

ADDENDUM NO. 3  
TO THE CONTRACT DOCUMENTS  
for the construction of

Date: April 22, 2021  
Project No.: D3226100

C.C. WILLIAMS WASTEWATER TREATMENT PLANT  
DEWATERING AND OTHER IMPROVEMENTS PROJECT

MOBILE AREA WATER AND SEWER SYSTEM  
MOBILE, ALABAMA

**To All Planholders and/or Prospective Bidders:**

The following changes, additions, and/or deletions are hereby made a part of the Contract Documents for the construction of Wright Smith, Jr. Wastewater Treatment Plant Headworks Replacement Project dated March 2021 as fully and completely as if the same were fully set forth therein:

**A. PART 1 – MAWSS STANDARD SPECIFICATIONS**

1. Information for bidders: The first paragraph is replaced in its entirety to read as follows:

“No bid will be accepted or read from a bidder who is not on the list of entities who have requested the contract documents as per the Invitation to Bid.”

**B. PART 2 - TECHNICAL SPECIFICATIONS**

1. Section 01 11 00 Paragraph 1.01.A is amended to ADD Subparagraph 10 to read as follows: “Work shall include the removal and disposal of non-friable asbestos and lead-containing materials in the Operations Building as identified in the herewith attached report titled CC Williams WWTP Asbestos and LBP Survey. Work shall be performed as a component of the building demolition in adherence to applicable regulations for such removal and disposal. Work shall include the required TCLP testing with copies of test reports submitted along with disposal records for any materials determined to be classified as hazardous.”
2. Section 01 11 00 Paragraph 1.01.B.5.b is amended to ADD the following: “Demolition shall include the removal and disposal of lead-containing material in the Chlorine Building as identified in the herewith attached report titled CC Williams WWTP Asbestos and LBP Survey. Work shall be performed as a component of the building demolition in adherence to applicable regulations for such removal and disposal. Work shall include the

## Smith Wastewater Treatment Plant - Headworks Replacement

- required TCLP testing with copies of test reports submitted along with disposal records for any materials determined to be classified as hazardous.”
3. Section 07 70 01 Paragraph 2.04.B.1 REVISE to read “Size: See Drawings.”
  4. Section 08 71 00 Paragraph 1.01 E – DELETE in its entirety.
  5. Section 09 97 23 Paragraph 2.01 ADD subparagraph "C" to read as follows “Manufacturers as listed under 09 90 00 are acceptable alternate manufacturers.”
  6. Section 23 31 16.16 Paragraph 2.03.J - ADD “5 - Perry Fiberglass Products, Inc.”
  7. Section 40 90 00 Supplement 2 is AMENDED to include 20-PSH-12-1 with Component Code P8, Quantity 1, Instrument name Pressure Switch, Component options "Range: Coordinate with Pump Supplier", P & ID Number 08-N-6001.
  8. Section 44 42 56.03 Supplement 1 - ADD “WILO-Co-Helix as an approved manufacturer with the model to be determined to meet the contract requirements.”
  9. Section 44 42 56.10 Supplement 1 - ADD “Patterson Pump as an approved manufacturer with the model to be determined to meet the contract requirements.”
  10. Section 44 42 56.10 Supplement 1 - ADD “Scott Pump as an approved manufacturer with the model to be determined to meet the contract requirements.”
  11. Section 44 42 56.13 Supplement 1 - ADD “Netzsch as an approved manufacturer with the model to be determined to meet the contract requirements.”
  12. Section 44 42 56.18 Supplement 1 – Smith Sludge Pump #2 - ADD “Wemco as an approved manufacturer with the model to be determined to meet the contract requirements.” This acceptance is NOT applicable to the other pumps of this section.

### C. **PART 3 DRAWINGS**

1. Drawing Sheet 7 – REVISE Demolition Notes as follows:
  - A. Edit Note 8. To replace the second sentence as follows: “Timber piles supporting the operations building shall be removed in accordance with Note 17.”

- B. Replace Note 17 to read as follows: "Before Preloading the site, existing timber piles shall be removed down to an elevation of 5.0 where beneath the preload area and where beneath any utility mains. Where beneath the pump station they shall be removed to elevation -10 or fully extracted at the Contractor's option. The overexcavation required to expose the timber piles and remove the top will be backfilled with structural fill material following spec section 31 23 23."
2. Drawing Sheet 28 – REVISE General Note 4 to read as follows: "Timber piles supporting the operations building shall be removed in accordance with Note 17 of Drawing 01-G-005B."
3. Drawing Sheet 29 - ADD the following as General Note 3: "The existing vegetation within the hatched areas and also within the curbs indicated to be removed by Keynote 6 shall be removed."
4. Drawing Sheet 30 - ADD Keynote 1 to the road cut restoration south of Structure 83 and the next two restoration areas to the east to coordinate with Drawing Sheet 35.
5. Drawing Sheet 31 - ADD the following:
- A. General note 3: "Reconfigure the HVAC unit at the southeast corner of the administration building to rotate it 90 degrees counterclockwise about the discharge duct. Include a new concrete pad and reconnection of the duct and electrical / controls in the work."
  - B. General note 4: "If Additive Alternate 1 is not taken, the pump station as indicated for removal shall be delivered to the Owner at their directed location on site."
6. Drawing Sheet 31 – REVISE Key Note 9 to read as follows: "Timber piles supporting the operations building shall be removed in accordance with Note 17 of Drawing 01-G-005B."
7. Drawing Sheet 33 – The Preload Grading plan is REVISED as follows: On the north side of the preload area, the slope shall be constructed as indicated up to elevation 24. From elevation 24 to elevation 30. The northern slope shall be at 1 vertical to 6 horizontal. Adjust the ramp grade and the eastern slope to tie to the northern slope as modified.
8. Drawing Sheet 40 - Note 2 is REVISED to replace references to a 4" inlet pipe to be a 6" inlet pipe. Discharge from station shall be 2".

## Smith Wastewater Treatment Plant - Headworks Replacement

9. Drawing Sheet 99 – Room 20-105 - REPLACE the “K” designation on the south walls with “B1”.
10. Drawing Sheet 100 - DELETE the "H" wall designations on the north and east walls where above the training room above the suspended ceiling. These are concrete walls.
11. Drawing Sheet 101 – ADD General Note 4 to read “Include in the work the supply and installation of 1,000 sf of TPO walkway. Layout is to be as directed by the Owner.”
12. Drawing Sheet 109 – REVISE Notes 6 and 7 to indicated components will be Owner Supplied for Contractor Installation. Add Note 8 to read “Owner may substitute a cabinet-hung microwave for the fume hood at its option.” Drawing Sheets 147 – Add Note 12 to read “Include 4" exhaust duct for fume hood or microwave to connect to Janitor exhaust duct.”
13. Drawing Sheet 116 – REVISE the door schedule to ADD Door 20-S02A to be identical to 20-S01A.
14. Drawing Sheet 119 – REVISE the Finish Schedule as follows:
  - A. Room 20-103, East Wall (where Type K wall) MTL: GWB/FRP, Finish: FCTY, Color: TBS
  - B. Room 20-105 REVISE the south wall type to “B1”
  - C. Room 20-106 North, South and West walls -MTL: CONC; East wall -MTL: GWB/FRP, Finish: FCTY, Color: TBS
  - D. Room 20-107 North and South walls -MTL: CONC; East and West walls - MTL: GWB/FRP, Finish: FCTY, Color: TBS
  - E. Room 20-108 North, South, East and West walls -MTL: GWB, Finish: PS115, Color: TBS (Exclude FRP on West wall)
  - F. Room 20-112 (above the suspended ceiling), North, East and south walls - MTL: CONC, Finish: FCTY, Color: TBS
15. Drawing Sheet 119 – REPLACE all references to “Floor Sealer” with “Floor Hardener”.
16. Drawing Sheet 198 – Edit Detail 7 to DELETE the call for stainless steel (SST). Components shall be carbon steel.

17. Drawing Sheet 243 – EDIT note 9 to be Storefront Type doors per 08 41 13 rather than FRP doors
18. Drawing Sheets 244, 248 and 249 – DELETE General Notes 4, 5, and 6 entirely

**D. PART 4 QUESTIONS AND RESPONSES (Q and R):**

1. Q: Reference sheet 42. At structure “90” (Plant Sewer PS) there is a note about installing an inside MH drop. The standard MAWSS drawing it references, other than piping configuration, provides insufficient data to ascertain this scope of work. What is the existing 12” pipe material, what are the elevations and/or length of required drop, is the station to be by-passed to complete this work, what are the by-pass requirements, wall penetration details? Please advise.

R: See Record Drawings from the BDI Headworks Project for the requested geometry information. Additional wall penetrations are not required. Omit the 90-degree bend at the bottom of the drop and terminate the vertical drop at 3' above the station invert. Bypass pumping will be required during the work within the pump station. Bypass pumping shall have a capacity of 1,000 gpm using at least two pumps and shall draw water from the first manhole upstream of the pump station. The Owner will coordinate such that the main entering from the north will not have flow for up to 12 continuous hours.

2. Q: Reference sheet 62, 63 & 145. Note 1 on sheet 145 says to utilize existing Wright Smith tank piping for the new Sludge pump piping associated with the Bio Tanks. As this new piping arrangement is quite different and thus requiring a lot of field re-work, this reuse will not provide any real material benefit. If the contractor chooses to use new piping at CC Williams can this piping be DI per the DS piping requirements (CELDI).

R: Per 07-D-1001 Note 3, and 20-D-9002 Note 1 supplement the use of the available piping as needed. Piping shall be as designated for DS piping except nozzles and blind flanges to be connected to stainless steel shall be stainless steel. Dissimilar metals may only be mated at flanged joints with gaskets separating the materials.

3. Q: Reference sheet 64. Digested sludge pump 85-P-11-1&2 seem to indicate new (bold lines) for check and plug valve. Sheet 245 does not callout new discharge valves. Please confirm no new valves are required.

R: Valves are not to be replaced. Drawing 85-D-2001 supersedes 08-N-6001.

4. Q: What type of floodlight(s) will be mounted on the poles as detailed on drawing 99-TY-5004 (Pole Base Detail)? The lights are not shown in the lighting schedule.

R: The model number of the pole-mounted lights for the security cameras is Model DXF2 LED P3 40K WFR 120-THX-PEX-120-DDBXD as manufactured by Lithonia.

5. Q: Will there be a detail upcoming for the Pendant Light Installation inside the Dewatering/Control Building and Chlorine/SO<sub>2</sub> Building?  
R: No additional details will be provided for the installation of the pendant mounted lights. Please note that the height at which the various light fixtures are to be installed is shown on the Drawings.
6. Q: Does any exposed (exterior or interior) PVC pipe get painted? (plumbing or process)  
R: Per 09 90 00 Par 3.07.I all PVC exposed to view is to be painted. This requirement is hereby revised to exclude PVC located indoors with the exception of PVC carrying chlorine or sulfur dioxide. Requirements of Section 10 14 00 for labeling of piping remain in place.
7. Q: What, if any, equipment will be provided by owner in division 41-44?  
R: Refer to the Contract Drawings which indicate several components are to be reallocated or reused. (e.g.: pump station on Drawing Sheet 31, BFP per Drawing Sheet 133, shutoff valves per Drawing Sheet 215).
8. Q: Do the waterlines as referred to as "W3", reclaimed water follow the same spec as W2 pipe?  
R: Yes.
9. Q: Reference section 44 42 56.12 & 44 42 56.18. Supplement 1 of both of these spec sections list identical Tag Number 20-P-20-X (X = 1A, 2A, 3A, 4A). Please clarify which pump spec sections is to be used for Tag Number 20-P-20-X.  
R: Per section 44 46 16 paragraph 2.05\_O, the BFP manufacturer is to provide one of the two pump selections at their discretion to meet the performance criteria.
10. Q: 44 4 56.04 Supplement-3, pdf page 647, The KSB metallurgy has a 15% chromium and not 25%. Our metallurgy is ASTM A 532 II C 15% CrMo-HC. Will this be acceptable?  
R: Use of ASTM 532 II C will be acceptable for this pump.
11. Q: Section 09 90 00, para. 2.01 – Can we use just one Coating manufacturer for both the Architectural and Protective Coating systems?  
R: Yes
12. Q: Just to clarify, the interior precast walls do not paint in the field. It appears they are pre-colored by the precast manufacturer. Please verify.  
R: Verified
13. Q: Will the new Geotech address/amend the backfill requirements at the demolished Primary Clarifiers?

R: Requirements for backfill material and compaction procedures to backfill the demolished Primary Clarifiers shall follow the requirements stated in Specification Section 31 23 23, 3.09.

14. Q: Regarding the Preload Embankment, do we preload right on top of existing soils prior to the required undercut or after the undercut?

R: Preload material shall be placed after the required undercut has been performed. Refer to Section 31 23 23, 3.02, B.

15. Q: Please confirm that 91-ENS-1 and 91-ENS-2 as shown Drawing 08-N-7002 is part of the base bid regardless of whether alternate 9 is selected?

R: Confirmed as per Drawing Sheet 77.

16. Q: Is 91-FOPP-01 included in the Base bid or as Alternate 9 only?

R: Base Bid per Drawing Sheet 251.

All Bidders shall acknowledge receipt and acceptance of this Addendum No. 3 in the Bid Form AND by submitting the Addendum with the bid package. Bid Forms submitted without acknowledgment or without this Addendum will be considered in nonconformance.

Jacobs

David A. Carr

Project Manager

Appended hereto and part of Addendum No. 3:

CC Williams WWTP Asbestos and LBP Survey

**END OF ADDENDUM**

April 22, 2021

Mr. Doug Cote  
Assistant Director of Operations  
MAWSS  
4725 Moffett Road  
Mobile, AL 36618

Re: Pre-Demolition Asbestos and Lead-Based Paint Survey  
C.C. Williams Waste Water Treatment Plant (WWTP)  
1600 Yeend Street  
Mobile, AL  
SESI Project No.: M21-213

Dear Mr. Cote:

**Southern Earth Sciences, Inc. (SESI)** is pleased to inform you of the results of the above referenced project.

## 1.0 INTRODUCTION

The pre-demolition asbestos and lead-based paint (LPB) survey included the Operations Building, Dewatering Building, SO<sub>2</sub> Building, and Chlorine Building located at the C.C. Williams WWTP in Mobile, Alabama. Mr. Adam Beasley of SESI completed the pre-demolition asbestos and lead-based paint survey on April 20, 2021. A total of thirty-two (32) bulk samples of suspect asbestos-containing building materials were collected for analysis. The bulk samples were sent to Eurofins CEI, a National Voluntary Laboratory Accreditation Program (NVLAP) accredited analytical laboratory in Cary, NC. Bulk samples were analyzed by Polarized Light Microscopy (PLM), Environmental Protection Agency (EPA) Method 600/R-93/116. Test results are attached. A total of twenty-three (23) XRF readings were collected from various components of the subject structures.

## 2.0 DEFINITIONS

**Asbestos Containing Materials (ACM):** Building materials used for construction of a structure that are known or are suspect for containing asbestos.

**Asbestos:** Asbestos is the asbestiform varieties of chrysotile, crocidolite, amosite, anthophyllite, tremolite, and actinolite.

**Asbestos Inspection:** An evaluation performed by a trained and EPA certified inspector to determine the presence or absence of Asbestos-containing materials. Asbestos inspectors engage in the survey and assessment of ACBM.

**Category I non-friable ACM:** asbestos-containing packings, gaskets, resilient floor covering and asphalt roofing products.

**Category II non-friable ACM:** any material, excluding Category I ACM, that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

**Demolition:** the removal of load-bearing walls or structural components.

**Lead-Based Paint (LBP) –** Paint or coatings containing 1.0 mg/cm<sup>2</sup> or greater lead as determined by XRF testing or 0.5% by laboratory analysis is considered to be LBP by the U.S. Environmental Protection Agency (EPA) and the U.S. Housing and Urban Development (HUD).



Regulated Asbestos Containing Material (RACM): (a) Friable asbestos materials, (b) Category I non-friable ACM that has become friable, (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or, (d) Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by NESHAPS.

Renovation: the removal of any other building components other than load-bearing walls or structural components.

XRF Analyzer - an instrument that estimates lead concentration in milligrams per square centimeter (mg/cm<sup>2</sup>) using the principal of x-ray fluorescence ("XRF").

XRF Results Interpretation – Readings of 1.0 mg/cm<sup>2</sup> or greater are considered positive (lead-based paint) and readings below 1.0 mg/cm<sup>2</sup> are considered negative (not lead-based paint).

### **3.0 PHYSICAL SURVEY**

The Operations Building is an approximately 5,000 square foot structure built in the 1950s to 1960s. The structure is a single-story, slab-on-grade building with brick exterior walls and a flat membrane roof. Interior flooring consists of terrazzo, floor tile, ceramic tile, carpet and bare concrete. Interior walls are constructed of gypsum board and ceramic tile. Interior ceilings are constructed of a suspended ceiling grid system. The Dewatering Building is a single-story, slab-on-grade building that is approximately 4,000 square feet in size and was constructed after 2000. Exterior walls are metal panels and brick. The roof is constructed of fiberglass panels. Interior flooring is bare concrete. Walls are constructed of concrete block. A suspended ceiling grid with ceiling tiles is located in the office and restroom. The SO<sub>2</sub> and Chlorine Buildings are both single-story, slab-on-grade structures that were built in the 1990s. Exterior walls are constructed of brick and concrete block. The roofs are constructed of rolled shingles. Interior flooring consists of bare concrete and ceramic tile. Interior walls are concrete block and ceramic tile. The ceilings of the buildings are the concrete roof decks.

### **4.0 SUMMARY OF FINDINGS**

The EPA definition for an asbestos-containing material is a building material that contains more than 1 percent asbestos when analyzed by PLM and is placed into two categories; friable and non-friable. Friable ACM is a material that can be easily pulverized with hand pressure as opposed to non-friable ACM. The EPA and HUD definition of lead-based paint is any paint or coating containing 1.0 mg/cm<sup>2</sup> or greater lead as determined by XRF testing or 0.5% by laboratory analysis.

#### **4.1 FRIABLE ACM**

No Friable ACMs were found during this survey.

#### **4.2 NON-FRIABLE ACM**

The Gray 9" x 9" Floor Tile contained 7% chrysotile asbestos. This material is considered a Category I non-friable ACM under the NESHAP regulation. There is approximately 1,100 square feet of the asbestos containing floor tile in the large conference room and the two northeast corner offices of the Operations Building.

If additional suspect materials are discovered that were not assessed during this survey, work should be stopped, and the materials tested by an Alabama Safe State Accredited Asbestos Inspector.

#### 4.3 LEAD-BASED PAINT / LEAD CONTAINING BUILDING COMPONENTS

A total of thirty-seven (37) XRF readings were collected from various components located in the interior and on the exterior of the subject structures. Of these, five (5) indicated lead concentrations equal to or in excess of 1.0 mg/cm<sup>2</sup>.

Lead concentrations greater than 1.0 Mg/Cm<sup>2</sup> were identified during this survey on the following building components:

- Green Interior Ceramic Tile Walls in the Operations Building (Photograph No. 6)
- Green Interior Ceramic Tile Walls in the Chlorine Building (Photograph No. 7)

#### 5.0 CONCLUSIONS AND RECOMMENDATIONS

##### Asbestos

The asbestos containing floor tile in the Operations Building is classified as a Category I non-friable asbestos containing material. This material may be left in place during demolition. However, if the material is left in place, the demolition debris must be disposed of in a C & D landfill that accepts non-friable asbestos containing materials and the building materials cannot be recycled. In addition, demolition with non-friable asbestos containing materials left in place is considered Class II work by OSHA (29CFR1926.1101) and requires worker and supervisor asbestos training. The non-friable materials that are left in place must be adequately wetted during all demolition activities to avoid "Visible Emissions" as described in NESHAPS regulations. An OSHA Competent Person must be on site during demolition to ensure proper engineering controls and work practices are utilized and to recognize suspect ACM. Therefore, we recommend that the asbestos containing floor tile be removed by an Alabama Accredited Abatement Contractor which will allow the demolition debris to be disposed of in a C & D landfill and recycling of building materials.

##### Lead Containing Building Components

The following components indicated the presence of lead concentrations at or above 1.0 mg/cm<sup>2</sup>:

- Green Interior Ceramic Tile Walls in the Operations Building (Photograph No. 6)
- Green Interior Ceramic Tile Walls in the Chlorine Building (Photograph No. 7)

Please note that the U.S. Occupational Safety and Health Administration (OSHA) regulations, 29 Code of Federal Regulations (CFR) 1926.62, applies to activities involving disturbance of coatings containing lead in any concentration. This OSHA regulation governs workers exposure to lead paint concentrations in any amount. It is possible for paints containing less than 1.0 mg/cm<sup>2</sup> lead by XRF testing or less than 0.50% lead by laboratory analysis of paint chip samples to cause worker exposures above the OSHA Action Level (AL) of 30 micrograms per cubic meter of air (30 ug/m<sup>3</sup>) averaged over an 8-hour period or Permissible Exposure Limit (PEL) of 50 ug/m<sup>3</sup> averaged over an 8-hour period depending on the type of work being performed.

A case by case assessment of each construction activity should be conducted to determine which components should be abated prior to disturbance. The assessment should include an evaluation of the type of work that will be conducted (i.e. drilling, sawing, demolition, repainting etc.), the concentration of lead detected in the painted surface, and the results of any available prior negative exposure air monitoring data. Contractors should follow these regulations when working with lead painted components and avoid activities (sanding, torch cutting, grinding, abrading) which could produce lead fume or respirable dust.

The EPA requires that solid waste containing lead be tested using the Toxicity Characteristic Leachate Procedure (TCLP) for lead to determine if the waste must be disposed of as hazardous waste. A composite sample of any paint-chips and building components known to contain lead should be analyzed using the lead TCLP before disposing of such waste. If the laboratory results for the TCLP analysis are greater than 5.0 milligrams per liter (or

5.0 parts per million), the waste will be considered hazardous and must be properly disposed of as hazardous waste. Metal components coated with lead-based paint may be disposed of at a recycling facility as scrap metal.

Non-sampled or tested painted building components should be treated as if they contain lead until a determination can be made regarding the lead concentration of the paint coating in question.

## 6.0 GENERAL COMMENTS

This asbestos and lead-based paint survey has been performed to identify ACMs and LBP coated components in the existing building and is not intended as abatement specifications and drawings.

Comments and observations given above reflect an opinion as to the various materials and conditions visually observed during the inspection and should not be construed as a representation or warranty expressed or implied, as to scope, thoroughness or accuracy of the inspection.

A conscious effort is made to identify all suspect materials. There is a possibility that conditions or materials may exist which could not be identified during our survey due to physical inaccessibility and the use of nondestructive sampling methods. Materials that typically do not contain asbestos have not been sampled. These materials include but are not limited to rubber, fiberglass, etc.

Conclusions and recommendations given in this report are based upon our interpretation of current regulatory standards. Changes in regulatory standards may require changes in our conclusions and recommendations.

We appreciate the opportunity to be of service to you on this project. Should you have any questions or require additional information, please contact our office.

Sincerely,

**SOUTHERN EARTH SCIENCES, INC.**



Adam P. Beasley  
Alabama Accredited Asbestos Inspector  
Certificate No.: AIN0818279250



Mark E. Wilson  
Principal Asbestos Consultant

Attachments: Table 1: Asbestos Bulk Sample Analytical Results Summary  
Asbestos Laboratory Analytical Report/Bulk Sample Log/Sample Chain of Custody  
XRF Testing Results  
Photographs/Diagram  
Inspector's Training Certificates

TABLE 1: Asbestos Bulk Sample Analytical Results Summary

Project Name: **C.C. Williams WWTP**Project Number: **M21-213**

Sample Number	Material Description (Layers)	Location	Estimated Quantity	Condition	Friable	Asbestos Content
01,02	Dark Gray 12" x 12" Floor Tile with Black Mastic	Operations Building	N/A	N/A	N/A	NAD <sup>(1)</sup>
03,04	Light Gray 12" x 12" Floor Tile with Tan Mastic and Tan Carpet Glue	Operations Building	N/A	N/A	N/A	NAD
05,06	Green 9" x 9" Floor Tile with Tan Mastic and Tan Carpet Glue	Operations Building	N/A	N/A	N/A	NAD
<b>07,08<sup>(2)</sup></b>	<b>Gray 9" x 9" Floor Tile (FT)</b> with Black Mastic (BM) and Tan Carpet Glue (TG)	<b>Operations Building in the Large Conference Room and the Two Northeast Corner Rooms</b>	<b>1,100 SF</b>	<b>Good</b>	<b>No</b>	<b>FT=7% CH<sup>(3)</sup></b> BM=NAD TG=NAD
09,10	Cream Covebase Mastic	Operations Building	N/A	N/A	N/A	NAD
11,12	Drywall System	Operations Building	N/A	N/A	N/A	NAD
13,14	White "Smooth" 2' x 2' Ceiling Tile	Operations Building	N/A	N/A	N/A	NAD
15,16	White "Fissured" 2' x 2' Ceiling Tile	Operations Building	N/A	N/A	N/A	NAD
17,18	White Window Caulking	Operations Building	N/A	N/A	N/A	NAD
19,20	Built-Up Membrane Roof	Operations Building	N/A	N/A	N/A	NAD
21,22	White 2' x 2' Ceiling Tile	Dewatering Building	N/A	N/A	N/A	NAD
23,24	Gray Door Caulking	Dewatering Building	N/A	N/A	N/A	NAD
25,26	Gray Door Caulking	SO2 Building	N/A	N/A	N/A	NAD
27,28	Brown Colored Shingle Roof	SO2 Building	N/A	N/A	N/A	NAD
29,30	Cream Colored Shingle Roof	Chlorine Building	N/A	N/A	N/A	NAD
31,32	Gray/White Door Caulking	Chlorine Building	N/A	N/A	N/A	NAD

## Notes:

(1) NAD = No Asbestos Detected

(2) **Bold** = >1% Asbestos was identified in the bulk sample.

(3) CH = Chrysotile Asbestos

April 21, 2021

Southern Earth Sciences, Inc.  
707 E. Cervantes St., Suite B, #198  
Pensacola, FL 32501

**CLIENT PROJECT:** C.C. Williams WWTP, M21-213  
**CEI LAB CODE:** A214846

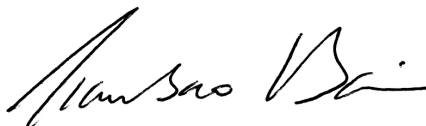
Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on April 21, 2021. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations.

Kind Regards,



Tianbao Bai, Ph.D., CIH  
Laboratory Director

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## **ASBESTOS ANALYTICAL REPORT**

### **By: Polarized Light Microscopy**

Prepared for

**Southern Earth Sciences, Inc.**

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CLIENT PROJECT: C.C. Williams WWTP, M21-213

LAB CODE: A214846

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 04/21/21

TOTAL SAMPLES ANALYZED: 32

# SAMPLES >1% ASBESTOS: 2

# Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: C.C. Williams WWTP, M21-213

LAB CODE: A214846

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
01		A69952A	Dark Gray	Floor Tile	None Detected
		A69952B	Tan	Mastic	None Detected
02		A69953A	Dark Gray	Floor Tile	None Detected
		A69953B	Tan	Mastic	None Detected
03	Layer 1	A69954A	Tan	Glue	None Detected
	Layer 2	A69954A	Light Gray	Floor Tile	None Detected
		A69954B	Tan	Mastic	None Detected
04	Layer 1	A69955A	Tan	Glue	None Detected
	Layer 2	A69955A	Light Gray	Floor Tile	None Detected
		A69955B	Tan	Mastic	None Detected
05	Layer 1	A69956A	Tan	Glue	None Detected
	Layer 2	A69956A	Green	Floor Tile	None Detected
		A69956B	Tan	Mastic	None Detected
06	Layer 1	A69957A	Tan	Glue	None Detected
	Layer 2	A69957A	Green	Floor Tile	None Detected
		A69957B	Tan	Mastic	None Detected
07	Layer 1	A69958A	Tan	Glue	None Detected
	Layer 2	A69958A	Gray	Floor Tile	Chrysotile 7%
		A69958B	Black	Mastic	None Detected
08	Layer 1	A69959A	Tan	Glue	None Detected
	Layer 2	A69959A	Gray	Floor Tile	Chrysotile 7%
		A69959B	Black	Mastic	None Detected
09		A69960	Cream	Covebase Mastic	None Detected
10		A69961	Cream	Covebase Mastic	None Detected
11		A69962	White	Drywall/Joint Compound	None Detected
12		A69963	White	Drywall/Joint Compound	None Detected
13		A69964	White	Smooth Ceiling Tile	None Detected
14		A69965	White	Smooth Ceiling Tile	None Detected
15		A69966	White	Fissured Ceiling Tile	None Detected
16		A69967	White	Fissured Ceiling Tile	None Detected
17		A69968	White	Window Caulk	None Detected

# Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

**PROJECT:** C.C. Williams WWTP, M21-213

**LAB CODE:** A214846

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
18		A69969	White	Window Caulk	None Detected
19	Layer 1	A69970	White	Flat Membrane Roof	None Detected
	Layer 2	A69970	Beige,Cream	Flat Membrane Roof	None Detected
	Layer 3	A69970	Black	Flat Membrane Roof	None Detected
	Layer 4	A69970	Beige	Flat Membrane Roof	None Detected
20	Layer 1	A69971	White	Flat Membrane Roof	None Detected
	Layer 2	A69971	Beige,Cream	Flat Membrane Roof	None Detected
	Layer 3	A69971	Black	Flat Membrane Roof	None Detected
	Layer 4	A69971	Beige	Flat Membrane Roof	None Detected
21		A69972	White,Beige	Ceiling Tile	None Detected
22		A69973	White,Beige	Ceiling Tile	None Detected
23		A69974	Gray	Door Caulk	None Detected
24		A69975	Gray	Door Caulk	None Detected
25		A69976	Gray	Door Caulk	None Detected
26		A69977	Gray	Door Caulk	None Detected
27		A69978	Brown	Shingle Roof	None Detected
28		A69979	Brown	Shingle Roof	None Detected
29		A69980	Cream	Shingle Roof	None Detected
30		A69981	Cream	Shingle Roof	None Detected
31	Layer 1	A69982	Gray	Door Caulk	None Detected
	Layer 2	A69982	White	Door Caulk	None Detected
32	Layer 1	A69983	Gray	Door Caulk	None Detected
	Layer 2	A69983	White	Door Caulk	None Detected



# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Southern Earth Sciences, Inc.  
707 E. Cervantes St., Suite B, #198  
Pensacola, FL 32501

**Lab Code:** A214846  
**Date Received:** 04-21-21  
**Date Analyzed:** 04-21-21  
**Date Reported:** 04-21-21

**Project:** C.C. Williams WWTP, M21-213

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
<b>01</b> A69952A	Floor Tile	Homogeneous Dark Gray Fibrous Bound	2%	Cellulose	60% 38%	Vinyl Calc Carb	None Detected
A69952B	Mastic	Homogeneous Tan Fibrous Bound	2%	Cellulose	60% 38%	Mastic Calc Carb	None Detected
<b>02</b> A69953A	Floor Tile	Homogeneous Dark Gray Fibrous Bound	2%	Cellulose	60% 38%	Vinyl Calc Carb	None Detected
A69953B	Mastic	Homogeneous Tan Fibrous Bound	2%	Cellulose	60% 38%	Mastic Calc Carb	None Detected
<b>03</b> Layer 1 A69954A	Glue	Homogeneous Tan Fibrous Bound	2%	Cellulose	60% 38%	Binder Calc Carb	None Detected
Layer 2 A69954A	Floor Tile	Homogeneous Light Gray Fibrous Bound	2%	Cellulose	60% 38%	Vinyl Calc Carb	None Detected
A69954B	Mastic	Homogeneous Tan Fibrous Bound	2%	Cellulose	60% 38%	Mastic Calc Carb	None Detected

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

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**Lab Code:** A214846  
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**Date Reported:** 04-21-21

**Project:** C.C. Williams WWTP, M21-213

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
<b>04</b> Layer 1 A69955A	Glue	Homogeneous Tan Fibrous Bound	2%	Cellulose	60% 38%	Binder Calc Carb	None Detected
Layer 2 A69955A	Floor Tile	Homogeneous Light Gray Fibrous Bound	2%	Cellulose	60% 38%	Vinyl Calc Carb	None Detected
A69955B	Mastic	Homogeneous Tan Fibrous Bound	2%	Cellulose	60% 38%	Mastic Calc Carb	None Detected
<b>05</b> Layer 1 A69956A	Glue	Homogeneous Tan Fibrous Bound	2%	Cellulose	60% 38%	Binder Calc Carb	None Detected
Layer 2 A69956A	Floor Tile	Homogeneous Green Fibrous Bound	2%	Talc	60% 38%	Vinyl Calc Carb	None Detected
A69956B	Mastic	Homogeneous Tan Fibrous Bound	2%	Cellulose	60% 38%	Mastic Calc Carb	None Detected
<b>06</b> Layer 1 A69957A	Glue	Homogeneous Tan Fibrous Bound	2%	Cellulose	60% 38%	Binder Calc Carb	None Detected

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

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Pensacola, FL 32501

**Lab Code:** A214846  
**Date Received:** 04-21-21  
**Date Analyzed:** 04-21-21  
**Date Reported:** 04-21-21

**Project:** C.C. Williams WWTP, M21-213

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
Layer 2 A69957A	Floor Tile	Homogeneous Green Fibrous Bound	2%	Talc	60% 38%	Vinyl Calc Carb	None Detected
A69957B	Mastic	Homogeneous Tan Fibrous Bound	2%	Cellulose	60% 38%	Mastic Calc Carb	None Detected
07 Layer 1 A69958A	Glue	Homogeneous Tan Fibrous Bound	2%	Cellulose	60% 38%	Binder Calc Carb	None Detected
Layer 2 A69958A	Floor Tile	Homogeneous Gray Fibrous Bound	2%	Talc	60% 31%	Vinyl Calc Carb	7% Chrysotile
A69958B	Mastic	Homogeneous Black Fibrous Bound	2%	Cellulose	60% 38%	Mastic Calc Carb	None Detected
08 Layer 1 A69959A	Glue	Homogeneous Tan Fibrous Bound	2%	Cellulose	60% 38%	Binder Calc Carb	None Detected
Layer 2 A69959A	Floor Tile	Homogeneous Gray Fibrous Bound	2%	Talc	60% 31%	Vinyl Calc Carb	7% Chrysotile

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

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**Date Analyzed:** 04-21-21  
**Date Reported:** 04-21-21

**Project:** C.C. Williams WWTP, M21-213

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
A69959B	Mastic	Homogeneous Black Fibrous Bound	2%	Cellulose	60% 38%	Mastic Calc Carb	None Detected
09 A69960	Covebase Mastic	Homogeneous Cream Fibrous Bound	2%	Cellulose	60% 38%	Mastic Calc Carb	None Detected
10 A69961	Covebase Mastic	Homogeneous Cream Fibrous Bound	2%	Cellulose	60% 38%	Mastic Calc Carb	None Detected
11 A69962	Drywall/Joint Compound	Heterogeneous White Fibrous Bound	10%	Cellulose	15% 10% 65%	Calc Carb Binder Gypsum	None Detected
12 A69963	Drywall/Joint Compound	Heterogeneous White Fibrous Bound	10%	Cellulose	15% 10% 65%	Calc Carb Binder Gypsum	None Detected
13 A69964	Smooth Ceiling Tile	Heterogeneous White Fibrous Bound	10%	Cellulose	2% 88%	Paint Gypsum	None Detected
14 A69965	Smooth Ceiling Tile	Heterogeneous White Fibrous Bound	10%	Cellulose	2% 88%	Paint Gypsum	None Detected

# ASBESTOS BULK ANALYSIS

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**Project:** C.C. Williams WWTP, M21-213

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
<b>15</b> A69966	Fissured Ceiling Tile	Heterogeneous White Fibrous Loosely Bound	65% 10%	Cellulose Fiberglass	5% 20%	Paint Perlite	None Detected
<b>16</b> A69967	Fissured Ceiling Tile	Heterogeneous White Fibrous Loosely Bound	65% 10%	Cellulose Fiberglass	5% 20%	Paint Perlite	None Detected
<b>17</b> A69968	Window Caulk	Homogeneous White Fibrous Bound	<1%	Cellulose	100%	Caulk	None Detected
<b>18</b> A69969	Window Caulk	Homogeneous White Fibrous Bound	<1%	Cellulose	100%	Caulk	None Detected
<b>19</b> Layer 1 A69970	Flat Membrane Roof	Homogeneous White Fibrous Bound	<1%	Cellulose	100%	Binder	None Detected
Layer 2 A69970	Flat Membrane Roof	Heterogeneous Beige,Cream Fibrous Bound	15%	Synthetic Fiber	85%	Foam	None Detected
Layer 3 A69970	Flat Membrane Roof	Heterogeneous Black Fibrous Bound	5% 15%	Fiberglass Synthetic Fiber	5% 75%	Gravel Tar	None Detected

# ASBESTOS BULK ANALYSIS

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## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
Layer 4 A69970	Flat Membrane Roof	Homogeneous Beige Fibrous Loosely Bound	90%	Cellulose	10%	Perlite	None Detected
<b>20</b> Layer 1 A69971	Flat Membrane Roof	Homogeneous White Fibrous Bound	<1%	Cellulose	100%	Binder	None Detected
Layer 2 A69971	Flat Membrane Roof	Heterogeneous Beige,Cream Fibrous Bound	15%	Synthetic Fiber	85%	Foam	None Detected
Layer 3 A69971	Flat Membrane Roof	Heterogeneous Black Fibrous Bound	5% 15%	Fiberglass Synthetic Fiber	5% 75%	Gravel Tar	None Detected
Layer 4 A69971	Flat Membrane Roof	Homogeneous Beige Fibrous Loosely Bound	90%	Cellulose	10%	Perlite	None Detected
<b>21</b> A69972	Ceiling Tile	Heterogeneous White,Beige Fibrous Loosely Bound	65% 10%	Cellulose Fiberglass	5% 20%	Paint Perlite	None Detected
<b>22</b> A69973	Ceiling Tile	Heterogeneous White,Beige Fibrous Loosely Bound	65% 10%	Cellulose Fiberglass	5% 20%	Paint Perlite	None Detected

# ASBESTOS BULK ANALYSIS

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## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
<b>23</b> A69974	Door Caulk	Homogeneous Gray Fibrous Bound	<1%	Cellulose	100%	Caulk	None Detected
<b>24</b> A69975	Door Caulk	Homogeneous Gray Fibrous Bound	<1%	Cellulose	100%	Caulk	None Detected
<b>25</b> A69976	Door Caulk	Homogeneous Gray Fibrous Bound	<1%	Cellulose	100%	Caulk	None Detected
<b>26</b> A69977	Door Caulk	Homogeneous Gray Fibrous Bound	<1%	Cellulose	100%	Caulk	None Detected
<b>27</b> A69978	Shingle Roof	Heterogeneous Brown Fibrous Bound	25%	Synthetic Fiber	10% 65%	Gravel Tar	None Detected
<b>28</b> A69979	Shingle Roof	Heterogeneous Brown Fibrous Bound	25%	Synthetic Fiber	10% 65%	Gravel Tar	None Detected
<b>29</b> A69980	Shingle Roof	Heterogeneous Cream Fibrous Bound	25%	Synthetic Fiber	10% 65%	Gravel Tar	None Detected

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Southern Earth Sciences, Inc.  
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Pensacola, FL 32501

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**Date Reported:** 04-21-21

**Project:** C.C. Williams WWTP, M21-213

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
<b>30</b> A69981	Shingle Roof	Heterogeneous Cream Fibrous Bound	25%	Synthetic Fiber	10% 65%	Gravel Tar	None Detected
<b>31</b> Layer 1 A69982	Door Caulk	Heterogeneous Gray Fibrous Bound	<1%	Cellulose	100%	Caulk	None Detected
Layer 2 A69982	Door Caulk	Homogeneous White Fibrous Bound	<1%	Cellulose	100%	Caulk	None Detected
<b>32</b> Layer 1 A69983	Door Caulk	Heterogeneous Gray Fibrous Bound	<1%	Cellulose	100%	Caulk	None Detected
Layer 2 A69983	Door Caulk	Homogeneous White Fibrous Bound	<1%	Cellulose	100%	Caulk	None Detected



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**LEGEND:**      Non-Anth      = Non-Asbestiform Anthophyllite  
                      Non-Trem      = Non-Asbestiform Tremolite  
                      Calc Carb      = Calcium Carbonate

---

**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

---

**REPORTING LIMIT:** <1% by visual estimation

---

**REPORTING LIMIT FOR POINT COUNTS:** 0.25% by 400 Points or 0.1% by 1,000 Points

---

**REGULATORY LIMIT:** >1% by weight

---

Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. *Estimated measurement of uncertainty is available on request.*

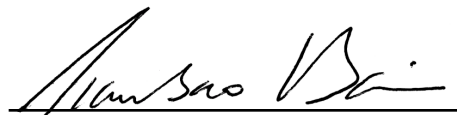
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Information provided by customer includes customer sample ID and sample description.

ANALYST:

  
 Shilpa Ladekar

APPROVED BY:

  
 Tianbao Bai, Ph.D., CIH  
 Laboratory Director



CEI

730 SE Maynard Road, Cary, NC 27511

Tel: 866-481-1412; Fax: 919-481-1442

## CHAIN OF CUSTODY

32

LAB USE ONLY:

CEI Lab Code:

CEI Lab I.D. Range:

A214846

A69952-A69983

COMPANY INFORMATION	PROJECT INFORMATION
CEI CLIENT #:	Job Contact: Adam Beasley
Company: Southern Earth Sciences	Email / Tel: abeasley@soearth.com / 850-501-7752
Address: 707 E. Cervantes St., Suite B, # 198	Project Name: C.C. Williams WWTP
Pensacola, FL 32501	Project ID#: M21-213
Email: abeasley@soearth.com	PO #:
Tel: 850-501-7752 Fax:	STATE SAMPLES COLLECTED IN: AL

IF TAT IS NOT MARKED STANDARD 3 DAY TAT APPLIES.

ASBESTOS	METHOD	TURN AROUND TIME					
		4 HR	8 HR	1 DAY	2 DAY	3 DAY	5 DAY
PLM BULK	EPA 600	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (400)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM POINT COUNT (1000)	EPA 600	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM GRAV w POINT COUNT	EPA 600		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLM BULK	CARB 435		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCM AIR	NIOSH 7400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	EPA AHERA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	NIOSH 7402	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR (PCME)	ISO 10312	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM AIR	ASTM 6281-15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM BULK	CHATFIELD		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST WIPE	ASTM D6480-05 (2010)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM DUST MICROVAC	ASTM D5755-09 (2014)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM SOIL	ASTM D7521-16			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM VERMICULITE	CINCINNATI METHOD			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEM QUALITATIVE	IN-HOUSE METHOD		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REMARKS / SPECIAL INSTRUCTIONS:

☒

Accept Samples

☐

Reject Samples

Relinquished By:

Date/Time

Received By:

Date/Time

4/20/2021 1600

J.C.

04/21

10:20

Samples will be disposed of 30 days after analysis





**ASBESTOS BULK SAMPLE LOG**

**M21-213**

Project Number

*C.C. Williams WWTP*

Project Name

**Adam Beasley**

Inspector

**04/20/2021**

Date

*Ops. Bldg, Dewatering, SO<sub>2</sub>, Chlorine*  
Building Name / Area Surveyed

**AIN0820279250**

Inspector License #

Sample #	Material Description	Sample Location	Friable
01 <sup>DARK</sup>	Gray 12" Floor Tile / Mastic <sup>(top visible layer)</sup>	Operations Bldg. - West End File Storage Area	No
02	"	" - "	"
03	Light Gray 12" Floor Tile / Mastic	" - S.W. corner room under carpet	No
04	"	" - "	"
05	Green 9" Floor Tile / Mastic	" - West End - File Room	No
06	"	" - " - SW corner office	"
07	Gray 9" Floor Tile / Mastic	" - East End - NE corner room	No
08	"	" - " - Conference Room	"
09	Corebase Mastic	" - West end	No
10	"	" - East end	"
11	Drywall system	" - West end - File Storage Area	No
12	"	" - NE corner office	"
13	White "Smooth" 2x2 Ceiling Tile	" - Locker Room	Yes
14	"	" - Mens Room	"
15	White "Fissured" 2x2 Ceiling Tile	" - Break Room	Yes
16	"	" - Conference Room	"
17	Window Caulk	" - North Side Exterior	No
18	"	" - South Side Exterior	"
19	Flat Membrane Roof	" - Roof	No
20	"	" - "	"
21	2x2 Ceiling Tile	Dewatering Bldg	Yes
22	"	"	"
23	Door Caulk	"	No
24	"	"	"
25	Door Caulk	SO <sub>2</sub> Bldg.	No
26	"	"	"
27	Brown Shingles / Roof	"	No
28	"	"	"

## ASBESTOS BULK SAMPLE LOG

Inspector License #

[illegible]

### LBP SURVEY XRF TESTING LOG

Client: MAWSS		Date: 04/20/2021	Page 1 of 2		
XRF Serial No.: 101337		Inspector: Adam Beasley			
Project Site: C.C. Williams WWTP		Project No.: M21-213			
Sample Number	Component Description	Component Location	BGS	PC	XRF Reading (mg/cm²)
-	1.04 mg/cm² Reference (Calibration) Test	Parking Area	N/A	I	1.06
-	1.04 mg/cm² Reference (Calibration) Test	Parking Area	N/A	I	1.02
-	1.04 mg/cm² Reference (Calibration) Test	Parking Area	N/A	I	1.08
001	Tan Wall	Ops. Bldg. – Lobby	GB	I	0.00
002	White Wall	Ops. Bldg. – File Room	GB	I	0.00
003	White Wall	Ops. Bldg. – West Foyer	GB	I	0.00
004	White Wall	Ops. Bldg. – SW Office	GB	I	0.00
005	Brown Door Frame	Ops. Bldg. – SW Office	M	I	0.00
006	Brown Door Frame	Ops. Bldg. – File Room	M	I	0.00
007	Tan Windowsill	Ops. Bldg. – SW Office	W	I	0.00
008	Dark Brown Door Frame	Ops. Bldg. – Lobby	M	I	0.00
009	Dark Brown Door Frame	Ops. Bldg. – Hallway	M	I	0.00
010	Dark Brown Door Frame	Ops. Bldg. – Hallway	M	I	0.00
011	Tan Wall	Ops. Bldg. – Hallway	GB	I	0.00
012	Pink Wall	Ops. Bldg. – NE Corner Room	GB	I	0.00
013	Tan Windowsill	Ops. Bldg. – NE Corner Room	W	I	0.00
014	Tan Wall	Ops. Bldg. – Breakroom	GB	I	0.00
015	Tan Wall	Ops. Bldg. – Conference Room	GB	I	0.00
016	Tan Windowsill	Ops. Bldg. – Conference Room	W	I	0.00
017	Green Wall	Ops. Bldg. – Mens Room	CT	I	1.40
018	Brown Floor	Ops. Bldg. – Mens Room	CT	I	0.00
019	Brown Stall Dividers	Ops. Bldg. – Mens Room	M	I	0.00
020	Green Wall	Ops. Bldg. – Locker Room	CT	I	1.70
021	Brown Floor	Ops. Bldg. – Locker Room	CT	I	0.00
022	Brown Lockers	Ops. Bldg. – Locker Room	M	I	0.00
023	Brown Stall Dividers	Ops. Bldg. – Locker Room	M	I	0.10
024	Green Wall	Ops. Bldg. – Womens Room	CT	I	2.30
025	White Column	Ops. Bldg. – Exterior North	C	I	0.00

### LBP SURVEY XRF TESTING LOG

Client: MAWSS		Date: 04/20/2021	Page 2 of 2		
XRF Serial No.: 101337		Inspector: Adam Beasley			
Project Site: C.C. Williams WWTP		Project No.: M21-213			
Sample Number	Component Description	Component Location	BGS	PC	XRF Reading (mg/cm²)
026	White Windowsill	Ops. Bldg. – Exterior North	M	I	0.00
027	White Door	Ops. Bldg. – Exterior East	M	I	0.00
028	White Door	Ops. Bldg. – Exterior South	M	I	0.00
029	White Windowsill	Ops. Bldg. – Exterior South	M	I	0.00
030	White Wall	SO2 Building	CB	I	0.00
031	Yellow Bollard	SO2 Building	C	I	0.00
032	Gray Column	Chlorine Building	C	I	0.00
033	Blue Door	Chlorine Building	M	I	0.00
034	Green Wall	Chlorine Building	CT	I	1.70
035	Green Wall	Chlorine Building	CT	I	1.60
036	Brown Floor	Chlorine Building	CT	I	0.00
037	White Wall	Chlorine Building	CB	I	0.00
-	1.04 mg/cm² Reference (Calibration) Test	Parking Area	N/A	I	1.10
-	1.04 mg/cm² Reference (Calibration) Test	Parking Area	N/A	I	1.04
-	1.04 mg/cm² Reference (Calibration) Test	Parking Area	N/A	I	1.08

PC = Paint Condition: I = Intact, D = Defective

BGS = Background Substrate: W = Wood, M = Metal, C = Concrete, CB = Concrete Block, GB = Gypsum Board,

CT = Ceramic Tile





**Photo No. 1: VIEW OF THE OPERATIONS BUILDING.**



**Photo No. 2: VIEW OF THE DEWATERING BUILDING.**



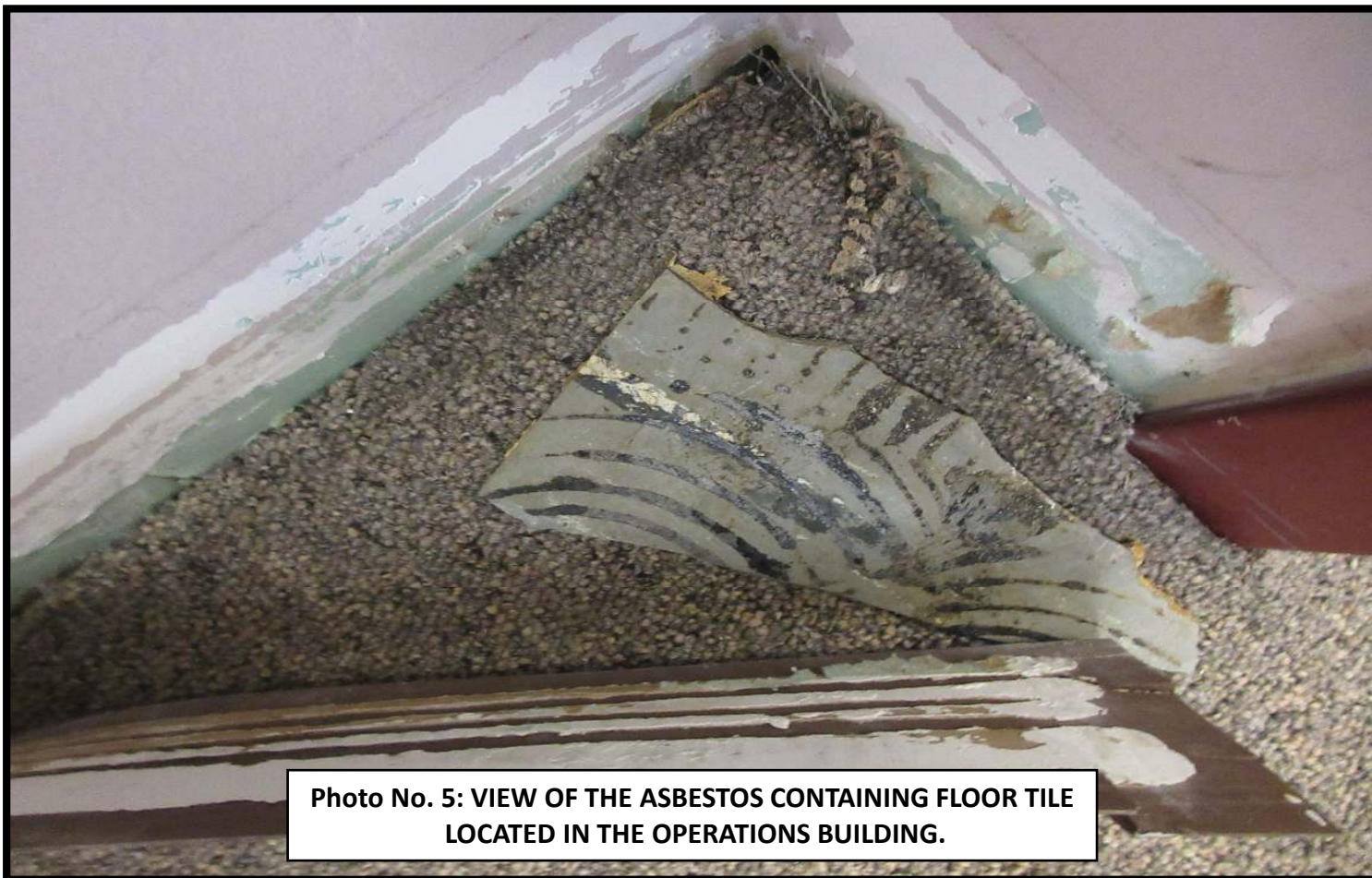


**Photo No. 3: VIEW OF THE SO2 BUILDING.**

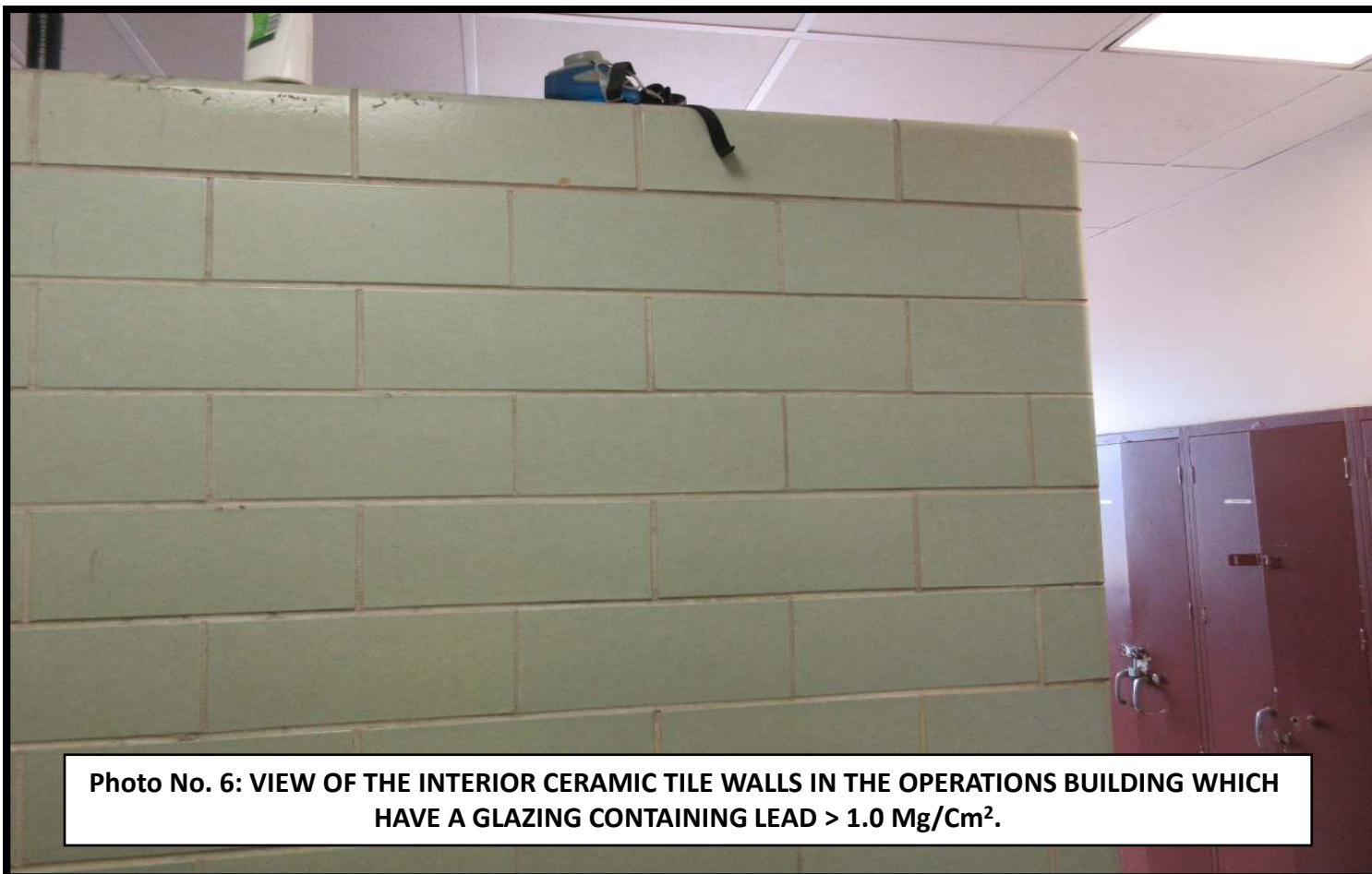


**Photo No. 4: VIEW OF THE CHLORINE BUILDING.**





**Photo No. 5: VIEW OF THE ASBESTOS CONTAINING FLOOR TILE  
LOCATED IN THE OPERATIONS BUILDING.**



**Photo No. 6: VIEW OF THE INTERIOR CERAMIC TILE WALLS IN THE OPERATIONS BUILDING WHICH  
HAVE A GLAZING CONTAINING LEAD  $> 1.0 \text{ Mg/Cm}^2$ .**



**Photo No. 7: VIEW OF THE INTERIOR CERAMIC TILE WALLS IN THE CHLORINE BUILDING WHICH HAVE A GLAZING CONTAINING LEAD > 1.0 Mg/Cm<sup>2</sup>.**






 = Asbestos Containing Flooring



FIGURE 1  
ASBESTOS CONTAINING MATERIALS LOCATIONS  
C.C. WILLIAMS WWTP  
MOBILE, AL

SESI PROJECT NO.: M21-213

DRAWN BY: A. BEASLEY

CHECKED BY: M. WILSON

DATE: 4/22/2021



THE UNIVERSITY OF ALABAMA®

**UA SafeState**

has examined the documentation of asbestos training and qualifications of the  
person named below and confers this

# Certificate of Accreditation

For the Asbestos Contractor Discipline

**INSPECTOR**

Adam P Beasley

Alabama Accreditation Number  
**AIN0820279250**

Certificate Expiration Date  
**August 4, 2021**

This certificate has been issued pursuant to the authority granted to The University of Alabama SafeState Program by the Alabama Asbestos Contractor Accreditation Act, Alabama Act No. 89-517, May, 1989 and Alabama Act No. 97-626, May, 1997.

  
\_\_\_\_\_  
Executive Director

  
\_\_\_\_\_  
Associate Director for Environmental Programs



Alabama Lead-Based Paint Activities Accreditation Program  
**THE UNIVERSITY OF ALABAMA®**

**UA SafeState**

has examined the documentation of lead-based paint training and qualifications  
of the person named below and confers this

# Certificate of Accreditation

for the Lead-Based Paint Activities Discipline

**INSPECTOR**

**Adam P Beasley**

Alabama Accreditation Number

**LIN0319279250**

Certificate Expiration Date

**March 5, 2021**

This certificate has been issued pursuant to the authority granted to The  
University of Alabama SafeState Program for the Registration and  
Accreditation of Lead Training Programs and Individuals engaged in Lead-  
Based Paint Activities. Alabama Administrative Code 822-X-1, July 27, 1998

  
Executive Director

  
Associate Director for Environmental Programs