ASBESTOS ASSESSMENT AND ABATEMENT PLAN
FOR THE
ASBESTOS ABATEMENT OF BUILDING 401
NIAGARA FALLS STORAGE SITE
LEWISTON, NEW YORK

PREPARED FOR:

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, BUFFALO DISTRICT
BUFFALO, NEW YORK
CONTRACT DACW49-00-D-0007

Prepared by:

Jacobs Engineering Group, Inc. - Federal Operations
13723 Riverport Drive
Maryland Heights, MO. 63043

October 2001
Revision 1 – January 2002

ROUTING OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE FOR APPROVAL

(Used to route ENG Form 4025 with items attached. Not to become a part of the Contractor's Record.)

	TO:	FROM:	DATE
1	Stephen Yaksich	Todd Kufel	17-Jan-02

The attached items listed on ENG Form 4025 are forwarded for approval action.

CONTRACT NUMBER	CONTRACTOR
DACW49-00-D-0007	Jacobs Engineering
TRANSMITTAL NUMBERS	**PROJECT TITLE AND LOCATION**
Asbestos Assess. & Abatement Plan (Rev. 1)	NFSS Building 401 Asbestos Abatement

COMMENTS (Attach additional sheet, if necessary.)

Revised work plan. All PDT comments have been resolved.

NO. OF INCL.	TYPED NAME AND TITLE	SIGNATURE
10	Todd Kufel, Project Engineer	Todd C Kufel

	TO:	FROM:	DATE
2			

COMMENTS (Attach additional sheet, if necessary.)

NO. OF INCL.	TYPED NAME AND TITLE	SIGNATURE

	TO:	FROM:	DATE
3			

COMMENTS (Attach additional sheet, if necessary.)

NO. OF INCL.	TYPED NAME AND TITLE	SIGNATURE

	TO:	FROM:	DATE
4	Judith Leithner	Stephen Yaksich	1/18/02

The following action codes are given to items listed on ENG Form 4025:

ACTION CODES

A - APPROVED AS SUBMITTED.
B - APPROVED, EXCEPT AS NOTED ON DRAWINGS. RESUBMISSION NOT REQUIRED.
C - APPROVED, EXCEPT AS NOTED ON DRAWINGS. REFER TO ATTACHED SHEET, RESUBMISSION REQUIRED.
D - WILL BE RETURNED BY SEPARATE CORRESPONDENCE.
E - DISAPPROVED (SEE ATTACHED)
F - RECEIPT ACKNOWLEDGE
G - OTHER (specify).

ACTION CODES TO BE INSERTED IN COLUMN G, SECTION I, ENG FORM 4025 (Attach sheets, when required.)

ITEM NO. *(Taken from ENG Form 4025)*	1.5a							
CODE GIVEN	B							

REMARKS

Item No. 1.5a - Approved, except as noted on attached comment sheet. Resubmission not required.

NO. OF INCL.	TYPED NAME AND TITLE	SIGNATURE
1	Stephen Yaksich, Chief, Engineering Division	

FORM 4026 EDITION OF NOV 66 MAY BE USED. * U.S. GOVERNMENT PRING OFFICE: 1984-449-726:18'

ENG 1 NOV 74

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JE JACOBS ENGINEERING®
Engineers and Constructors

Jacobs Engineering Group, Inc. - Federal Operations
13723 Riverport Drive
Maryland Heights, MO. 63043

October 2001
Revision 1 – January 2002

☐ APPROVAL RECOMMENDED — Initials: _____ Date: _____

☒ APPROVAL RECOMMENDED SUBJECT TO COMMENTS INDICATED — Initials: _____ Date: 1/18/02

☐ DISAPPROVAL RECOMMENDED — Initials: _____ Date: _____

APPROVED/DISAPPROVED — Signature: _____ Date: _____

COMPLETION OF INDEPENDENT TECHNICAL REVIEW

Jacobs Engineering Group, Inc. has completed the Asbestos Assessment and Abatement Plan for the asbestos abatement of Building 401, Niagara Falls Storage Site, Lewiston, New York. Notice is hereby given that an independent technical review has been conducted that is appropriate to the level of risk and complexity inherent in the project, as defined in the Quality Control Plan. During the independent technical review, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of assumptions; methods, procedures, and material used in analyses; alternatives evaluated; the appropriateness of data used and level of data obtained; and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing Corps policy.

Leo Marett [signature] — 10-02-01

(Signature) (Date)

Study/Design Team Leader and Team Members

Brian Kraus [signature] — 10-03-01

(Signature) (Date)

Independent Technical Review Team Leader and Team Members

Virgil W Jansen [signature] — 10/3/01

(Signature) (Date)

Independent Technical Review Team Leader and Team Members

[signature] — 10/04/01

(Signature) (Date)

Independent Technical Review Team Leader and Team Members

CERTIFICATION OF INDEPENDENT TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows (Describe the major technical concerns, possible impact, and resolution):
Section 2.0 – Provide the as noted clarification re: Assessment

Section 4.4 – Include the local labor force re: medical exams

Section 5.9 – Add discussion of air clearance (Summary)

Section 7.4 – Identify responsible party performing air clearance.

Consider comments as to section titles, paragraph locations, etc.

All concerns resulting from independent technical review of the project have been considered.

Virgil W Jansen (Signature)

10/3/01 (Date)

(Engineer of Record)

TABLE OF CONTENTS

APPENDICIES

ABBREVIATIONS AND ACRONYMS

AAAP	Asbestos Assessment and Abatement Plan
AAP	Asbestos Abatement Plan
ACGIH	American Conference of Governmental Industrial Hygienists
ACM	Asbestos Containing Material
AHERA	Asbestos Hazard Emergency Response Act
APR	air-purifying respirator
ASHARA	Asbestos School Hazard Abatement Reauthorization Act
ASTM	American Society for Testing and Materials
BRA	Baseline Risk Assessment
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
C&D	construction and demolition
CAA	Clean Air Act
CAPE	Cape Environmental Management Inc
CEDE	Committed Effective Dose Equivalent
CERCLA	Comprehensive Environmental Response Compensation and Liability
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CHSP	Corporate Health and Safety Procedure
CIH	Certified Industrial Hygienist
CMS	Corrective Measures Study
COC	Chain of Custody
COPC	Chemical of Potential Concern
COR	Contracting Officer Representative
CRs	Carcinogenic Risk
CRZ	Contamination Reduction Zone
CWA	Clean Water Act
DA	Department of the Army
DAC	Inhalation Derived Air Concentrations
DOE	U.S. Department of Energy
DOP	dioctylphthalate
DOT	U.S. Department of Transportation
EDC	Economic Development Conveyance Area
EMSL	EMSL Analytical, Inc.
EPA	U.S. Environmental Protection Agency
EZ	Exclusion Zone
F	Fahrenheit
f/cc	Fibers per cubic centimeter of air
FMEA	Failure Mode and Effects Analysis
FSP	Field Sampling Plan
GAC	Granulated Activated Carbon
GFCI	Ground Fault Circuit Interrupter
HAZOP	Hazard and Operability Study
HazWOPER	Hazardous Waste Operations and Emergency Response
HEPA	High Efficiency Particulate Air
HHE	Human Health Evaluation
HHRA	Human Health Risk Assessment
HI	Hazard Index

HQ	Hazard Quotient
HVAC	heating, ventilation, and air conditioning
IDLH	Immediately Dangerous to Life or Health
IHT	Industrial Hygiene Technician
IS	Interim Standards
JE	Jacobs Engineering
JEG	Jacobs Engineering Group
LEL	Lower Explosive Limit
LOOW	Lake Ontario Ordnance Works
LPM	liters per minute
MAP	Model Accreditation Plan
MCE	mixed-cellulose ester
MCLGs	Maximum Contaminant Level Goals
MCLs	Maximum Contaminant Levels
MED	Manhattan Engineering District
MSDS's	Material Safety Data Sheets
MSL	Mean Sea Level
NAM	Negative Air Machine
NAWQC	National Ambient Water Quality Criteria
NCP	National Contingency Plan
NEPA	National Environmental Policy Act
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NFSS	Niagra Falls Storage Site
NIOSH	National Institute for Occupational Safety and Health
NOB	Non-friable Organically Bound
NPDES	National Pollution Discharge Elimination System
NRC	Nuclear Regulatory Commission
NYCRR	New York Code of Rules and Regulations
NYSDOL	New York State Department of Labor
ORISE	Oak Ridge Institute for Science and Education
OSHA	Occupational Safety and Health Administration
PACM	Presumed Asbestos Containing Materials
PAPR	Powered Air Purifying Respirator
PBC	Public Benefit Conveyance Area
PCM	Phase Contrast Microscopy
PDU	Personal Decontamination Unit
PEL	Permissible Exposure Limit
PHA	Process Hazard Analysis
PLHCP	Physician or other Licensed Health Care Professional
PLM	Polarized Light Microscopy
PPE	personal protective equipment
PRGs	Preliminary Remediation Goals
PVC	polyvinyl chloride
QAPP	Quality Assurance Plan
QC	quality control
QCR	Quality Control Reports
QLFT	Qualitative Fit Test Requirements
QNFI	Quantitative Fit Test Requirements
RA	Restricted Area
RAD	Radiation
RCRA	Resource Conservation and Recovery Act

RFI	RCRA Facility Investigation
RFP	Request For Proposal
RGOs	Remedial Goal Objectives
RME	Reasonable Maximum Exposure
SAR	Supplied-Air Respirator
SCBA	Self-Contained Breathing Apparatus
SCS	Soil Conservation Service
SDWA	Safe Drinking Water Act
SEV	Screening Ecological Value
SHM	Safety and Health Manager
SHP	Safety and Health Plan
SMCLs	Secondary Maximum Contaminant Levels
SOP	Standard Operating Procedures
SOR	Safety Observation Report
SSHO	Site Safety and Health Officer
SSHP	Site Safety and Health Plan
SSL	Soil Screening Level
STL	Severn Trent Services Laboratories
SVOCs	Semi-volatile Organic Compounds
SWMU	Solid Waste Management Unit
SZ	Support Zone
TAL	Total Analyte List
TBC	To Be Considered
TCLP	Toxicity Characteristic Leaching Procedure
TDS	Total Dissolved Solids
TEDE	Total Effective Dose Equivalent
TEM	Transmission Electron Microscopy
TLV	Threshold Limit Value
TSI	Thermal System Insulation
TSS	Total Suspended Solids
TWA	Time-Weighted Average
UCL	Upper Confidence Level
UCS	Unconfined Compressive Strength
UEL	Upper Explosive Limit
USACE	United States Army Corps of Engineers
USAEC	United States Army Environmental Center (formerly USATHAMA)
USATHAMA	United States Army Toxic and Hazardous Materials Agency (now USAEC)
USDA	United States Department of Agriculture
VOCs	Volatile Organic Compounds
WA	Work Area (Asbestos Regulated Area)
WBGT	Wet Bulb Globe Temperature Index
WCS	Waste Containment Structure

1.0 INTRODUCTION

Jacobs Engineering, Inc. (JE) is under contract with the United States Army Corps of Engineers (USACE), Buffalo District, to provide Engineering, Procurement, and Construction services tasks including, but not limited to, the development of required work plans for the asbestos abatement of Building 401 at the Niagara Falls Storage Site. As a contract requirement, JE is tasked to develop an Asbestos Assessment and Abatement Plan (AAAP). A condensed Asbestos Assessment is tasked to identify all asbestos containing materials (ACM) located throughout the interior of the building. The identified ACM will then be removed and disposed as described in the Asbestos Abatement Plan sections of this document. This AAAP has been developed as a written management plan for executing a quality remedial construction service.

1.1 SITE BACKROUND

Niagara Falls Storage Site (NFSS) is located at 1397 Pletcher Road, Lewiston, New York. The U.S. Department of Energy (DOE) owns the site. The site consists of an engineered Waste Containment Structure (WCS), various buildings, and open areas. The site was originally a part of the Lake Ontario Ordnance Works (LOOW). The primary use of the site from early 1940s through mid 1950s was for storage, trans-shipment, and disposal of radioactive wastes from various sources.

Building 401 was initially the powerhouse for the production of TNT at LOOW, and was used to store radioactive materials in support of Manhattan Engineering District (MED) activities during World War II. The building was used for the production of Boron-10 from 1953 to 1959 and from 1965 to 1971 and then became a waste storage facility by MED. In 1971, Building 401 was gutted and its instrumentation and hardware were disposed of as surplus materials. The building has been inactive since.

Building 401 is steel frame four story structure approximately 100,000 square feet of floor area. The main structural system of the building consists of steel and concrete load bearing walls supporting the roof. There are multiple floors that contain rooms and offices and building service areas. There is a tower area and high bay. The building floor is concrete slab on grade.

1.2 PROJECT WORK TASKS

There are three (3) primary work tasks associated with the execution of Delivery Order #1: Assessment, Abatement, and Waste Disposal. Each of these tasks are detailed in the following sections of this AAAP.

2.0 ASSESSMENT IDENTIFICATION AND SAMPLING

JE will self perform the Building 401 asbestos/radiation assessment fieldwork. The JE assessment team includes the Project Manager, SSHO/Health Physicist (HP), RAD technician, and two New York State certified Asbestos Inspectors. The assessment fieldwork will occur during a one-week duration working eight hours per day, five days per week immediately following mobilization and setup. The RAD portion of the assessment will be performed as described in the Radiation Control Contingency Plan (RCCP).

The asbestos survey shall identify the following types of installations:

- Surfacing treatments: fireproofing; acoustical plaster; and finish plasters.
- Thermal system insulation: equipment insulation and boiler/breaching/duct/tank insulation.
- Miscellaneous materials: dust and debris, vinyl asbestos tile, ceiling tile, gaskets/seals/sealants, vibration isolators, laboratory tables and hood, cementitious board, fire curtains, and fire doors.

Exterior materials such as roofing felts, flashings, cementitious board, shingles and galbestos will not be assessed as part of this task.

2.1 SAMPLING PROTOCOL

After preliminary assignment of homogeneous areas and a visual inspection of the building interior, a sampling scheme will be developed. AHERA protocols will be used. This will include collection of a minimum of three samples of each type of homogenous thermal system insulation, surfacing treatments, and miscellaneous materials. For a sampling area between 1,000 and 5,000 square feet, the inspector will take at least 5 samples and for a sampling area over 5,000 square feet, seven samples will be taken for analysis. The descriptions of the laboratory analytical methods for bulk sample analysis are discussed in the Sampling and Analysis Plan (SAP).

Sample locations will be determined in the field by the JE asbestos inspectors. Once the sample location is identified, a radiological screening at that location will be performed by a JE Health Physics Technician. This technician will be with the asbestos inspectors at all times while inside the building. If radiological testing results are less than the RAD release levels as per NRC Regulation 1.86, then a sample will be taken at that location. Further explanation of the radiological screening techniques as they would apply to the asbestos assessment are discussed in the RCCP.

A unique sample ID number will be assigned to each sample location. This ID number will be on the sample container, a plastic zip-lock sample bag. The sample ID number and the sample location will be recorded on the sample area diagram (field copy), data

sheet, and the Chain of Custody sheet. Upon completion of the field survey, the bulk sample bags will be placed in a second oversized zip-lock bag, along with the Chain of Custody sheet, placed in a FEDEX box, and sent overnight delivery to EMSL Analytical, Inc., a JE subcontractor, for analysis.

Bulk samples will be analyzed according to 12 NYCRR 56 asbestos regulations for bulk samples. Asbestos samples will be analyzed using Polarized Light Microscopy (PLM). Samples of Non-friable Organically Bound (NOB) materials found to contain less that 1% by PLM will then be analyzed using Transmission Electron Microscopy (TEM).

Digital photographs shall be taken of the various areas of the building, asbestos materials, and sampling locations.

The identified ACM will be quantified by dimension. All volumes recorded will be reported in cubic feet. In the case of pipe insulation, the lengths of pipe containing the insulation, pipe diameters, and insulation thickness, and insulation condition shall be recorded.

2.2 ASSESSMENT PERSONAL PROTECTIVE EQUIPMENT

The minimal level of protection for asbestos assessment and abatement is Level C with full face piece air purifying respirator with P100 filters and full body disposable particulate coverall, hand, feet and head protection. Level C protection, as described in the Safety and Health Plan (SHP) includes:

- Full face air purifying respirator, NIOSH listed;
- Appropriate respirator filters (P100, organic vapor);
- Disposable full body coverall;
- Disposable nitrile gloves or equivalent;
- Disposable nitrile inner gloves or equivalent;
- Chemically-resistant steel to and shank boots;
- Disposable or reusable covers or equivalent;
- Head protection.

3.0 ASSESSMENT PERSONAL HYGIENE AND DECONTAMINATION

Assessment personnel entering Building 401 exclusion zone (EZ) or areas where contamination may occur shall decontaminate before leaving the EZ. Decontamination will be performed in accordance with the procedures set forth in the SHP and RCCP.

3.1 DECONTAMINATION

For the asbestos assessment phase of work, a polyethylene sheet will be placed on the floor and personal protective equipment will be removed and placed in asbestos 6 mil disposal bags. Wipes will be used to wash face, hands, respirator, and assessment equipment.

The Health Physicist will RAD screen all bulk samples, PPE, and assessment equipment to verify the materials can be safely removed from Building 401. Materials radioactively contaminated will be segregated, packaged, and transported to a USACE designated on-site storage area.

3.2 DISPOSITION OF DECONTAMINATION WASTES

For the asbestos assessment, PPE wastes will be collected in 6 mil asbestos disposal bags. Each disposal bag will be double bagged and goose-necked taped and then placed in a segregated room within Building 401, to be later disposed of with asbestos wastes generated during asbestos abatement activities. The RAD technician will screen each item for RAD content and segregate RAD items for disposal.

4.0 ASBESTOS ABATEMENT

The following sections describe the asbestos abatement work plan for the ACM found during the Assessment of Building 401 Niagara Storage Site, Lewiston, New York. The objective of this work plan is to provide the site-specific procedures and protocol necessary to conduct work in accordance with 12 New York Code of Rules and Regulations (NYCRR) Part 56 and all applicable state and federal regulations. This plan was reviewed and approved by Blair Ingalls, New York State/ Environmental Protection Agency (EPA) approved Asbestos Project Designer.

This plan will be implemented and enforced by the JE Project Manager, Cape Environmental Management, Inc. (CAPE) Project Manager, CAPE Asbestos Abatement Supervisor, JE Site Safety and Health Officer (SSHO), and the Chopra Lee, Inc. Asbestos Project Monitor. This plan will establish the written procedures and protocols for personnel involved in the project and will apply and interface with requirements of the CAPE Safety and Health Program, SHP, and other plans developed specifically for this project.

A copy of the complete AAAP will be available at the site during onsite activities. All field personnel will have access to the AAAP for review of pertinent requirements and guidelines as they apply to site activities. The AAAP may be revised should additional information become available concerning conditions at the site and/or should significant changes occur in the scope of work, operational procedures, site hazards, and hazard control measures. The AAAP may be revised by the Asbestos Project Designer upon review and approval by the Asbestos Project Monitor, CAPE Project Manager, the Asbestos Abatement Supervisor, JE Project Manager and the Contracting Officer's Representative (COR).

4.1 PROJECT DESCRIPTION

This project involves abatement of all asbestos-containing material (ACM) located throughout the interior of Building 401 as identified in the Asbestos Assessment to be performed by JE. There will be no abatement of exterior Building 401 ACM within the scope of this project. The types of suspect ACM that exist in the building as identified in the pre-proposal site visit are shown in Table 1 of Appendix I.

Removal, packaging, and disposal of ACM shall be performed in accordance with 12 NYCRR, Part 56 and Occupational Safety and Health Administration (OSHA) regulations, Department of Transportation (DOT), and EPA. Any RAD contaminated or commingled waste shall be stored inside the building in a location designated by the client, as required by the RCCP, and as directed by the JE Health Physicist.

CAPE, a JE subcontractor, will perform the fieldwork for asbestos abatement and will hold all applicable New York State licenses for asbestos abatement. JE will provide a Project Manager, SSHO and RAD technicians to oversee and coordinate this fieldwork.

Chopra-Lee, Inc. will provide the New York DOL accredited Asbestos Project Monitor and Air Sampling Technician.

4.2 CAPE PROJECT ORGANIZATION

The CAPE project team, reporting to the JE Project Manager, includes: Program Manager, Project Manager, Site Project Superintendent (Asbestos Abatement Supervisor), and 18 to 20 asbestos abatement workers. The abatement will occur over sixty-six workdays (Level of Effort Estimate) while working eight hours per day, five days per week.

CAPE's Program Manager, Herman Kitt, will have overall responsibility for the technical, contractual, and administrative matters for CAPE during this project. Mr. Kitt has more than 10 years of program management experience. He will be responsible for ensuring that a high degree of client satisfaction is maintained.

The day-to-day project management will be performed by CAPE's Project Manager, Juan Hernandez. Day-to-day responsibilities will include daily supervision of the project, establishment of work teams for specific tasks, resolution of issues, direct and frequent liaison with the JE Project Manager, early identification and resolution of technical problems, identification of potential or desired modifications to the scope of work, cost, schedule, and field operations, quality control (QC), and preparation of project progress reports.

Cape employee, Jesus Uriostegui, an EPA/Asbestos Hazard Emergency Response Act (AHERA)-accredited Asbestos Abatement Supervisor, will be the New York State DOL accredited Asbestos Abatement on site supervisor . He will act in the role of the OSHA Competent Person for asbestos abatement operations. Mr. Uriostegui will report to Mr. Hernández.

4.3 TRAINING CERTIFICATION RECORDS

All asbestos abatement workers shall successfully complete an EPA approved 24-hour asbestos abatement worker-training course and the annual 8-hour refresher course. The Asbestos Abatement Supervisor shall successfully complete an EPA approved 40-hour asbestos supervisor's course and/or the 8-hour refresher course. Also, abatement workers, supervisors, project monitor, and air sampling technician shall be certified by New York DOL as required by 12 NYCRR Part 56. In addition to applicable asbestos training, all site personnel shall successfully complete a 40-hour Hazardous Waste Operations and Emergency Response (HazWOPER) course and radiation protection training meeting 10 Code of Federal Regulations (CFR) Parts 19 and 20 as well as any site-specific radiological training required by JE. Copies of training certification records for site personnel will be maintained on site by the SSHO and will be submitted to the COR when an anticipated start date for the project is finalized.

4.4 MEDICAL EXAMINATION

Medical examination reports for CAPE personnel, including local union personnel utilized on this project, are presented in the form of health status medical reports. These reports indicate any detected medical conditions that would increase an individual's risk of physical health impairment from occupational exposure to asbestos or if the individual has limitations in the use of personal protective equipment (PPE) such as protective clothing or respirator use. Copies of medical examination reports for site personnel will be maintained on site by the SSHO and Asbestos Abatement Superintendent, and will be submitted to the COR when an anticipated start date for the project is finalized.

5.0 ASBESTOS ABATEMENT PROCEDURES

5.1 DESCRIPTION OF TYPICAL ASBESTOS WORK AREA

All asbestos abatement activities will be performed within regulated work area (WA), which will be demarcated with red "Danger Asbestos" barrier tape and OSHA asbestos warning signs. Critical isolation barriers will be installed to block and seal openings between the WA and adjacent non-WA, and will consist of two layers of 6-mil fire-retardant plastic sheeting and duct tape. All floor (an exception will be taken in work area where the floor is contaminated with ACM) wall and ceiling surfaces shall also be covered with a minimum of two layers of 6-mil fire-retardant sheeting. The floor shall be plasticized first, and its plastic sheeting shall extend up the wall a distance of at least 12 inches on all sides The walls shall then be plasticized by applying plastic sheeting from ceiling to floor, thus overlapping the floor sheeting by at least 12 inches. This process shall be repeated for the second layer of plastic sheeting for the floors and walls with all seams within a layer being staggered and separated by a distance of at least 6 feet. A local exhaust system consisting of a calculated number of negative air machines (NAM) in the asbestos-regulated area, to provide at least four air changes per hour within the WA and a negative pressure of no less than 0.02 inches of water. The local exhaust system will terminate at the exterior of the building and be remote from any unprotected personnel.

Warning signs at all approaches to asbestos-regulated WA will be provided. Signs will meet OSHA requirements and will be located such that personnel may read the sign and take the necessary protective steps required before entering the area. Bilingual signs (English and Spanish) will be provided.

All personnel leaving the regulated WA shall exit through a designated personal decontamination area. All equipment and properly containerized waste shall be taken out of the regulated WA through a designated equipment decontamination load-out area.

A centralized personnel decontamination unit (PDU) with a separate decontamination room and clean room with a shower in between will be established within each WA. All employees will be required to shower before changing into street clothes. Personnel exiting the WA will remove asbestos-contaminated disposable protective clothing, while still wearing respirators, at the boundary of the WA. Personnel will seal the disposable protective clothing in impermeable bags or containers for disposal, shower, and then proceed to the clean room.

The PDU shall be a prefabricated trailer unit, sealed with a minimum of two layers of 6-mil plastic sheeting. The PDU will be constructed in compliance with NYCRR 56 and shall consist of a clean room, a shower room, and an equipment room, in series, separated from each other and from the work area by airlocks. See the Site Operations Plan for the Site Layout Drawing.

The equipment decontamination area will be constructed in compliance with 12 NYCRR 56-10-1 and shall consist of a washroom/cleanup room and a holding area. The washroom/cleanup area shall be constructed with an unlocked doorway to the work area and another unlocked doorway to the holding area. The holding area shall be constructed with an unlocked doorway to the washroom/cleanup room and another lockable door to the outside.

5.2 SEQUENCING OF ASBESTOS-RELATED WORK AND INTERFACING WITH OTHER TRADES

During the asbestos abatement phase, the only trades anticipated being required in addition to the abatement crew and plumbers and electricians is the subcontracted transportation and disposal firm as called for in the site Operations Plan. Transportation and disposal will be coordinated in advance to have an established schedule for pickup and drop off of waste containers. Before commencement of asbestos abatement activities, 10-day notifications shall be submitted to regional U.S. EPA National Emissions Standards for Hazardous Air Pollutants (NESHAPS) and the New York State Department of Labor (NYSDOL) Asbestos Control Unit. Additional requirements regarding transportation and disposal are called for in the Waste Management Plan.

5.3 METHOD OF NOTIFICATION OF OTHER EMPLOYERS AT THE WORKSITE

Site-specific orientation training will be provided for visitors and subcontractors before assignment to fieldwork at the site and will involve a review of the SHP and associated Activity Hazard Analysis, hazard communication program, and other pertinent site-specific safety topics. This briefing session will be conducted by the SSHO so that all visitors and subcontractors are familiar with the hazards associated with the site and the specific requirements and responsibilities for maintaining a safe and healthful work environment. The SSHO will also brief the workers on the applicable portion of the RCCP.

5.4 PERSONAL PROTECTIVE EQUIPMENT TO BE USED

It is anticipated that Level C PPE will be used during asbestos abatement activities. Level C protection will consist of:

- Powered air purifying respirator (PAPR) with appropriate cartridge/filter (organic vapor filter with a P-100 [HEPA] pre-filter for asbestos fiber protection)
- Disposable, hooded, one-piece, full-body coveralls constructed of spun-bonded olefin or polyproppeylene fabrics (e.g. Tyvek® or equivalent)
- Boot covers of 60-mil rubberized polyvinyl chloride (PVC) over steel toe boots or rubber boot with steel toes.
- Work clothing, as dictated by the weather
- Nitrile, neoprene, or natural rubber gloves with cotton liners

- Hard hat
- Safety glasses, goggles of face shield
- Hearing protection (if noise levels require raising voice to communicate)
- High-visibility orange or green safety vest (if in vehicle or equipment traffic routes; reflective if night work)
- Two-way radio communication (between WAs and clean areas).

The SSHO will establish action levels to upgrade or downgrade the initial minimum levels of protection prior to start of work. The level of protection reassessment will be based on air monitoring results, worker potentials for exposure, changes in site conditions, changes in work phases/tasks, weather, temperature extremes, individual medical considerations, etc. No downgrade of PPE is anticipated.

5.5 RESPIRATORY PROTECTION

Respiratory protection will be selected, used, and maintained in accordance with the Safety and Health Program Respiratory Protection Program presented in the SSHP. Site-specific respiratory protection requirements include:

- The SSHO will be responsible for seeing that workers have required medical examinations (and are fit for duty), respirator training, respirator fit testing, and required documentation
- No facial hair that interferes with respirator fit is allowed
- A positive and negative pressure respirator user seal check will be completed each time a respirator is put on
- Personnel are responsible for the proper maintenance, cleaning, storage, and use of individually assigned respirators. Respirators will be cleaned after each use, placed in a plastic bag, and inspected before using again
- Whenever respirators are required, no person will remove a respirator in the work area (WA) or enter these WA without a respirator. Respirators will be removed in the shower compartment of the personal decontamination unit (PDU) after rinsing hands and face
- Personnel using air-purifying respirators (APRs) must have passed a quantitative fit-test within the past year. Quantitative fit testing will be conducted as needed and shall be documented on a "Respirator Fit Test Completion Form"
- When a worker uses a respirator:

    - A licensed physician, who must provide written medical certification documentation that states the worker is physically able to use a respirator, must first evaluate the worker.
    - The Asbestos Abatement Supervisor and SSHO is responsible for ensuring that workers have required medical exams and that copies of medical certifications are maintained and available according to OSHA record keeping requirements. Copies of fit testing records and medical

- certification documentation shall be maintained on site by the Asbestos Abatement Supervisor and the SSHO.

- Visitors will be required to provide documentation of respiratory protection instruction and fit testing and a copy of a physician's written statement of respirator use fitness for entry into controlled work zones that require respirator use.

5.6 GENERAL PROJECT ABATEMENT SEQUENCE

- Establish regulated WA by placing asbestos hazard warning signage and barricade tape around the perimeter of the building and entrance(s) to the building/WA.
- Construct/Attach decontamination unit and equipment decontamination units contiguous to WA. Connect necessary electrical, plumbing, and perform prep work on the mobile units.
- Install negative air machines (NAM)
- Preclean WA.
- Inspect interior of room/WA for penetrations and establish WA seals consisting of two layers of 6-mil poly over all critical openings and/or spray form. During this process, plug all drains to prevent decontamination agents or contaminated debris from entering drains and migrating off site.
- Establish negative pressure.
- Install glove bags on piping (where necessary) within a full containment area or within a tent as called for in 12 NYCRR, Part 56.
- Perform removal of ACM (see Section 5.7 of this document).
- Double bag all accumulated ACM or contaminated debris and test by the RAD Technician before loading to lined dumpsters. Materials will only be loaded out after it has been determined through radiological screening that materials are not RAD contaminated. Materials deemed to be RAD contaminated would be stored within the building in a space designated by the USACE.
- Clean WA of all ACM, debris, and dust. Replace HEPA filter, decon all equipment.
- Spray a lock down sealer.
- Final visual inspection of WA(s) by CAPE Asbestos Abatement Supervisor.
- Perform final visual inspection by designated Asbestos Project Monitor and conduct final clearance air sampling.
- Remove WA control signage and seals, and demobilize upon receipt of notification of acceptable visual clearance and acceptable final clearance air sample results. All equipment brought to the site for abatement purposes shall remain on site throughout the duration of the project and shall be decontaminated in accordance with 12 NYCRR 56-5 as well as determined to meet radiological release criteria per Nuclear Regulatory Commission (NRC) Guide 1.86 before being removed from the project site.

5.7 METHODS TO REMOVE SPECIFIC ACM TYPES

- Pipes and pipe fitting insulation will be removed via a combination of gross removal and negative pressure glove bag within a full negative pressure containment area or within a tent as called for in 12 NYCRR, Part 56. Scaffolding and/or man lifts will be used as necessary to safely access pipes at heights. Generally, pipe insulation located at heights above six (6) feet will be glove bagged to containerize the material so that it can be safely lowered to the ground.
- Tank and Boiler Insulation will be removed via full containment gross removal methods. After removal and bagging of gross debris from tanks and boilers, the underlying surfaces will be fine cleaned of any residual debris with wire brushes and steel wool pads.
- Floor tile and Associated Mastic will be removed manually. The floor tile will be removed using long-handled spud bars. Associated mastic will be removed using a low-odor mastic removal agent.
- Transite panels will be removed manually. Care will be taken to insure as little breakage as possible occurs. Panels will be wrapped in two layer of 6-mil polyethylene and properly labeled for disposal.
- Window Putty will be removed manually using putty knives and properly bagged for disposal.
- Ceiling Tile will be removed manually and properly bagged for disposal.

All materials will be kept adequately wetted throughout the removal process and will be double bagged (or wrapped) in 6-mil polyethylene disposal bags and properly labeled for disposal.

5.8 METHODS TO CONTROL THE SPREAD OF ACM

The following work methods will be used to control the spread of ACM waste and airborne fiber concentrations during ACM removal:

- All WA will be pre cleaned prior to major prep-work.
- All removal of ACM shall be performed using wet methods. Amended water shall be used.
- NAM sufficient to perform at least four air changes per hour and a negative pressure of 0.02 inches H_20 will be installed in WA
- Removed ACM shall be immediately bagged (while wet)
- Accumulations of dust shall be cleaned from surfaces on a daily basis using High-Efficiency Particulate Air filter (HEPA) vacuum and/or wet cleaning methods
- Installation of isolation barriers as described in Section 5.1 of this document
- Proper worker decontamination procedures as described in Section 5.1 of this document

- Shutdown or positive pressurization of heating, ventilation, and air conditioning (HVAC) systems during asbestos abatement process.

Local exhaust for the performance of asbestos abatement will be provided by a HEPA-filtered NAM. After establishing the regulated area and installing critical barriers, the NAM will be installed within the WA to provide a negative pressure enclosure. The NAM will be exhausted to the exterior of the building.

CAPE will provide the NAM and backup NAM as required per NYCRR56. On this project, CAPE will use HEPA AIRE H2000HP NAM, which are rated at 2,000 cubic feet per minute (cfm). All HEPA filters will be dioctylphthalate (DOP)-tested in accordance with Mil-STD 282, and will be registered and labeled to meet or exceed a minimum of 99.97 percent efficiency for 0.3-micron particles.

5.9 ASBESTOS WORK VERIFICATION PROCEDURES

Verification of asbestos-related work will be completed before, during, and after asbestos abatement. The purpose of the verification process will be to monitor the work procedures for correct performance and to verify the completeness of the abatement work. In each WA, visual inspections will be conducted before, during, and after asbestos abatement by the Asbestos Project Monitor and Asbestos Abatement Supervisor, with an option for a COR to be present. All inspections will be documented in the Daily Logs. Visual inspections will be performed in accordance with American Society for Testing and Materials (ASTM) E1368 "Standard Practice for Visual Inspection of Asbestos Abatement Projects." Also, final containment verification shall be provided utilizing air clearance sampling methods as described in the SAP and Section 7.4 of this document.

5.10 BULK SAMPLING AND ANALYTICAL METHODS

Asbestos bulk sampling may be conducted during the asbestos abatement portion of the project when a new suspect asbestos containing material is identified. Sampling and analysis of asbestos bulk sampling will be performed as specified herein. Bulk samples will be analyzed according to 12 NYCRR 56 asbestos regulations for bulk samples. Asbestos samples will be analyzed using Polarized Light Microscopy (PLM). Samples of Non-friable Organically Bound (NOB) materials found to contain less that 1% by PLM will then be analyzed using Transmission Electron Microscopy (TEM). The independent asbestos testing laboratory to be used is EMSL Analytical, Inc., 107 Haddon, Westmont, NJ 08108, (800) 220-3675.

6.0 WASTE STORAGE AND DISPOSAL

Asbestos waste, scrap, debris, bags, containers, equipment, and asbestos-contaminated clothing will be collected and placed in sealed dust-proof, waterproof, non-returnable containers (e.g., double plastic bags, 6-mil thick, or cartons, drums, or cans). Wastes within the containers will be adequately wet in accordance with 40 CFR 61, Subpart M. An OSHA warning label and U.S. Department of Transportation (DOT) label will be affixed to each container or bag, unless the approved warnings and DOT labeling is preprinted on the bag. The name of the waste generator and the location at which the waste was generated will be clearly indicated on the outside of each container. The transport dumpster will be lined with plastic sheeting before loading and will be cleaned after the transport and unloading of asbestos debris has been completed. Asbestos waste material will be disposed at an offsite EPA- and state-approved asbestos landfill and/or construction and demolition (C&D) landfill, as applicable under regulatory guidelines.

Before any asbestos waste leaves the site, a non-hazardous waste manifest shall be completed and signed by the COR. The procedure for hauling and disposal will comply with 40 CFR 61, Subpart M; 49 CFR 172, and state, regional, and local standards. Workers unloading the containerized bagged asbestos will wear half-face respirators with P-100 filters, disposable protective coveralls, leather gloves, and steel-toed boots when handling ACM at the disposal site. The Asbestos Abatement Supervisor, in conjunction with the Asbestos Project Monitor, will record and report to the COR the amount of ACM removed and transported for disposal.

Asbestos-contaminated water will be processed through a 20-micron and 5-micron wastewater filter system in line to a holding tank. The filters will be changed on a daily basis. The filtered water will then be tested by the RAD Technician as called for in the Radiation Control Contingency Plan and/or Waste Management Plan. Before any waste can be removed from the WA, it will first have to be determined by RAD Technician to be within the NRC limits. Waste determined to be RAD commingled or contaminated shall be segregated and stored on site in an area designated by the USACE.

Asbestos waste, asbestos-contaminated water, scrap, debris, bags, containers, equipment, and asbestos-contaminated clothing that may produce airborne concentrations of asbestos fibers will be collected and placed in sealed dust-proof, waterproof, nonreturnable containers (e.g., double plastic bags, 6-mil thick, or cartons, drums or cans). Wastes within the containers will be adequately wet in accordance with 40 CFR 61, Subpart M. Typical spills associated with this asbestos abatement work are:

- Leaking waste container
- Liquid leaking from WA around shower.

A spill kit will be available on site (located in designated area near the PDU or other areas subject to leaks or spills such as the floor below) with supplies for spill containment and control and includes:

- HEPA vacuum
- Shovel
- Rags
- Water mister with amended water
- Sandbags
- Absorbent pads (two pillows)
- Solid absorbent (two bags)
- Waste containers.

CAPE equipment will be stored in a safe and secure area that that is easily accessible to the work crew. Site trailers will be fully enclosed, properly identified, and locked.

7.0 AIR MONITORING STRATEGIES

Monitoring will be required to determine personnel exposures to chemical contaminants and physical agents during various site activities. The Asbestos Project Monitor will complete exposure monitoring during asbestos abatement. The independent asbestos testing laboratory to be used is EMSL Analytical, Inc. See Appendix II for laboratory certifications.

At a minimum, 25 percent of the work personnel shall be monitored daily for Time-Weighted Average (TWA) exposures over the course of each 8-hour shift (including excursion testing) for each work category that may have different exposures.

Exposure monitoring will be completed on site during project work. Should action level concentrations indicated in the SHP be exceeded, response actions will be initiated to implement engineering controls, safe work practices, upgrade/downgrade in PPE, work stoppage and/or emergency evacuation, and notification/evaluation by the SSHO.

The results of air monitoring will be recorded/attached onto the daily safety inspection log completed by the SSHO. The SSHO will provide exposure monitoring results for specific contaminant monitoring to individuals monitored within 5 days of receipt of results. The SSHO will maintain copies of such exposure monitoring records at the site for the duration of the project. Upon completion of the project, the exposure monitoring records will be maintained similarly to medical records and placed in each applicable employee's exposure monitoring record files for the duration of employment plus 30 years.

7.1 INITIAL EXPOSURE ASSESSMENT

Monitoring for asbestos will be conducted as per the SHP and SAP to establish representative personnel exposures during initial abatement activities at the site. Personnel will be monitored during each initial task of abatement removal when highest exposures are anticipated (i.e. pre-cleaned, prep, removal, final cleaning, waste load out, transportation and waste disposal).

Personal pumps will be used to collect air samples on 25-mm-diameter mixed-cellulose ester (MCE) filters with 2-inch extension cowls. Air samples are collected in worker breathing zones at a flow rate of 1 liter per minute (LPM) to 2.5 LPM for a 30-minute period to establish excursion limit concentrations and remaining sample duration’s will be based on filter loading. A sufficient number of samples will be collected to calculate 8-hour TWA exposures. Air samples are analyzed at an accredited laboratory by phase contrast microscopy the National Institute for Occupational Safety and Health (NIOSH)

Method 7400. Personal air sampling pumps are calibrated before and after use (pre/postcalibration) with an electronic bubble meter primary standard, or a secondary standard rotameter. The average flow rate of the pre and post calibration will be used to calculate the airborne asbestos concentration.

7.2 BACKGROUND MONITORING

Background samples will be collected by the Air Sampling Technician 24 hours prior to the isolation of the work area. Background sample locations will comply with those described in 12 NYCRR Part 56 – 17-2. Results will be provided to the USACE for approval within 48 hours of sampling.

7.3 ASBESTOS ABATEMENT MONITORING

During asbestos abatement, the Air Sampling Technician will collect air samples at locations described in 12 NYCRR Part 56 – 17-3. Results will be provided to the USACE for approval within 48 hours of sampling.

7.4 CLEARANCE MONITORING

The clearance sampling for airborne fiber concentrations will be in accordance with 40 CFR 763 and will comply with methods and locations as described in 12 NYCRR Part 56 – 17.2. The Asbestos Project Monitor and Air Sampling Technician will perform the clearance sampling. Results will be provided to the USACE for approval within 48 hours of sampling.

7.5 MONITORING OF ADJACENT SPACES

Due to the nature of work activities to be conducted at the site, the establishment of formalized work zones (i.e., Exclusion Zone [EZ], Contamination Reduction Zone [CRZ], and Support Zone) will be required. Site work zone requirements are established to limit access to WA to authorized personnel, prevent the spread of contamination from the WA, establish site communication, and site security measures. Site work zones will be established based on the type of work operations, potential for contaminant exposure, and potential for contact with other safety hazards. Within these work zones, regulated areas will be established to demarcate asbestos hazards.

Environmental monitoring of the regulated areas will be required to determine airborne concentrations of airborne fibers during abatement activities and shall be in accordance with 12 NYCRR 56-17, Schedules and Methods.

8.0 HAZARDOUS SUBSTANCES WITH ANTICIPATED USE AT THE SITE

Hazardous substances will be used for various purposes during asbestos abatement. A listing of hazardous substances with anticipated use is provided below (copies of material safety data sheets [MSDS] will be available on site.). A hazardous substances inventory list will be prepared by the SSHO and MSDS for hazardous substances to be used during asbestos abatement will be maintained on site. Hazardous materials with anticipated use are not expected to pose significant exposures above action limits. Hazardous materials may include:

- Gasoline for portable generator equipment
- Mastic removal solvent
- Dry chemical for fire extinguishers.
- Encapsulant and sealers
- Wetting agents

The wetting agent planned for use on this project is Fiberlock Technologies Penewet. The encapsulant planned for use on this project is Foster Post-Removal Residual Encapsulant. The mastic removal solvent for use on this project is Chem Safe 100, manufactured by ASRAMSCO.

9.0 AAAP EQUIPMENT LIST

The following represents a list of equipment to be utilized on the project site. This list may be modified as the projects progresses. Back up monitoring equipment will be provided during the project once project specific monitoring equipment needs are determined.

HEPA Vacuums with attachments
Portable Shower Units
Shower Pump/Filtration Units
HEPA Exhaust Units (N.A.M.S.)
Airless Sprayers
Waste water holding tanks with hoses
Personnel air Sampling Pumps/Supplies as per the SAP
Rotometers
Manometers
Temporary lighting
Electrical Power Panels (G.F.I.) Temporary Panels
Scaffolding
Generator
Transformer
Temporary Storage Box
Geiger Counter
Electric Manlift
Lockable Waste Dumpsters
(2) 16 Foot Box Van Trucks
Platform lift
Mobile Decon Unit (Pre-fabricated) (3)
Crew lunch Trailer
Fiberglass Ladders
Fiberglass Scoop Shovels
Rental vehicles
Rental Office Trailers (2)
Miscellaneous bulk sampling supplies/tools

APPENDIX I

TABLE 1 – SUSPECTED ACM

Niagara Falls Storage Site
Table 1
Suspect Asbestos Containing Material

Location	Piping (lf)	Fittings (ea)	Floor tile (sf)	Transite (sf)	Tanks (sf)	Boilers (sf)	Plaster Ceiling (sf)	Plaster Walls (sf)	Window Putty (lf)	Ceiling Ttile (sf)	Debris (cf)
Room 125			270	1056							
Room 120	500	125			260	1100					
Room 119	300	70									
Room 133	65										
Room 117	240	65									
Room 116	160		500								
Hallway			450				450				
Room 115	200	70	500	160			500		96		
Room 114	35		200	120			200		96		
Room 113			200	160			200		48		
Room 111			200				200				
Room 109	20		160				160		48		
Room 108			1200				2400				
Room 105			24				200				
Room 102	40		400				400		48		
Room 101	100	25	400				400		192		
Room 103	10		150				150				
Room 107	20						200				
Room 135	75										
Room 121	210	50									
Room 127			400	400							
Room 131			300	930							
Room 132			200	740							
Room 201,202,222,204	10		400				400		144		
Stairwell	8						160				
Room 214,221,215			325				325			325	
Hallway			450				450				
Room 213	10		24				72				
Room 211	12		300				300				
Room 210, 219			750	300			750			750	
Room 208	8		240	200			240		96		
Room 205,206,207	16		700	500			700		240		
Room 217	190	65							2240		
Room 208	8		240	200			240		96		
Room 203	40	15									
Room 216	60	25			286		375				
Room 122	250	45						8550			
Debris Room							240				720
Room ??			800				800		288		
TOTALS	2587	555	9783	4766	546	1100	10512	8550	3632	1075	720

APPENDIX II

EMSL CERTIFICATION

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Wadsworth Center The Governor Nelson A. Rockefeller Empire State Plaza P.O. Box 509 Albany, New York 12201-0509

Antonia C. Novello, M.D., M.P.H., Dr. P.H.
Commissioner

Dennis P. Whalen
Executive Deputy Commissioner

Dear Laboratory Director:

Enclosed are the ELAP Certificate(s) of Approval for permit year 2001-2002 issued to your environmental laboratory. The Certificate(s) supersede any previously issued and are in effect through March 31, 2002. Please carefully examine the Certificate(s) to insure that the categories, subcategories, analytes and methods for which your laboratory is approved are listed correctly, as well as verifying your laboratory's name, address, director and identification number.

Please notify this office of any corrections required.

Sincerely,

Linda L. Madlin

Linda L. Madlin
Administrative Assistant
Environmental Laboratory
Approval Program

LLM:mes
Enclosure

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER
Antonia C. Novello, M.D., M.P.H., Dr.P.H. Commissioner

Expires 12:01 AM April 01, 2002
Issued August 23, 2001

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

DR. PETER FRASCA
EMSL ANALYTICAL
107 HADDON AVE
WESTMONT NJ 08108 USA

NY Lab Id No: 10872
EPA Lab Code: NJ00337

is hereby APPROVED as an Environmental Laboratory for the category
ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved subcategories and/or analytes are listed below:

Miscellaneous

Asbestos in Friable Material	Method Not Specified
Asbestos in Non-Friable Materi	Method Not Specified

Serial No.: 13430

Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted. Valid certificates have a raised seal and may be verified by calling (518)485-5570.

DOH-3317 (3/97)

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER
Antonia C. Novello, M.D., M.P.H., Dr.P.H. Commissioner

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DR. PETER FRASCA
EMSL ANALYTICAL
107 HADDON AVE
WESTMONT NJ 08108 USA

NY Lab Id No: 10872
EPA Lab Code: NJ00337

is hereby APPROVED as an Environmental Laboratory for the category
ENVIRONMENTAL ANALYSES AIR AND EMISSIONS
All approved subcategories and/or analytes are listed below:

Miscellaneous Air

Asbestos	40 CFR APX A No. III
	YAMATE,AGARWAL GIBB
Fibers	40 CFR 763.121 APX B
	Method Not Specified
	NIOSH 7400 A RULES

Serial No.: 13431

Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted. Valid certificates have a raised seal and may be verified by calling (518)485-5570.

DOH-3317 (3/97)

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER
Antonia C. Novello, M.D., M.P.H., Dr.P.H. Commissioner

Expires 12:01 AM April 01, 2002
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DR. PETER FRASCA
EMSL ANALYTICAL
107 HADDON AVE
WESTMONT NJ 08108 USA

NY Lab Id No: 10872
EPA Lab Code: NJ00337

is hereby APPROVED as an Environmental Laboratory for the category
ENVIRONMENTAL ANALYSES POTABLE WATER
All approved subcategories and/or analytes are listed below:

Drinking Water Miscellaneous

Asbestos	EPA 100.1

Serial No.: 13429

Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted. Valid certificates have a raised seal and may be verified by calling (518)485-5570.

DOH-3317 (3/97)

The American Industrial Hygiene Association

is proud to acknowledge that

EMSL Analytical, Inc.

Westmont, NJ

has fulfilled the requirements for and has been formally recognized by AIHA
and is technically competent to perform the analyses listed in the following

SCOPE OF ACCREDITATION

INDUSTRIAL HYGIENE Originally Accredited: 01/01/98		ENVIRONMENTAL LEAD		ENVIRONMENTAL MICROBIOLOGY
___Metals	_X_Silica	___Paint Chips	___Air	___Bacteria
_X_Asbestos PCM	_X_Asbestos PLM	___Dust Wipes	___Soil	___Fungi
___Organic Solvents	___Diffusive Samples			

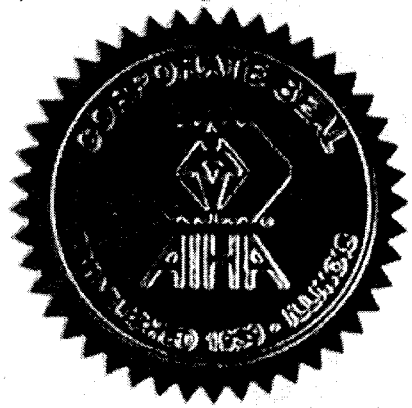
The above named laboratory agrees to perform all analyses listed above in the scope of accreditation according to applicable policy requirements and acknowledges that continued accreditation is dependent on successful participation in the appropriate proficiency testing programs. This laboratory may be contacted to verify the current scope of accreditation, proficiency testing performance and accreditation status. Accreditation by AIHA is not a guarantee of the validity of the data generated by the laboratory.

Laboratory # 100192

Certificate #

Accreditation Expires: 02/01/04

Dave Sandusky, CIH
Chair, Analytical Accreditation Board



Steven P. Levine, Ph.D., CIH
President, AIHA

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

ISO/IEC GUIDE 25:1990
ISO 9002:1987

Certificate of Accreditation

EMSL ANALYTICAL, INC.
WESTMONT, NJ

is recognized under the National Voluntary Laboratory Accreditation Program for satisfactory compliance with criteria established in Title 15, Part 285 Code of Federal Regulations. These criteria encompass the requirements of ISO/IEC Guide 25 and the relevant requirements of ISO 9002 (ANSI/ASQC Q92-1987) as suppliers of calibration or test results. Accreditation is awarded for specific services, listed on the Scope of Accreditation for:

AIRBORNE ASBESTOS FIBER ANALYSIS

June 30, 2002
Effective through

David F. Alderman
For the National Institute of Standards and Technology

NVLAP Lab Code: 101048-0

NVLAP-01C (11-95)

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

ISO/IEC GUIDE 25:1990
ISO 9002:1987

Certificate of Accreditation

DEPARTMENT OF COMMERCE ★ UNITED STATES OF AMERICA ★

EMSL ANALYTICAL, INC.
WESTMONT, NJ

is recognized under the National Voluntary Laboratory Accreditation Program for satisfactory compliance with criteria established in Title 15, Part 285 Code of Federal Regulations. These criteria encompass the requirements of ISO/IEC Guide 25 and the relevant requirements of ISO 9002 (ANSI/ASQC Q92-1987) as suppliers of calibration or test results. Accreditation is awarded for specific services, listed on the Scope of Accreditation for:

BULK ASBESTOS FIBER ANALYSIS

June 30, 2002
Effective through

David F. Alderman
For the National Institute of Standards and Technology

NVLAP Lab Code: 101048-0

NVLAP-01C (11-95)

APPROVED VARIANCES
To
Asbestos Assessment and Abatement Plan

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on the reverse side prior to initiating form)*	DATE: 28 March 2002	TRANSMITTAL NO. 005

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS *(This section will be initiated by the contractor)*

TO: U.S. Army Corps of Engineers ATTN: NY/PA Area Office (Bryan Miner) 1776 Niagara St, Buffalo, NY 14207-3199	FROM: Jacobs Engineering 125 Broadway Avenue Oak Ridge, TN 37830	CONTRACT NO. DACW49-00-D-0007 Delivery Order # 001	CHECK ONE: ☑ THIS IS A NEW TRANSMITTAL ☐ THIS IS A RESUBMITTAL OF TRANSMITTAL
SPECIFICATION SEC. NO. (Cover only one section with each transmittal) Section3.2	PROJECT TITLE AND LOCATION NFSS Building 401 Asbestos Abatement - NFSS		

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO.	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO.	FOR CONTRACTOR USE CODE		VARIATION (See instruction No. 6)	FOR CE USE CODE
a.	b.	c.	d.	e.	f.	g.		h.	j.
2	Request for variance from ~~N.Y.C.CR~~. Part #56 Section ICR- 56- (k)- (5) NYS ICR		10	3.2.4			A	✓	A
3	Request for variance from ~~N.Y.C.C.R~~. Part #56 Section ICR-56-17.3 NYSICR		10	3.2.4			A	✓	A

REMARKS I am requesting Government approvel of attached variances from N.Y.C.C.R. #56

Items 2, 3 - APPROVED AS SUBMITTED

I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as other wise stated.

Mark Gifford

Mark Gifford, Site Quality Control Manager

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by Item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE
	Bryan C. Miner **Bryan C. Miner, Contracting Officer's Rep**	10 APRIL 2002

(continued)

INSTRUCTIONS

1. Section 1 will be initiated by the Contractor in the required number of copies.

2. Each transmittal shall be numbered consecutively in the space provided for "Transmittal No.". This number, in addition to the contract number, will form a serial number for identifying each submittal. For new submittals or resubmittals mark the appropriate box; on resubmittals, insert transmittal number of last submission as well as the new submittal number.

3. The "Item No." will be the same "Item No." as indicated on ENG Form 4288 for each entry on this form.

4. Submittals requiring expeditious handling will be submitted on a separate form.

5. Separate transmittal form will be used for submittals under separate sections of the specifications.

6. A check shall be placed in the "Variation" column when a submittal is not in accordance with the plans and specifications-- also, a written statement to that effect shall be included in the space provided for "Remarks".

7. Form is self-transmittal, letter of transmittal is not required.

8. When a sample of material or Manufacturer's Certificate of Compliance is transmitted, indicate "Sample" or "Certificate" in column c, Section I.

9. U.S. Army Corps of Engineers approving authority will assign codes as indicated below in space provided in Section I, column I to each item submitted. In addition they will ensure enclosures are indicated and attached to the form prior to the contractor. The Contractor will assign action codes as indicated below in Section I, column g, to each item submitted.

THE FOLLOWING ACTION CODES ARE GIVEN TO ITEMS SUBMITTED

A	--	Approved as submitted	E	--	Disapproved (See attached)
B	--	Approved, except as noted on drawings	F	--	Receipt acknowledged
C	--	Approved, except as noted on drawings. Refer to attached sheet resubmission required.	FX	--	Receipt acknowledged, does not comply as noted with contract requirements
D	--	Will be returned by separate correspondence	G	--	Other *(Specify)*

10. Approval of items does not relieve the contractor from complying with all requirements of the contract plans and specifications.

Reverse of ENG FORM 4025

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on the reverse side prior to initiating form)*	DATE: 28 March 2002	TRANSMITTAL NO. 005

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS *(This section will be initiated by the contractor)*

TO: U.S. Army Corps of Engineers ATTN: NY/PA Area Office (Bryan Miner) 1776 Niagara St, Buffalo, NY 14207-3199	FROM: Jacobs Engineering 125 Broadway Avenue Oak Ridge, TN 37830	CONTRACT NO. DACW49-00-D-0007 Delivery Order # 001	CHECK ONE: ☑ THIS IS A NEW TRANSMITTAL ☐ THIS IS A RESUBMITTAL OF TRANSMITTAL
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a.	b.	c.	d.	e.	f.	g.		h.	j.
2	Request for variance from N.Y.C.CR. Part #56 Section ICR- 56- (k)- (5)		10	3.2.4			A	✓	
3	Request for variance from N.Y.C.C.R. Part #56 Section ICR-56-17.3		10	3.2.4			A	✓	

REMARKS I am requesting Government approvel of attached variances from N.Y.C.C.R. #56

I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as other wise stated.

Mark Gifford

Mark Gifford, Site Quality Control Manager

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by Item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE
	Bryan C. Miner, Contracting Officer's Rep	

CAPE
ENVIRONMENTAL
MANAGEMENT
I N C

Petition for Variance or Other Relief for Asbestos Abatement at Niagra Falls Storage Site, Lewiston, NY

CAPE Project No. 10024.001.007

Submitted to:
Mr. MarkGifford
Jacobs Engineering
125 Broadway Avenue
Oak Ridge, Tennessee 37830

Petitioner
Jeffrey P. Shannon:
Cape Environmental Management Inc.
2302 Parklake Drive
Suite 200
Atlanta, GA 30345-2907

March 2002

1.0 Project Description

The project consists of the abatement of asbestos containing materials from Building 401-Niagra Falls Storage Site (NFSS) located at 1397 Pletcher Road, Lewiston, New York. Building 401 is an abandoned steel frame four-story structure. with approximately 100,000 square feet of floor area.There are multiple floors that contain rooms and offices and building service areas. The building is concrete slab on grade. The objective of this abatement is to facilitate future demolition of the building by others. Specifically, the scope of work for this project consists of the removal and disposal of the following materials:

(1) Floor Tile and Associated Mastic	10071 SF
(2) Pipe Insulation Approximately	3668 LF
(3) Pipe Fitting Insulation	675 EA
(4)Transite Panels	4657 SF
(5)Tank Insulation	1026 SF
(6)Boiler Insulation	1375 SF
(7)Oven Insulation	30 SF
(8) Asbestos Containing Debris	435 SF

Reason for Petition for Varience

Cape proposes to perform this work in accordance with revised procedures for work area preparation and performance of daily air monitoring for the following reasons.

(1) Building 401 is abandoned and will not be reoccupied. It will eventually be demolished by others.
(2) Building 401 is isolated and located on a secured federal site to which the general public has no access. Only authorized personnel who have appropriate training may gain access to the site.
(3) The impracticality of preparation of floors where floor tile and associated mastic is to be removed under full containment.
(4) The site will only be occupied while work is being performed.

Proposal

Removal of Floor Tile and Mastic and Pipe Insulation from Office Areas of Building Under Full Containment

Cape Environmental is seeking relief from the following sections of ICR 56 for the project referenced above.

(1) **ICR 56-8 (k) (5) Work Area Preparation- Plasticizing / Sealing** which states that all floor, wall and ceiling surfaces shall be covered with a minimum of two layers of at least six-mil fire retardant plastic sheeting. The work area for which we are requesting relief from this rule consists of a two-floor area where rooms that once served as offices, bathrooms and laboratories are located. The materials to be abated

from this work area are floor tiles and associated mastic as well as pipe insulation on runs and lagging throughout these rooms.

Cape is specifically seeking relief from(a) plasticizing of floors as floor tile and mastic is to be removed and(b)plasticizing of ceilings as ceilings are constructed of smooth non porous plaster and concrete which can be effectively decontaminated and subsequently encapsulated utilizing an airless sprayer. Relief from the requirement for plasticizing of ceilings would eliminate the need for much of the over head and high work necessary on this project resulting in a safer work environment for abatement personnel. We believe that since the objective of this abatement project is to prepare an abandoned building for demolition coupled with the fact that only properly trained personnel who are knowledgeable about the site and its hazards have access to the site, that the proposed alternative strategy may be employed to safely accomplish this work with -out compromise to the level of protection afforded by strict compliance to the requirements of ICR-56-8 (k) (5). Please consider our request for relief from (a) plasticizing of floors and (b) plasticizing of ceilings as two separate petitions for relief from ICR-56-8 (k)(5). Cape is not seeking any relief from ICR-56-(k)(5) for abatement to be performed in the boiler room.

We propose to conduct work area preparation in accordance with ICR 56 –8 with the exception of plasticizing of floors and ceilings as required by ICR-56 (K)(5). Cape proposes to place isolation barriers over all critical openings in ceilings and perform work under negative pressure. After abatement of floor tiles/ mastic and pipe insulation, Cape will perform decontamination of exposed floor and ceiling surfaces via combination of HEPA vacuuming and wet cleaning utilizing an airless sprayer, prior to visual inspection and encapsulation of these areas.

(2)**ICR-56-17.3Air Sampling During Abatement** which states that once abatement activities have begun, the schedule of sampling required for large asbestos abatement projects shall be conducted on a daily basis.

Cape is specifically seeking relief from the requirement that sampling be performed *on a daily basis as required* ICR-56-17.3.We believe that the objective of the monitoring requirements specified in ICR-56-17.3 is to protect neighboring tenants or building occupants throughout the abatement process. Because the site is unoccupied except when work is being performed by trained asbestos professionals *and isolated from the general public*, we believe that it is critical to have air monitoring only during the time that work is actually being performed. Abatement activities are currently being performed on Monday through Friday. It is unlikely that a breach in containment would occur on days when there is no activity, and an even more remote possibility that a personal exposure would occur as a result of such a breach due to the isolation and inaccessibility of the building Because of the site occupancy conditions described above, we believe that the proposed alternative strategy may be employed to safely accomplish this work with no compromise to the level of protection afforded by strict compliance to the requirements of ICR-56-17.3

We propose that air monitoring be conducted by a third party independent consultant in accordance with the requirements of ICR-56-17 with the exception of a variance from section 56-17.3 to perform air monitoring only on days that abatement is performed.

With the exception of variances requested in this document, all other work will be conducted in accordance with ICR-56 and applicable variances.Thank you for your consideration in this matter.

Sincerely,

Cape Environmental Management, Inc.

Jeffrey P. Shannon
Field Operations Manager

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on the reverse side prior to initiating form)*	DATE: 30 April 2002	TRANSMITTAL NO. 006

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS *(This section will be initiated by the contractor)*

TO:	FROM:	CONTRACT NO.	CHECK ONE:
U.S. Army Corps of Engineers ATTN: NY/PA Area Office (Bryan Minor) 1776 Niagara St., Buffalo, NY 14207-3199	Jacobs Engineering 125 Broadway Avenue Oak Ridge, TN 37830	DACW49-00-D-0007 Delivery Order # 001	☑ THIS IS A NEW TRANSMITTAL ☐ THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO. (Cover only one section with each transmittal)	PROJECT TITLE AND LOCATION

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO.	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO.	FOR CONTRACTOR USE CODE		VARIATION (See instruction No. 6)	FOR CE USE CODE
a.	b.	c.	d.	e.	f.	g.		h.	i.
4	Request for variance from NYSICR Part # 56		10	3.2.4.			A	—	B
	Section ICR-56-8 (K) (5)								

REMARKS I am requesting Government approval of attached variance from N.Y.C.C.R. Part # 56

APPROVED PENDING COMPLIANCE WITH ATTACHED COMMENTS DURING OPERATIONS.

CODE B-

I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as other wise stated.

Mark Gifford

Mark Gifford, Site Quality Control Manager

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by Item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE
4. COMMENT/RESPONSE SHEET AND APPROVED SUBMITTAL.	Bryan C. Miner **Bryan C. Miner, Contracting**	3 MAY 2002

INSTRUCTIONS

1. Section I will be initiated by the Contractor in the required number of copies.

2. Each transmittal shall be numbered consecutively in the space provided for "Transmittal No.". This number, in addition to the contract number, will form a serial number for identifying each submittal. For new submittals or resubmittals mark the appropriate box; on resubmittals, insert transmittal number of last submission as well as the new submittal number.

3. The "Item No." will be the same "Item No." as indicated on ENG FORM 4288-R for each entry on this form.

4. Submittals requiring expeditious handling will be submitted on a separate form.

5. Separate transmittal form will be used for submittals under separate sections of the specifications.

6. A check shall be placed in the "Variation" column when a submittal is not in accordance with the plans and specifications--also, a written statement to that effect shall be included in the space provided for "Remarks".

7. Form is self-transmittal, letter of transmittal is not required.

8. When a sample of material or Manufacturer's Certificate of Compliance is transmitted, indicate "Sample" or "Certificate" in column c, Section I.

9. U.S. Army Corps of Engineers approving authority will assign action codes as indicated below in space provided in Section I, column i to each item submitted. In addition they will ensure enclosures are indicated and attached to the form prior to return to the contractor. The Contractor will assign action codes as indicated below in Section I, column g, to each item submitted.

THE FOLLOWING ACTION CODES ARE GIVEN TO ITEMS SUBMITTED

A -- Approved as submitted.	E -- Disapproved (See attached).
B -- Approved, except as noted on drawings.	F -- Receipt acknowledged.
C -- Approved, except as noted on drawings. Refer to attached sheet resubmission required.	FX -- Receipt acknowledged, does not comply as noted with contract requirements.
D -- Will be returned by separate correspondence.	G -- Other *(Specify)*

10. Approval of items does not relieve the contractor from complying with all the requirements of the contract plans and specifications.

(Reverse of ENG Form 4025-R)

NFSS BUILDING 401 ASBESTOS ABATEMENT
WORKPLAN REVIEW COMMENT SHEET

Complete and Return to: Virgil Jansen, Jacobs Engineering **Date Transmitted:** 5/1/02

Document Title: Request for Variance (rev. 1)

COMMENT NUMBER	PAGE OR SHEET	REVIEWER'S COMMENTS	PREPARER'S RESPONSE	REVIEWER ACCEPT/ REJECT
1	General	The work area shall stay under negative pressure to a minimum of 0.025 in/H2O.		
2	General	A procedure shall be implemented to document and ensure that all exposed walls, ceilings, and floors are decontaminated after ACM removal.		
3	General	All critical openings shall be sealed.		
4	General	The variance from plasticizing only applies to non-porous surfaces.		

CAPE
ENVIRONMENTAL
MANAGEMENT
I N C

Revised Petition for Variance or Other Relief for Asbestos Abatement at Niagra Falls Storage Site, Lewiston, NY

CAPE Project No. 10024.001.007

Submitted to:
Mr. MarkGifford
Jacobs Engineering
125 Broadway Avenue
Oak Ridge, Tennessee 37830

Petitioner
Jeffrey P. Shannon:
Cape Environmental Management Inc.
2302 Parklake Drive
Suite 200
Atlanta, GA 30345-2907

April 2002

☐ APPROVAL RECOMMENDED _____ Date _____ Initials

☒ APPROVAL RECOMMENDED SUBJECT TO COMMENTS INDICATED K.Y Date 5/3/02 Initials

☐ DISAPPROVAL RECOMMENDED _____ Date _____ Initials

APPROVED/DISAPPROVED 5/3/02 Date Signature

vacuuming and wet cleaning utilizing an airless sprayer, prior to visual inspection and encapsulation of these areas.

plasticizing of walls was needed to facilitate the achievement and maintenance of negative pressure in the work area given the overall condition of the building. We now know that this is not the case and critical seals are being maintained with plywood furring strips and masonry screws. Negative pressure in the work area has consistently ranged between-0.026 and –0.065 inH20. The additional relief requested will not only facilitate a safer work environment by eliminating more of the remaining high work to be accomplished, but will also allow for more efficient execution of project tasks and utilization of project resources.

Removal of Floor Tile and Mastic and Pipe Insulation from Office Areas of Building Under Full Containment

Cape Environmental is seeking relief from the following sections of ICR 56 for the project referenced above.

(1) **ICR 56-8 (k) (5) Work Area Preparation- Plasticizing / Sealing** which states that all floor, wall and ceiling surfaces shall be covered with a minimum of two layers of at least six-mil fire retardant plastic sheeting. The work area for which we are requesting relief from this rule consists of a two-floor area where rooms that once served as offices, bathrooms and laboratories are located. The materials to be abated from this work area are floor tiles and associated mastic as well as pipe insulation on runs and lagging throughout these rooms.

Cape is specifically seeking relief from (a) plasticizing of floors as floor tile and mastic is to be removed and (b)plasticizing of ceilings and(c) walls as these components are constructed of smooth non porous plaster and concrete which can be effectively decontaminated and subsequently encapsulated utilizing an airless sprayer. Relief from the requirement for plasticizing of ceilings and walls would eliminate the need for much of the over head and high work necessary on this project resulting in a safer work environment for abatement personnel. We believe that since the objective of this abatement project is to prepare an abandoned building for demolition coupled with the fact that only properly trained personnel who are knowledgeable about the site and its hazards have access to the site, that the proposed alternative strategy may be employed to safely accomplish this work with - out compromise to the level of protection afforded by strict compliance to the requirements of ICR-56-8 (k) (5). Please consider our request for relief from (a) plasticizing of floors and (b) plasticizing of ceilings as well as (c) walls as three separate petitions for relief from ICR-56-8 (k)(5). Cape is <u>not</u> seeking any relief from ICR-56-(k)(5) for abatement to be performed in the boiler room.

We propose to conduct work area preparation in accordance with ICR 56 –8 with the exception of plasticizing of floors, ceilings and walls as required by ICR-56 (K)(5). Cape proposes to place isolation barriers over all critical openings in walls and ceilings as well as erect polyethylene splash guards on walls and perform work under negative pressure. After abatement of floor tiles/ mastic and pipe insulation, Cape will perform decontamination of exposed floor, ceiling, and wall surfaces via combination of HEPA

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on the reverse side prior to initiating form)*	DATE June11, 2002	TRANSMITTAL NO. 005

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS *(This section will be initiated by the contractor)*

TO: U.S. Army Corps of Engineers ATTN: NY/PA Area Office (Bryan Miner) 1776 Niagara St., Buffalo, NY 14027-3199	FROM: Jacobs Engineering 125 Broadway Avenue Oak Ridge, TN 37830	CONTRACT NO. DACW49-00-D-0007 Delivery Order # 1	CHECK ONE: ☑ THIS IS A NEW TRANSMITTAL ☐ THIS IS A RESUBMITTAL OF TRANSMITTAL
SPECIFICATION SEC. NO. (Cover only one section with each transmittal) Section 3.2	PROJECT TITLE AND LOCATION: NFSS Asbestos Abatement of Bldg. # 401		

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO.	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO.	FOR CONTRACTOR USE CODE	VARIATION (See instruction No. 6)	FOR CE USE CODE
a.	b.	c.	d.	e.	f.	g.	h.	j.
4	Request for variance from N.Y.S.I.C.R. Part		10	3.2.4		A		A
	#56 Section ICR-56-17.3							

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as other wise stated.

Mark Gifford

Mark Gifford CQC

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by Item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE
1	Richard W. Reppner ~~Bryan C. Miner~~, Contracting Officer's ~~Rep.~~	6/14/02

CAPE
ENVIRONMENTAL
MANAGEMENT
I N C

Petition for Variance or Other Relief for Asbestos Abatement (Boiler Room Phase) at Niagra Falls Storage Site, Lewiston, NY

CAPE Project No. 10024.001.007

Submitted to:
Mr. MarkGifford
Jacobs Engineering
125 Broadway Avenue
Oak Ridge, Tennessee 37830

Petitioner
Jeffrey P. Shannon:
Cape Environmental Management Inc.
2302 Parklake Drive
Suite 200
Atlanta, GA 30345-2907

June 2002

☒ APPROVAL RECOMMENDED	6/13/02 (Date)	K.Y (Initials)
☐ APPROVAL RECOMMENDED SUBJECT TO COMMENTS INDICATED	_____ (Date)	_____ (Initials)
☐ DISAPPROVAL RECOMMENDED	_____ (Date)	_____ (Initials)
APPROVED/DISAPPROVED	_____ (Date)	_____ (Signature)

1.0 Project Description

The project consists of the abatement of asbestos containing materials from Building 401-Niagra Falls Storage Site (NFSS) located at 1397 Pletcher Road, Lewiston, New York. Building 401 is an abandoned steel frame four-story structure. with approximately 100,000 square feet of floor area.There are multiple floors that contain rooms and offices and building service areas. The building is concrete slab on grade. The objective of this abatement is to facilitate future demolition of the building by others. Specifically, the scope of work for this project consists of the removal and disposal of the following materials:

(1) Floor Tile and Associated Mastic	10071 SF
(2) Pipe Insulation Approximately	3668 LF
(3) Pipe Fitting Insulation	675 EA
(4)Transite Panels	4657 SF
(5)Tank Insulation	1026 SF *
(6)Boiler Insulation	1375 SF *
(7)Oven Insulation	30 SF *
(8) Asbestos Containing Debris	435 SF*

*(Material Located in bioler room)

Reason for Petition for Varience

Cape proposes to perform this work in accordance with revised procedures for performance of daily air monitoring during the boiler room phase of abatement for the following reasons.

(1) Building 401 is abandoned and will not be reoccupied. It will eventually be demolished by others.
(2) Building 401 is isolated and located on a secured federal site to which the general public has no access. Only authorized personnel who have appropriate training may gain access to the site.
(3) The site will only be occupied while work is being performed.

Proposal

(1)ICR-56-17.3Air Sampling During Abatement In Boiler Room Phase of Building which states that once abatement activities have begun, the schedule of sampling required for large asbestos abatement projects shall be conducted on a daily basis.

Cape is specifically seeking relief from the requirement that sampling be performed on a daily basis as required ICR-56-17.3.We believe that the objective of the monitoring requirements specified in ICR-56-17.3 is to protect neighboring tenants or building occupants throughout the abatement process. Because the site is unoccupied except when work is being performed by trained asbestos professionals

and isolated from the general public, we believe that it is critical to have air monitoring only during the time that work is actually being performed. Abatement activities are currently being performed on Monday through Friday. It is unlikely that a breach in containment would occur on days when there is no activity, and an even more remote possibility that a personal exposure would occur as a result of such a breach due to the isolation and inaccessibility of the building Because of the site occupancy conditions described above, we believe that the proposed alternative strategy may be employed to safely accomplish this work with no compromise to the level of protection afforded by strict compliance to the requirements of ICR-56-17.3 We propose that air monitoring be conducted by a third party independent consultant in accordance with the requirements of ICR-56-17 with the exception of a variance from section 56-17.3 to perform air monitoring only on days that abatement is performed.

With the exception of variances requested in this document all other work will be conducted in accordance with ICR-56 , applicable and previously granted variances.Thank you for your consideration in this matter.

Sincerely,

Cape Environmental Management, Inc.

Jeffrey P. Shannon
Field Operations Manager

CAPE
ENVIRONMENTAL
MANAGEMENT
I N C

Petition for Variance or Other Relief for Asbestos Abatement (Boiler Room Phase) at Niagra Falls Storage Site, Lewiston, NY

CAPE Project No. 10024.001.007

Submitted to:
Mr. MarkGifford
Jacobs Engineering
125 Broadway Avenue
Oak Ridge, Tennessee 37830

Petitioner
Jeffrey P. Shannon:
Cape Environmental Management Inc.
2302 Parklake Drive
Suite 200
Atlanta, GA 30345-2907

June 2002

☒ APPROVAL RECOMMENDED	6-13-02 (Date)	K.Y (Initials)
☐ APPROVAL RECOMMENDED SUBJECT TO COMMENTS INDICATED	_____ (Date)	_____ (Initials)
☐ DISAPPROVAL RECOMMENDED	_____ (Date)	_____ (Initials)
APPROVED/DISAPPROVED	_____ (Date)	_____ (Signature)

1.0 Project Description

The project consists of the abatement of asbestos containing materials from Building 401-Niagra Falls Storage Site (NFSS) located at 1397 Pletcher Road, Lewiston, New York. Building 401 is an abandoned steel frame four-story structure. with approximately 100,000 square feet of floor area.There are multiple floors that contain rooms and offices and building service areas. The building is concrete slab on grade. The objective of this abatement is to facilitate future demolition of the building by others. Specifically, the scope of work for this project consists of the removal and disposal of the following materials:

(1) Floor Tile and Associated Mastic	10071 SF
(2) Pipe Insulation Approximately	3668 LF
(3) Pipe Fitting Insulation	675 EA
(4)Transite Panels	4657 SF
(5)Tank Insulation	1026 SF *
(6)Boiler Insulation	1375 SF *
(7)Oven Insulation	30 SF *
(8) Asbestos Containing Debris	435 SF*

*(Material Located in bioler room)

Reason for Petition for Varience

Cape proposes to perform this work in accordance with revised procedures for performance of daily air monitoring during the boiler room phase of abatement for the following reasons.

(1) Building 401 is abandoned and will not be reoccupied. It will eventually be demolished by others.
(2) Building 401 is isolated and located on a secured federal site to which the general public has no access. Only authorized personnel who have appropriate training may gain access to the site.
(3) The site will only be occupied while work is being performed.

Proposal

(1)**ICR-56-17.3Air Sampling During Abatement In Boiler Room Phase of Building** which states that once abatement activities have begun, the schedule of sampling required for large asbestos abatement projects shall be conducted on a daily basis.

Cape is specifically seeking relief from the requirement that sampling be performed on a daily basis as required ICR-56-17.3.We believe that the objective of the monitoring requirements specified in ICR-56-17.3 is to protect neighboring tenants or building occupants throughout the abatement process. Because the site is unoccupied except when work is being performed by trained asbestos professionals

and isolated from the general public, we believe that it is critical to have air monitoring only during the time that work is actually being performed. Abatement activities are currently being performed on Monday through Friday. It is unlikely that a breach in containment would occur on days when there is no activity, and an even more remote possibility that a personal exposure would occur as a result of such a breach due to the isolation and inaccessibility of the building Because of the site occupancy conditions described above, we believe that the proposed alternative strategy may be employed to safely accomplish this work with no compromise to the level of protection afforded by strict compliance to the requirements of ICR-56-17.3 We propose that air monitoring be conducted by a third party independent consultant in accordance with the requirements of ICR-56-17 with the exception of a variance from section 56-17.3 to perform air monitoring only on days that abatement is performed.

With the exception of variances requested in this document all other work will be conducted in accordance with ICR-56 , applicable and previously granted variances.Thank you for your consideration in this matter.

Sincerely,

Cape Environmental Management, Inc.

Jeffrey P. Shannon
Field Operations Manager

RESPONSE COPY

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on the reverse side prior to initiating form)*	DATE 29 May 2002	TRANSMITTAL NO. 007

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS *(This section will be initiated by the contractor)*

TO: Army Corps of Engineers ATTN: NY/PA Area Office (Bryan Miner) 1776 Niagara St., Buffalo, NY 14207-3199	FROM: Jacobs Engineering 125 Broadway Avenue Oak Ridge, TN 37830	CONTRACT NO. DACW49-00-D-0007 Delivery Order # 001	CHECK ONE: ☑ THIS IS A NEW TRANSMITTAL ☐ THIS IS A RESUBMITTAL OF TRANSMITTAL
SPECIFICATION SEC. NO. (Cover only one section with each transmittal) Section 3.2	PROJECT TITLE AND LOCATION: Asbestos Abatement Bldg. # 401 NFSS		

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO.	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO.	FOR CONTRACTOR USE CODE		VARIATION (See instruction No. 6)	FOR CE USE CODE
a.	b.	c.	d.	e.	f.		g.	h.	j.
5	Request for variance from NYSICR Part # 56		10				A		B
	Section ICR 56-8 (k) (5)								
6	Request for variance from NYSICR Part # 56		10				A		B
	Section ICR 56-8 (k) (1)								
7	Request for variance from NYSICR Part # 56		10				A		B
	Section ICR 56-15-(b,c,d and e)								

REMARKS

CODE B - ITEMS 5, 6, 7 - APPROVED w/ COMMENT. SEE ATTACHED COMMENT SHEET AND COMPLY. RE-SUBMISSION NOT REQUIRED

I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as other wise stated.

Mark Gifford

Mark Gifford, Site Quality Control Manager

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by Item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE
ITEMS 5, 6, 7 - 1 each ATTACHED COMMENT SHEET	Bryan C Miner BRYAN C. MINER, COR	12 JUN 2002

ADDENDUM 2------REVISED PROPOSAL (Boiler Room Prep)

Revised Proposal: Based on the following observations of work area conditions during the performance of work in the Phase 1 work area (Office Areas of Building) and our belief that similar conditions as pertains to work area prep exist in the boiler room, Cape is requesting that the relief granted from ICR 56-8 be extended to apply to the boiler room.

Phase 1 Work Area Observations

(1) **An effective job of critically sealing the work area has been accomplished and adequate negative pressure is being maintained in the work area without plasticizing of floors, walls, and ceilings. Critical seals are being maintained with plywood furring strips and masonry screws. Negative pressure in the work area has consistently ranged between-0.026 and –0.065 inH20. The relief granted has not only facilitated a safer work environment by eliminating much of the high work to be accomplished, but has also allowed for more efficient execution of project tasks and utilization of project resources.**

(2) **Because of the rapid rise and fall in temperatures that occur in the Lewiston area, the concrete walls and other concrete surfaces tend to "sweat" from the humidity generated, rendering the spray adhesive and duct tape ineffective for maintaining the polyethylene prep of these surfaces without the additional work of utilizing furring strips and masonry screws. Because negative pressure is being maintained as outlined in item (1) above, we feel that project resources that would have been necessary for complete prep of the work area will now be better utilized elsewhere on this project.**

Removal of Tank, Boiler and Pipe Insulation from the Boiler Room.

Cape Environmental is seeking relief from the following sections of ICR 56 for the project referenced above.

(1) **ICR 56-8 (k) (5) Work Area Preparation- Plasticizing / Sealing** which states that all floor, wall and ceiling surfaces shall be covered with a minimum of two layers of at least six-mil fire retardant plastic sheeting. The work area for which we are requesting relief from this rule consists of a two-story area where the abandoned boilers that once served the building are located. The materials to be abated from this work area are tank, boiler and pipe insulation as well as associated debris.

(2) **ICR 56-8 (k) (1) Isolation Barriers-Specific** which states that separation of the work area from the remainder of the work site shall be accomplished as follows: **(1) Wall construction.** Walls shall be constructed of wood or metal framing to support barriers in all openings larger than 32 square feet, except when any one dimension is one foot or less.

(3) **ICR 56-15-(b, c, d, and e) Cleanup procedures (b) First Cleaning, (c) First sheeting removal, (d) second cleaning and sheeting removal, and (e) third cleaning.**

Cape is specifically seeking relief from plasticizing of floors as floors, walls, and ceilings as these components (with the exception of a wooden portion of the ceiling which will have to be plasticized) are constructed of smooth nonporous concrete which can be effectively decontaminated and subsequently encapsulated utilizing an airless sprayer. Relief from the requirement for plasticizing of ceilings and walls would eliminate the need for much of the over head and high work necessary on this project resulting in a safer work environment for abatement personnel. Cape is also seeking relief from the requirement for construction of hard shell walls to support barriers in openings larger than 32 square feet as effective barriers can be constructed utilizing 2'x4' framing and prepping with two layers of fire retardant poly without enclosing with hard shell plywood. Relief from this requirement would allow for more efficient utilization of project resources (manpower and materials) without compromise to safety. Cape also makes note of ICR 56-15(B, C, D and E) as these regulations pertain to post abatement requirements for cleanup. However, if variance is granted from ICR 56 -8(k) (5) and ICR 56-(8) (k) (1), these regulations would not apply as sheeting removal would not be necessary because only critical barriers would be erected inside the work area. (With the exception of necessary ceiling prep).

We believe that since the objective of this abatement project is to prepare an abandoned building for demolition coupled with the fact that only properly trained personnel who are knowledgeable about the site and its hazards have access to the site, that the proposed alternative strategy may be employed to safely accomplish this work with -out compromise to the level of protection afforded by strict compliance to the requirements of ICR-56-8 (k) (5), ICR-56-8 (k) (1) and ICR 56-15 (B, C, D, and E)

We propose to conduct work area preparation and isolation in accordance with ICR 56 –8 with the exception of plasticizing of floors, walls and nonporous ceilings and the construction of hard shell walls to support barrier openings larger than 32 square feet. Cape proposes to place isolation barriers over all critical openings in walls and ceilings and perform work under negative pressure. Cape will construct 2'x4' framing for walls which will consist of two layers of fire retardant poly for isolation barriers over 32 square feet. After abatement of tank, boiler and pipe insulation, Cape will perform decontamination of exposed floor, ceiling, and wall surfaces via combination of HEPA vacuuming and wet cleaning utilizing an airless sprayer, prior to visual inspection and encapsulation of these areas.

☐	APPROVAL RECOMMENDED	Date	Initials
☒	APPROVAL RECOMMENDED SUBJECT TO COMMENTS INDICATED	6/12/02 Date	K.Y Initials
☐	DISAPPROVAL RECOMMENDED	Date	Initials
APPROVED/DISAPPROVED		Date	Signature

NFSS BUILDING 401 ASBESTOS ABATEMENT
WORKPLAN REVIEW COMMENT SHEET

Complete and Return to: Virgil Jansen, Jacobs Engineering **Date Transmitted:** 6/12/02

Document Title: Request for Variance (rev. 2)

COMMENT NUMBER	PAGE OR SHEET	REVIEWER'S COMMENTS	PREPARER'S RESPONSE	REVIEWER ACCEPT/ REJECT
1	General	The work area shall stay under negative pressure to a minimum of 0.025 in/H2O.		
2	General	A procedure shall be implemented to document and ensure that all exposed walls, ceilings, and floors are decontaminated after ACM removal.		
3	General	All critical openings shall be sealed.		
4	General	The variance from plasticizing only applies to non-porous surfaces.		
5	General	Contractor is to follow Code Rule 56 in all other aspects and not create any additional hazards from removal activities.		

RESPONSE COPY

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE
(Read instructions on the reverse side prior to initiating form)

DATE: 06/25/02

TRANSMITTAL NO. 005

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS *(This section will be initiated by the contractor)*

TO: U.S. Army Corps of Engineers
ATTN: NY/PA Area Office (Bryan Miner)
1776 Niagara St, Buffalo, NY 14207-3199

FROM: Jacobs Engineering
125 Broadway Avenue
Oak Ridge, TN 37830

CONTRACT NO.
DACW49-00-D-0007
Delivery Order # 001

CHECK ONE:
☑ THIS IS A NEW TRANSMITTAL
☐ THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO. (Cover only one section with each transmittal) Section3.2

PROJECT TITLE AND LOCATION **NFSS Building 401 Asbestos Abatement - NFSS**

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.		VARIATION (See instruction No. 6) h.	FOR CE USE CODE j.
8	Request for variance from N.Y.C.CR. Part #56 Section ICR- 56-16.1 (c) (d) 1 through 9		10	3.2.4			A		A

REMARKS I am requesting Government approvel of attached variances from N.Y.C.C.R. #56

CODE A- PLEASE COMPLY WITH ATTACHED COMMENTS

I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as other wise stated.

Mark Gifford

Mark Gifford, Site Quality Control Manager
NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by Item No.)
① VARIANCE REQUEST W/COMMENT SHEET

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

Bryan C Miner

Bryan C. Miner, Contracting Officer's Rep

DATE: 27 JUN 02

ENG FORM 4025, May 91 *(ER 415-1-10)* EDITION OF AUG 89 IS OBSOLETE SHEET __ OF __ (Proponent: CENMP-CE)

CAPE
ENVIRONMENTAL
MANAGEMENT
I N C

Petition for Variance or Other Relief for Asbestos Abatement at Niagra Falls Storage Site, Lewiston, NY

CAPE Project No. 10024.001.007

Submitted to:
Mr. MarkGifford
Jacobs Engineering
125 Broadway Avenue
Oak Ridge, Tennessee 37830

Petitioner
Jeffrey P. Shannon:
Cape Environmental Management Inc.
2302 Parklake Drive
Suite 200
Atlanta, GA 30345-2907

June 2002

Cape is specifically seeking relief from the utilization of tents for the performance of glovebag removal Relief from this requirement would eliminate the need for much of the over head and high work necessary on this project resulting in a safer work environment for abatement personnel. The plenum presents more of a safety hazard from the standpoint of fall and overhead hazards than that of a fiber release, as pipe insulation is substantially intact. It will be necessary to shore up the ceiling in order to perform this work and elimination of unnecessary tent construction would expedite work in this area therby decreasing the time workers spend in this shored up area. We believe that since the objective of this abatement project is to prepare an abandoned building for demolition coupled with the fact that only properly trained personnel who are knowledgeable about the site and its hazards have access to the site, that the proposed alternative strategy may be employed to safely accomplish this work with -out compromise to the level of protection afforded by strict compliance to the requirements of ICR-56-16 (c) (d) 1 through 9.

We propose to perform glovebag removal according to 56-16.1 (a) and(b) Sections 1through 11while deviating from Sections (c) and (d)1through 9. Cape will place dropcloths underneath pipes to be glovebagged. After abatement of pipe insulation, Cape will perform decontamination of exposed attic surfaces via combination of HEPA vacuuming and wet cleaning utilizing an airless sprayer, prior to visual inspection and encapsulation of these areas.Personnel will proceed directly to a shower for decontamination after glovebag operations as described in Section 56-16 (d) (10).

(2)**ICR-56-17.3Air Sampling During Abatement** which states that once abatement activities have begun, the schedule of sampling required for large asbestos abatement projects shall be conducted on a daily basis.

Cape is specifically seeking relief from the requirement that sampling be performed on a daily basis as required ICR-56-17.3.We believe that the objective of the monitoring requirements specified in ICR-56-17.3 is to protect neighboring tenants or building occupants throughout the abatement process. Because the site is unoccupied except when work is being performed by trained asbestos professionals and isolated from the general public, we believe that it is critical to have air monitoring only during the time that work is actually being performed. Abatement activities are currently being performed on Monday through Friday. It is unlikely that a breach in containment would occur on days when there is no activity, and an even more remote possibility that a personal exposure would occur as a result of such a breach due to the isolation and inaccessibility of the building Because of the site occupancy conditions described above, we believe that the proposed alternative strategy may be employed to safely accomplish this work with no compromise to the level of protection afforded by strict compliance to the requirements of ICR-56-17.3 We propose that air monitoring be conducted by a third party independent consultant in accordance with the requirements of ICR-56-17 with the exception of a variance from section 56-17.3 to perform air monitoring only on days that abatement is performed.

Miner, Bryan C LRB

From: Miner, Bryan C LRB
Sent: Wednesday, June 26, 2002 4:28 PM
To: Virgil Jansen
Cc: Mark Gifford; Miner, Bryan C LRB; Wessel, John A LRB
Subject: FW: Jacobs Request for Variance

Virgil:

Your request for Variance from NYS ICR 56-16.1 (c) (d) 1 thru 9, as submitted in Transmittal No. 005, Item 8 is approved. Please review and comply with the attached USACE technical comment regarding air monitoring for this activity. Hard copy transmittal of this approval (on ENG FORM 4025) will be accomplished at the weekly status meeting tomorrow.

Bryan C. Miner

Bryan C. Miner
Contracting Officer's Representative
Contract No. DACW49-00-D-0007
Asbestos Abatement of Building 401
Phone (716) 879-4208
FAX: (716) 879-4356
Pager (716) 653-2355

-----Original Message-----
From: Kufel, Todd C LRB
Sent: Wednesday, June 26, 2002 1:02 PM
To: Miner, Bryan C LRB
Cc: Leithner, Judith S LRB; Cappella, Anthony F LRB; Wessel, John A LRB
Subject: Jacobs Request for Variance

Bryan---

Tony and I have reviewed Jacobs' latest request for variance regarding glovebag operations in the plenum area. I am currently transmitting the submittal to John Landahl for his approval recommendation. Please give Jacobs a verbal approval for the variances, provided air monitoring is performed in accordance with ICR AV91, as indicated on the attached comment sheet. I will forward you the official submittal approval recommendation once it is received from John Landahl.

Cmts-Variance(3).doc

If you have any questions or comments, please let me know.

Thanks,

Todd

NFSS BUILDING 401 ASBESTOS ABATEMENT
WORKPLAN REVIEW COMMENT SHEET

Complete and Return to: Virgil Jansen, Jacobs Engineering **Date Transmitted:** 6/26/02

Document Title: Request for Variance (Glovebag Removal, Plenum Area)

COMMENT NUMBER	PAGE OR SHEET	REVIEWER'S COMMENTS	PREPARER'S RESPONSE	REVIEWER ACCEPT/ REJECT
1	General	If tenting is not to be implemented, the contractor must adhere to the additional air monitoring requirements specified in ICR 56, Applicable Variance AV 91 for Glovebag Operations.		
		End of Comments		

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on the reverse side prior to initiating form)*	DATE: 16 July 2002	TRANSMITTAL NO. 005

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS *(This section will be initiated by the contractor)*

TO: U.S. Army Corps of Engineers ATTN: NY/PA Area Office (Bryan Minor) 1776 Niagara St., Buffalo, NY 14207-3199	FROM: Jacobs Engineering 125 Broadway Avenue Oak Ridge, TN 37830	CONTRACT NO. DACW49-00-D-0007 Delivery Order # 001	CHECK ONE: ☑ THIS IS A NEW TRANSMITTAL ☐ THIS IS A RESUBMITTAL OF TRANSMITTAL
SPECIFICATION SEC. NO. (Cover only one section with each transmittal) Section 3.2	PROJECT TITLE AND LOCATION		

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO.	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO.	FOR CONTRACTOR USE CODE		VARIATION (See instruction No. 6)	FOR CE USE CODE
a.	b.	c.	d.	e.	f.	g.		h.	i.
9	Request for variance from NYSICR Part # 56		10	3.2.4.			A		B
	Section ICR-56-8 (K) (5)								
10	Request for variance from NYSICR Part # 56		10	3.2.4			A		B
	Section ICR-56-17.3								
11	Request for variance from NYSICR Part # 56		10	3.2.4			A		B
	Section ICR 56.16.1 (c) (d) 1-9								
12	Request for variance from NYSICR Part # 56		10	3.2.4			A		B
	Section ICR 56-8 (k) (1)								

REMARKS I am requesting Government approval of attached variance from N.Y.C.C.R. Part # 56

CODE B - SEE ATTACHED COMMENT SHEET
RE-SUBMISSION NOT REQUIRED.

I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated.

Mark Gifford

Mark Gifford, Site Quality Control Manager

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by Item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE
ITEMS 9, 10, 11, 12 (1 ea.)	Bryan C. Miner **Bryan C. Miner, Contracting Officer's Rep.**	23 JULY 02

NFSS BUILDING 401 ASBESTOS ABATEMENT
WORKPLAN REVIEW COMMENT SHEET

Complete and Return to: Virgil Jansen, Jacobs Engineering **Date Transmitted:** 7/17/02

Document Title: Request for Variance (Rooms 117 and 119)

COMMENT NUMBER	PAGE OR SHEET	REVIEWER'S COMMENTS	PREPARER'S RESPONSE	REVIEWER ACCEPT/ REJECT
1	General	The work area shall stay under negative pressure to a minimum of 0.025 in/H2O.		
2	General	A procedure shall be implemented to document and ensure that all exposed walls, ceilings, and floors are decontaminated after ACM removal.		
3	General	All critical openings shall be sealed.		
4	General	The variance from plasticizing only applies to non-porous surfaces.		
5	General	Contractor is to follow Code Rule 56 in all other aspects and not create any additional hazards from removal activities.		

C A P E
ENVIRONMENTAL MANAGEMENT I N C

Petition for Variance or Other Relief for Asbestos Abatement at Niagra Falls Storage Site, Lewiston, NY Rooms 117 and 119 (Sling Bag Rooms)

CAPE Project No. 10024.001.007

Submitted to:
Mr. MarkGifford
Jacobs Engineering
125 Broadway Avenue
Oak Ridge. Tennessee 37830

Petitioner
Jeffrey P. Shannon:
Cape Environmental Management Inc.
2302 Parklake Drive
Suite 200
Atlanta, GA 30345-2907

July 2002

☐ APPROVAL RECOMMENDED	Date	Initials
☒ APPROVAL RECOMMENDED SUBJECT TO COMMENTS INDICATED	7/19/02 Date	JC Initials
☐ DISAPPROVAL RECOMMENDED	Date	Initials
APPROVED/DISAPPROVED	Date	Signature

Cape is specifically seeking relief from plasticizing of floors, ceilings and walls as these surfaces are constructed of smooth non-porous plaster and concrete which can be effectively decontaminated and subsequently encapsulated utilizing an airless sprayer. Relief from the requirement for plasticizing of ceilings would eliminate the need for much of the over head and high work necessary on this project resulting in a safer work environment for abatement personnel. Relief from plasticizing of walls and floors would facilitate a more efficient allocation of project resources. We believe that since the objective of this abatement project is to prepare an abandoned building for demolition coupled with the fact that only properly trained personnel who are knowledgeable about the site and its hazards have access to the site, that the proposed alternative strategy may be employed to safely accomplish this work with - out compromise to the level of protection afforded by strict compliance to the requirements of ICR-56-8 (k) (5).

We propose to conduct work area preparation in accordance with ICR 56 –8 with the exception of plasticizing of floors, walls and ceilings as required by ICR-56 (K)(5). Cape proposes to place isolation barriers over all critical openings in walls and ceilings and perform work under negative pressure. After abatement of pipe insulation, Cape will perform decontamination of exposed floor, wall and ceiling surfaces via combination of HEPA vacuuming and wet cleaning utilizing an airless sprayer, prior to visual inspection and encapsulation of these areas.

(2)**ICR-56-17.3Air Sampling During Abatement** which states that once abatement activities have begun, the schedule of sampling required for large asbestos abatement projects shall be conducted on a daily basis.

Cape is specifically seeking relief from the requirement that sampling be performed on a daily basis as required ICR-56-17.3.We believe that the objective of the monitoring requirements specified in ICR-56-17.3 is to protect neighboring tenants or building occupants throughout the abatement process. Because the site is unoccupied except when work is being performed by trained asbestos professionals and isolated from the general public, we believe that it is critical to have air monitoring only during the time that work is actually being performed. Abatement activities are currently being performed on Monday through Friday. It is unlikely that a breach in containment would occur on days when there is no activity, and an even more remote possibility that a personal exposure would occur as a result of such a breach due to the isolation and inaccessibility of the building Because of the site occupancy conditions described above, we believe that the proposed alternative strategy may be employed to safely accomplish this work with no compromise to the level of protection afforded by strict compliance to the requirements of ICR-56-17.3

We propose that air monitoring be conducted by a third party independent consultant in accordance with the requirements of ICR-56-17 with the exception of a variance from section 56-17.3 to perform air monitoring only on days that abatement is performed.

We propose to construct wood framing utilizing 2'x4' lumber for openings larger than 32 square feet to support walls constructed of reinforced polyethylene and utilization of furring strips to support critical isolation barriers while deviating from enclosing of walls and barriers with wood as required by ICR 56 (8) (k) (1).

(5)**ICR56-15(b) (c) (d) (e) Cleanup Procedures** which outlines the sequence of work area cleanings, sheetings removals and settling times.

Because Cape has proposed to perform removal under a variance from ICR 56-8-(k) (5) for work area preparation as outlined in (1) of this document, if granted, would make sections (b) (c) (d) and (e) of ICR 56-15 non applicable in that first and second layers of plastic sheeting would not be installed.

We propose performing work area prep as outlined in section (1) and glovebag removal as outlined in section (3) above and subsequently decontaminating all exposed surfaces (floors, walls, and ceilings) via combination of HEPA vacuuming and washing utilizing an airless sprayer.

With the exception of variances requested in this document, all other work will be conducted in accordance with ICR-56, applicable , and previously granted variances. Thank you for your consideration in this matter.

Sincerely,

Cape Environmental Management, Inc.

Jeffrey P. Shannon
Field Operations Manager

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE
(Read instructions on the reverse side prior to initiating form)

DATE: 29 July 2002

TRANSMITTAL NO. 005

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS *(This section will be initiated by the contractor)*

TO: U.S. Army Corps of Engineers
ATTN: NY/PA Area Office (Bryan Minor)
1776 Niagara St., Buffalo, NY 14207-3199

FROM: Jacobs Engineering
125 Broadway Avenue
Oak Ridge, TN 37830

CONTRACT NO.
DACW49-00-D-0007
Delivery Order # 001

CHECK ONE:
☐ THIS IS A NEW TRANSMITTAL
☐ THIS IS A RESUBMITTAL OF TRANSMITTAL

SPECIFICATION SEC. NO. (Cover only one section with each transmittal) Section 3.2

PROJECT TITLE AND LOCATION

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See instruction No. 6) h.	FOR CE USE CODE i.
13	Request for variance from NYSICR Part # 56 Section ICR-56-8 (K) (5)		10	3.2.4.		A		B
14	Request for variance from NYSICR Part # 56 Section ICR-56-17.3		10	3.2.4		A		B
15	Request for variance from NYSICR Part # 56 Section ICR-56-8 (K) (1)		10	3.2.4		A		B
16	Request for variance from NYSICR Part # 56 Section ICR-56-15 (b), (c), (d), (e)		10	3.2.4		A		B

REMARKS I am requesting Government approval of attached variance's from N.Y.C.C.R. Part # 56

APPROVED - REVIEW AND COMPLY WITH ATTACHED COMMENT SHEET

I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as other wise stated.

Mark Gifford

Mark Gifford, Site Quality Control Manager
NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by Item No.)

* ATTACHED COMMENT SHEET

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

Bryan C Miner

Bryan C. Miner , Contracting

DATE 7/31/02

ENG FORM 4025, May 91 (ER 415-1-10) EDITION OF AUG 89 IS OBSOLETE SHEET __ OF __ (Proponent: CENMP-CE)

NFSS BUILDING 401 ASBESTOS ABATEMENT
WORKPLAN REVIEW COMMENT SHEET

Complete and Return to: Virgil Jansen, Jacobs Engineering **Date Transmitted:** 7/31/02

Document Title: Request for Variance (Phase III Area)

COMMENT NUMBER	PAGE OR SHEET	REVIEWER'S COMMENTS	PREPARER'S RESPONSE	REVIEWER ACCEPT/ REJECT
1	General	The work area shall stay under negative pressure to a minimum of 0.025 in/H2O.		
2	General	A procedure shall be implemented to document and ensure that all exposed walls, ceilings, and floors are decontaminated after ACM removal.		
3	General	All critical openings shall be sealed.		
4	General	The variance from plasticizing only applies to non-porous surfaces.		
5	General	Contractor is to follow Code Rule 56 in all other aspects and not create any additional hazards from removal activities.		

ROUTING OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE FOR APPROVAL

(Used to route ENG Form 4025 with items attached. Not to become a part of the Contractor's Record.)

	TO:	FROM:	DATE
1	CELRB-TD-DG / Kufel	CELRB-TD-CN / Miner	30-Jul-02

The attached items listed on ENG Form 4025 are forwarded for approval action.

CONTRACT NUMBER	CONTRACTOR
DACW49-00-D-0007, DO #001	Jacobs Engineering
TRANSMITTAL NUMBERS	**PROJECT TITLE AND LOCATION**
5	NFSS Building 401 Asbestos Abatement

COMMENTS (Attach additional sheet, if necessary.)

Items # 13 Through #16 - Requests for Variances from NYS ICR 56 for the asbestos abatement in Phase III.

Please review and provide comments and/or Approval Recommendation by COB 06 August 02

NO. OF INCL.	TYPED NAME AND TITLE	SIGNATURE
8	Bryan C. Miner, Contracting Officer's Representative	Bryan C. Miner

	TO:	FROM:	DATE
2	John Landahl	Todd Kufel	7-31-02

COMMENTS (Attach additional sheet, if necessary.)

Submittal has been reviewed by the following PDT members:

- Cappella - CELRB-TD-EH
- Kufel - CELRB-TD-DG

NO. OF INCL.	TYPED NAME AND TITLE	SIGNATURE
3	Todd Kufel, Civil Engineer	Todd C Kufel

	TO:	FROM:	DATE
3			

COMMENTS (Attach additional sheet, if necessary.)

NO. OF INCL.	TYPED NAME AND TITLE	SIGNATURE

	TO:	FROM:	DATE
4	Bryan Miner	John Landahl	

The following action codes are given to items listed on ENG Form 4025:

ACTION CODES

A - APPROVED AS SUBMITTED.
B - APPROVED, EXCEPT AS NOTED ON DRAWINGS. RESUBMISSION NOT REQUIRED.
C - APPROVED, EXCEPT AS NOTED ON DRAWINGS. REFER TO ATTACHED SHEET, RESUBMISSION REQUIRED.
D - WILL BE RETURNED BY SEPARATE CORRESPONDENCE.
E - DISAPPROVED (SEE ATTACHED)
F - RECEIPT ACKNOWLEDGE
G - OTHER (specify).

ACTION CODES TO BE INSERTED IN COLUMN G, SECTION I, ENG FORM 4025 (Attach sheets, when required.)

ITEM NO. (Taken from ENG Form 4025)	13	14	15	16				
CODE GIVEN	B	B	B	B				

REMARKS

Trans. No. 5, Item Nos. 13-16 - Approved, except as noted on attached comment sheet. Resubmittal not required.

NO. OF INCL.	TYPED NAME AND TITLE	SIGNATURE
2	John Landahl, Chief, Technical Services Division	John Landahl for

FORM 4026 EDITION OF NOV 66 MAY BE USED. * U.S. GOVERNMENT PRING OFFICE: 1984-449-726:18'

ENG 1 NOV 74