a regulated area as defined by 29 CFR 1926.

**APPENDIX B
ASBESTOS SURVEY REPORT**