

# REQUEST FOR BID RESIDUAL BIOSOLIDS MANAGEMENT

**Bid Number 2021-WR-09** 

May 2021

CLAYTON COUNTY WATER AUTHORITY

1600 Battle Creek Road

Morrow, GA 30260

**Virtual Bid Opening** 

Tuesday, July 6, 2021 at 10:00 am local time

Non-Mandatory
Pre-Bid Virtual Meeting

Tuesday, June 22, 2021 at 10:00 am local time

This bid has a SLBE BID DISCOUNT

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May 2021

#### Division 1

# **General Information**

**Section 1: Request for Bids** 

Clayton County Water Authority 1600 Battle Creek Road Morrow, Georgia 30260

Name of Project: Residual Biosolids Management

The Clayton County Water Authority will open sealed bids via a Virtual Teams Meeting on Tuesday, July 6, 2021 at 10:00 a.m. (local time) for the following project: Residual Biosolids Management. Any bids received after the specified time will not be considered.

A Non-Mandatory Pre-Bid Virtual Teams Meeting will be held on **Tuesday**, **June 22**, **2021 at 10:00 a.m.** (local time).

Please use the following call-in instructions to attend the Pre-Bid and Bid Opening meeting:

Join Microsoft Teams Meeting +1 912-483-5368

Conference ID: 996 457 814#

CCWA encourages Small Local, Minority and Women-Owned businesses to participate and respond to this bid request.

In an effort to promote responsible environmental practices the bid package is available in electronic (Adobe PDF) format and can be requested via e-mail at **CCWA\_Procurement@ccwa.us**, or by calling **770-960-5223**, M-F, 8:00 am - 5:00 pm. Bidders will need to provide contact information and an email address and any file size transfer limits to ensure email transmittals can be made. A hardcopy bid package can also be requested at a cost of \$25.

Clayton County Water Authority By: Robin Malone, Chairperson

# **General Information**

# Section 2: Project Overview

#### 1.1 Intent and Purpose

This is an invitation to your firm to submit a sealed bid for **Residual Biosolids**Management for the Clayton County Water Authority's Northeast, Casey, and Shoal Creek Water Reclamation Facilities for the time period of **September 1**, 2021 to August 31, 2022.

The contract may be extended for a second and/ or third one-year term by mutual consent of both parties with no changes in terms, conditions or prices.

The bids shall be delivered or mailed to the Clayton County Water Authority (CCWA), located at 1600 Battle Creek Road, Morrow, Georgia 30260, in a sealed envelope, on or before **Tuesday**, **July 6**, **2021 at 10:00 a.m.** (**local time**). The envelope shall be marked "Sealed Bid" and carry the bid title, date, and time of bid opening (refer to General Instructions to Bidders). Any and all bids received after this date and time will be considered unresponsive.

The prospective bidders are to carefully examine the work description given herein and sign where indicated that he or she understands the work required and agrees to perform the work as specified.

The CCWA Standards will govern all work under this contract for Residual Biosolids Management, as well as all applicable United States, State of Georgia, and local laws/regulations.

The work shall be performed under the direction of the Director of Water Reclamation of the Clayton County Water Authority or his authorized designated representative. Payment requests shall be addressed to the Water Reclamation Department of the Clayton County Water Authority for processing.

For those bidders that do not attend the non-mandatory pre-bid conference meeting on Tuesday, June 22, 2021 at 10:00 a.m. or for those bidders who wish to visit the sites may do so with the following limitations:

Each Bidder shall schedule a Site visit on **Wednesday**, **June 23**, **2021 from 10:00am to 3:00 pm.** local time. Bidder shall schedule the Site visit at least 24 hours in advance by contacting the following CCWA staff for each location:

Mr. Herlon Fayard (Northeast WRF):

770-302-3450

herlon.fayard@ccwa.us

# **General Information**

# **Section 2: Project Overview**

#### Mr. Mike Holt (Shoal Creek WRF):

770-302-3448

Mike.holt@ccwa.us

# Mr. Tony Somerville (Casey Pelletizing):

770-302-3457

tony.somerville@ccwa.us

As part of the effort to maintain the health and safety of CCWA personnel – as well as visitors – CCWA has put in place the following procedures, practices and protocols:

- A: Each visitor shall complete the COVID-19 Health Assessment via DOCS Health Works. Download the DOCS Health Works app based on your device by going to the Apple Store or Google Play and download DOCS HealthWorks app. DOCS Health Works is also available by internet at <a href="https://secure.dentrustocs.com/docs/covidscreening/weblogin">https://secure.dentrustocs.com/docs/covidscreening/weblogin</a>.
- B: Once the DOCS Health Works app is installed, click the icon to open the program. Complete the fields as follows:
  - a. ID is VISITOR
  - b. Location Code is GTW3
  - c. Click Next. Enter your personal email and telephone number.
  - d. Create a 4-digit pin. Click Submit
  - e. You are now registered in the system.
- C: Complete the COVID-19 health assessment on the app or website. If everything is within normal parameters, you will receive a QR code for identification at the CapScann kiosk (this QR code is good for 24 hours).
- D: When you arrive to the facility, present the QR code to the CapScann device for identification.
- E: The CapScann device will then instruct you to place your wrist in the device opening, aligning it with infrared light crosshairs for a precise temperature reading. Once the CapScann device provides the green light indicating normal temperature, you are authorized to enter the facility.

# **General Information**

# **Section 2: Project Overview**

- F: Visitor(s) shall provide, wear, and use their own Personal Protective Equipment (PPE face mask/covering, gloves, disinfectant) while in public areas for the duration of the Site visit. The entire property of the Shoal Creek WRF is considered a 'public area'.
- G: Visitor(s) shall practice physical (social) distancing while at the Facility by providing others a personal space of at least six (6) feet during the visit.
- H: Visitor(s) will not have access to the Administration Building and public rest rooms.

The purpose of the site visit(s) is to view the solids loading facilities and the solids to be hauled and disposed. It is strongly encouraged that each bidder visits all three water reclamation facilities.

#### 1.2 Bid Evaluation

A contract will be awarded to the lowest responsive responsible bidder whose bid conforms to the RFB specifications and will be the most advantageous to the Clayton County Water Authority. An evaluation will also be performed to ensure bidders comply with the required submittals.

All items and estimated quantities shown on the Bid Form are our best estimate on annual requirements and will be used for evaluation purposes only.

This procurement has a Small Local Business Enterprise (SLBE) bid discount for evaluation purposes only, which will be given to CCWA certified SLBE primes only (regardless of their location). For more details, please refer to Division 2, Section 8 of this bid package.

#### 1.3 Addendum

Bidders may ask questions regarding this bid prior to the bid opening. To be considered, all questions must be received in writing via email at (CCWA\_Procurement@ccwa.us) by 10:00 a.m. local time, on Thursday, June 24, 2021. Any and all responses to bidders' questions will be issued in the form of an Addendum via email. All addenda issued shall become part of the Bid Documents.

# Division 2 Bid Requirements

#### **Section 1: Instructions to Bidders**

These instructions are to be followed by every entity proposing to provide the Clayton County Water Authority (CCWA) with goods and/or services. These instructions constitute an integral part of the bid, and any Bidder agrees that tender of a bid constitutes acknowledgment and acceptance of its obligation to adhere to these instructions, which are to be incorporated into and considered part of any contract the Bidder ultimately executes with the CCWA.

- 1. If there is any question whatsoever regarding any portion of the specifications, it shall be the Bidder's responsibility to seek clarification immediately from the CCWA, as early as possible prior to the bid opening. Regarding public works projects, requests for interpretations of specifications must be made in writing to the department proposing out the project not later than five (5) days prior to receipt of bids.
- 2. Unless it is otherwise stated in the bid documents, it shall be the responsibility of the bidder to inform itself as to all conditions of the work site and to make and take account thereof in calculating and submitting its bid. Documents may be made available by the CCWA during the bidding process; no warranty of accuracy is made in regard to these documents, and it is the responsibility of the bidder to make its own investigations as to the nature of the work and the conditions under which it shall be performed, and to make its own independent assumptions as to these matters. The burden of anticipating unforeseen circumstances, either hidden or latent, and the conditions of the work site and all related circumstances, and the cost of accommodating therefore should unanticipated circumstances be later encountered shall rest upon the bidder.
- 3. Pre-bid meeting or any other information session will be held at the location as indicated in the solicitation. Unless indicated otherwise, attendance is not mandatory; although vendors are strongly encouraged to attend. However, in the event the meeting is mandatory, then a representative of the vendor must attend the meeting in its entirety to be considered eligible for solicitation award. Late entry to the meeting will not be allowed.
- 4. In the event that, after the acceptance of a bid by the Board of Directors of the CCWA, any unsuccessful bidder wishes to contest such action, a written "Notice of Contest" must be filed with the General Manager no later than close of business on the 5th business day after the selection of successful bidder by the Board. Failure to timely file such notice shall forever preclude the filing of a contest of the award, or any civil action in the courts of the State of Georgia or of the United States.

# **Bid Requirements**

#### **Section 1: Instructions to Bidders**

- 5. Information submitted by the Bidder in the bid process shall be subject to disclosure after bid award in accordance with the Georgia Open Records Act. Proprietary information must be identified and be accompanied by a signed affidavit outlining the redacted information. Entire bids may not be deemed proprietary.
- 6. Bids must be made on the enclosed bid Form. Unless otherwise requested, one (1) original and at least two (2) copies of the bid Form need to be submitted, and these copies must be typewritten or printed in ink. All copies of any bid Forms must be signed in ink by the person or persons authorized to sign the bid Form. The person signing the bid Form must initial any changes or corrections.
- 7. The name of the person, firm, or corporation making the bid must be printed in ink, along with the Bidder's signature, on all separate sheets of the bid Form. If a bid is made by an individual, his name and post office address must be shown. If made by a firm, or partnership, the name and the post office address of each member of the firm or partnership must be shown. If made by a Corporation, the person or persons signing the bid must show the name of the State under the laws of which the Corporation is chartered and his, or their, authority for signing same. The names, titles and addresses of the President, Secretary and the Treasurer and the corporate authority for doing business in this state shall be listed and returned with the bid Form.
- 8. All bids must be hand delivered, delivered by courier service, or mailed via the United States Postal Service. No facsimiles will be accepted. The person, firm, or corporation making the bid shall submit it in a sealed envelope on or before the date and time specified in the bid package. The envelope shall be marked "Sealed Bid" and carry the bid title, Contractor's License Number and date and time of opening as set forth in the bid package. The envelope shall also bear the name of the party making the bid and the party's address. Address bids to Clayton County Water Authority, 1600 Battle Creek Road, Morrow, Georgia, 30260. Even if a bid is not submitted, the bid form should be returned signed and with an explanation, otherwise the result will be deletion from the mailing list.
- 9. If published price books are a part of your bid, one price book must be included with your bid Form, and the successful Bidder is required to furnish additional current price books after award of the bid.
- 10. Alterations to the documents are strictly prohibited and shall result in automatic disqualification of the Bidder's bid. If there are "exceptions" to the specifications or comments to any of the solicitation requirements or other language, then the bidder

# **Bid Requirements**

#### **Section 1: Instructions to Bidders**

may ask questions regarding those requirements or submit additional documentation as to the variation from the specifications but may not alter any of the language contained in the solicitation.

- 11. In the case of goods, the person, firm or corporation making the bid may propose all items. All items may be considered separately, at the discretion of the CCWA.
- 12. Bids for public works whose price exceeds \$100,000.00 must be accompanied by a certified check, cashier's check, or acceptable bid bond in an amount not less than five percent (5%) of the amount bid.
- 13. Bidders for construction contracts where the laws of Georgia or the United States of America require a license in order to perform such construction must list the license number and class on the face of the bid envelope and must enclose copies of any required license with the bid.
- 14. When public work is let out for bid, no person shall prevent or attempt to prevent competition in such bid. Such Bidders must make an oath filed with the officer who makes payments under the contract that they have not prevented or attempted to prevent competition in the bid process. Such oath must be signed by: if a partnership, all partners and any officer or agent or other person who acted on the partnership's behalf during the bid process; if a corporation, all officers, agents, or other persons who acted for the corporation in the bid process.
- 15. Bids shall not be withdrawn or cancelled by the bidder past the bid opening date and time. The bidder may make modifications/corrections to the bid by submitting a corrected seal bid but only if the change is prior to the bid opening. The corrected document should be clearly marked that it supersedes the bid originally submitted. No modification or corrections will be allowed subsequent to the bid opening.
- 16. By tendering a bid, a Bidder agrees to leave the bid open for acceptance by the CCWA for ninety (90) days after the date set for the opening thereof.
- 17. By tendering a bid, the Bidder certifies that the Bidder has carefully examined these instructions and the terms and specifications applicable to and made a part of the bid. The Bidder further certifies that the prices shown in any schedule of items on which the Bidder is proposing are in accordance with the conditions, terms and specifications of the bid and that they are aware that any exception taken thereto may disqualify the bid. Bidders are required to inform themselves fully as to the availability of materials and the conditions relating to construction and labor under which any work will be or is now being performed. No error or misjudgment nor any

# **Bid Requirements**

#### **Section 1: Instructions to Bidders**

lack of information on local conditions, general laws or regulations on the part of the Bidder shall merit withdrawal of the bid.

- 18. Copies of all communication pertaining to bids must be sent to the Contracts, Compliance and Risk Management Section.
- 19. The purpose of this bid is to establish contract prices. Unit price extension and net total must be shown if applicable. Cash discounts should be indicated separately. Any applicable sales taxes should be included in the unit prices for all materials to be provided by the successful Bidder.
- 20. Bidders are hereby notified and agree by submission of a bid Form that if additional items not listed in the bid Form become necessary and require unit prices not established by the bid Form, the unit prices of such items shall be negotiated and shall be directly proportional to the established unit prices of similar items in the bid Form.
- 21. All prices on goods shall be for delivery, our destination, f.o.b. freight prepaid Jonesboro, Georgia, and/or Morrow, Georgia, unless otherwise shown. Any deliveries shall be made as needed and requested throughout the contract period.
- 22. Quantities when shown are estimates only, based on anticipated needs. The CCWA reserves the right to purchase more or less based on actual need at contract price. If a Bidder intends to offer minimum or maximum shipment quantities, such intent and such quantities should be specified on the bid Form. Otherwise, none will be assumed.
- 23. The time for completion of the work is stated in the bid Form. Failure to complete the work within this period shall result in payment to the CCWA of liquidated damages in an amount provided for by contract for each calendar day in excess of the Contract time.
- 24. The Bidder must employ such methods and means in carrying out the work as will not cause any interruption of or interference with any other Bidder.
- 25. The successful Bidder must comply with the applicable Risk Management Requirements prior to beginning performance, and during the contract period.
- 26. The Contract between the CCWA and the Bidder shall be executed on a form provided by CCWA and will be subject to all requirements of the contract documents (which include but may not be limited to the Contract, these instructions,

# **Bid Requirements**

#### **Section 1: Instructions to Bidders**

any Purchase Orders, and the Risk Management Requirements), and shall form a binding contract between the contracting parties.

- 27. Failure to execute the Contract, any required Surety Performance and Payment Bonds, or to furnish any required satisfactory proof of carriage of required insurance within ten (10) days from the date of notice of award of the Contract shall be just cause for the annulment of the award and for forfeiture of the bid guaranty to the CCWA, not as a penalty, but in liquidation of damages sustained. At the discretion of the CCWA, the award may then be made to the next lowest responsible vendor, or the work may be re-advertised or constructed by the CCWA.
- 28. Any Contract and Contract Bonds shall be executed in duplicate.
- 29. Award of this bid shall be by action of the CCWA Board at its regular monthly meeting.
- 30. The CCWA reserves the right, with or without notice or cause, to accept any bid regardless of the cost thereof; to reject any bid, or any number of bids; to negotiate with any Bidder for a reduction of or alterations in its bid; to reject all bids and to call for additional bids upon the same or different invitations to bid, plans or specifications; to be sole judge, in its discretion, on all questions as to whether or not a bid complies with the invitation to bid, the plans or the specifications, and as to the solvency and sufficiency of any and all sureties on all bonds.
- 31. The apparent low bid for goods shall be considered to be the lowest aggregate total price of specified products at their unit prices times the estimated required quantities of these specified products.
- 32. Bids received from two (2) or more vendors that are identical in price, delivery and meet the requirements of the bid specifications shall be awarded on the following basis:
  - a. The bid submitted by a vendor who does not have a documented negative vendor performance record.
  - b. The bid submitted by a vendor who is located within Clayton County.
  - c. The bid submitted by a vendor who is certified by our Small Local Business Enterprise Program.
  - d. If the tie bids meet all the above criteria, and it is not in CCWA's best interest (at its sole discretion) to split the award, the bid award is based on the toss of a coin by CCWA staff in a public session. The vendors involved will be invited

# **Bid Requirements**

#### Section 1: Instructions to Bidders

to attend the coin toss at a stated date and time. One or more witnesses from both CCWA Procurement and the Request Department may be present. A simple coin toss (called by the vendor listed first in the alphabet) will break the tie and decide the award.

- 33. While price is the prime criteria, and the CCWA intends to purchase at the lowest responsible bid available, price shall not be the sole criteria utilized by the CCWA in evaluating the bid package submitted. The following criteria shall also be utilized by the CCWA in determining the lowest responsible bid:
  - Ability of bidder to perform in the time frame needed by the CCWA.
  - b. Reputation of the bidder in its industry.
  - c. Reasonableness of the bid in relation to anticipated costs.
  - d. Ongoing relationships with the CCWA based on above-average prior performance of work with CCWA.
  - e. Preference for local vendors where there is no significant variance in price or service.
- 34. Bidders are notified that CCWA reserves the right except in the case of public works contracts to include among the factors considered in awarding the contract the proximity of each Bidder's place of business to any affected Authority facility. CCWA further reserves the right to award the contract to a Bidder other then the Bidder offering the lowest price where: (a) the difference in price between the low Bidder and the preferred Bidder is nominal: and (b) CCWA's Board determines that the preferred bid provides the most cost effective option due to the closer proximity of the preferred Bidder's place of business to the affected Authority facility or facilities. In such a situation, by responding to this bid, the Bidder waives any cause of action against CCWA for frustration of bid or under any similar legal theory; furthermore, the Bidder agrees to pay all costs and expenses, including but not limited to attorney fees, incurred by CCWA in defending against any such claim.
- 35. It is the policy of the Clayton County Water Authority (CCWA) to promote award of sub-agreements for goods and/or services to qualified minority and women-owned businesses. Bidders are encouraged to solicit minority and women-owned businesses whenever they are potential sources.
- 36. Bidders are encouraged to utilize the services and assistance of the U.S. Small Business Administration (SBA), and the office of the Department of Commerce Minority Business Development Agency (MBDA). These agencies can provide

# **Bid Requirements**

#### **Section 1: Instructions to Bidders**

assistance in securing the names of qualified minority and women-owned businesses. Additionally, it is encouraged that bidders access certified Small Local Business Enterprise (SLBE) vendors from Clayton County, DeKalb County, and City of Atlanta.

The Georgia Department of Transportation (DOT) has established a list of qualified Disadvantaged Business Enterprises. Information is available online under the tab for "Directories", link for "UCP Directory - Excel" at: http://www.dot.ga.gov/PS/Business/DBE.

The successful Bidder will be asked to provide, along with his Request for Payment each month a list of qualified SLBE and MBE/WBE businesses utilized on this Project.

#### **GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT OF 2006**

37. Pursuant to the Georgia Security and Immigration Compliance Act of 2006, the successful Bidder understands and agrees that compliance with the requirements of O.C.G.A.13-10-91 and Georgia Department of Labor Rule 300-10-02 are conditions of this bid and contract document. The Bidder further agrees that such compliance shall be attested by the Bidder and any of his Subcontractors by execution of the appropriate Affidavit and Agreement included after the Agreement Form of these documents.

# **Bid Requirements**

#### Section 2: Risk Management Requirements

The Contractor will provide minimum insurance coverage and limits as per the following: The Contractor will file with the Authority Certificates of Insurance, certifying the required insurance coverages and stating that each policy has been endorsed to provide thirty (30) day notice to the Authority in the event that coverage is cancelled, non-renewed or the types of coverage or limits of liability are reduced below those required. All bonds and insurance coverage must be placed with an insurance company approved by Authority Management, admitted to do business in the State of Georgia, and rated Secure ("B+" or better) by A.M. Best Company in the latest edition of Property and Casualty Ratings, or rated by Standard & Poors Insurance Ratings, latest edition as Secure ("BBB" or better). Worker's Compensation self-insurance for individual Contractors must be approved by the Worker's Compensation Board, State of Georgia and/or Self-Insurance pools approved by the Insurance Commissioner, State of Georgia.

#### **CONTRACTS FOR UP TO \$50,000**

# Worker's Compensation – Worker's Compensation coverage on a statutory basis for the State of Georgia with an

Employer's Liability limit of \$100,000 each Accident, Disease \$100,000 each employee, \$500,000 Disease policy limit.

**Automobile Liability** – Automobile liability coverage for owned, hired and non-owned vehicles in the amount of \$500,000 combined single limit.

Commercial General Liability – Coverage to be provided on "occurrence" not "claims made" basis. The coverage is to include Contractual liability, Per Project Limit of Liability, losses caused by Explosion, Collapse and Underground ("xcu") perils, the "Clayton County Water Authority" is to be added as an Additional Insured and Products and Completed Operations coverage is to be maintained for three (3) years following completion of work.

# **CONTRACTS FOR MORE THAN \$50,000**

Worker's Compensation – Worker's Compensation coverage on a statutory basis for the State of Georgia with an Employer's Liability limit of \$1,000,000. The increased Employer's Liability limit may be provided by an Umbrella or Excess Liability policy.

**Automobile Liability** - Automobile liability coverage for owned, hired and non-owned vehicles in the amount of \$1,000,000 combined single limit.

**Commercial General Liability** – Coverage to be provided on "occurrence" not "claims The coverage is to include made" basis. Contractual liability, Per Project Limit of losses caused by Explosion, Liability, Collapse and Underground ("xcu") perils, the "Clayton County Water Authority" is to be Additional added as an Insured and Products and Completed **Operations** coverage is to be maintained for three (3) years following completion of work.

# **Bid Requirements**

Section 2: Risk Management Requirements

#### RISK MANAGEMENT REQUIREMENTS (Cont'd)

**CONTRACTS FOR UP TO \$50,000** 

**CONTRACTS FOR MORE THAN \$50,000** 

#### **LIMITS OF LIABILITY:**

\$1,000,000	Per Occurrence
\$1,000,000	Personal and Advertising
\$50,000	Fire Damage*
\$5,000	Medical Payments*
\$1,000,000	General Aggregate
\$1,000,000	Products/Completed Operations per Occurrence and Aggregate

<sup>\*</sup>These are automatic minimums

Owner's Protective Liability – The Authority Management's may, in its discretion, require Owner's Protective Liability in some situations.

Umbrella and/or Excess Liability – The umbrella or Excess Liability Policy may be used to combine with underlying policies to obtain the limits required. The Management of the Authority may elect to require higher limits.

Owner's Protective Liability – The Authority Management's may, in its discretion, require Owner's Protective Liability in some situations.

# **Bid Requirements**

#### **Section 3: Bid Submittals**

#### 3.1 Required bid submittals

Please complete and submit the following forms with your bid:

- A. Special Provisions, Division 2, Section 3.3, page 2-3.2.
- B. Bid Form, Division 2, Section 4.
- C. Bidder Qualification Information, including References and Questionnaire.
- D. Georgia Security and Immigration Compliance Act of 2006 form.
- E. Contractor Affidavit and Agreement form.
- F. Subcontractor Affidavit form.

If a Contractor/Subcontractor will not be performing any services under this contract, the Contractor/company submitting the bid MUST also complete, sign, date, and have both Affidavit forms notarized and make proper notation of "N/A" - Not Applicable.

CCWA cannot consider any bid which does not include completed affidavits. It is not the intent of this notice to provide detailed information or legal advice concerning the Georgia Security & Immigration Compliance Act of 2006, as amended on May 11, 2009. All Bidders intending to do business with CCWA are responsible for independently apprising themselves and complying with the requirements of that law and its effect on CCWA procurements and their participation in those procurements.

- G. SLBE Form 1-P.
- H. Vendor Information Form.
- I. W-9 Form.
- J. Addenda (if any issued).

#### 3.2 Required Post Award Submittals:

The successful bidder must provide quarterly reports of volume, reuse and compliance with EPA's 40 CFR Part 503 Regulations to CCWA.

# Division 2 Bid Requirements

#### **Section 3: Bid Submittals**

#### 3.3 Special Provisions

No work will be assigned to subcontractors without the prior written approval of the CCWA.

Clayton County Water Authority reserves the right to perform a site visit at any time during the RFB process and the contract period.

All of these facilities operate 24 hours per day seven days per week and all bidders will be given access as granted by the Plant Manager of the facility. Prior notification will be necessary before access is permitted. See Division 1: Section 2 – Project Overview for contact information.

It is the intention of CCWA to be environmental friendly with the disposal of these biosolids, therefore CCWA will offer a 5% bid price discount (for bid price evaluation purposes only) to any or all bidders that provide EPA defined Class "A" Biosolids disposal option (beneficial reuse) as part of their bid submittal. See EPA's 40 CFR Part 503 – Standards for the use or disposal of sewage sludge. A copy of CCWA previous year's analytic report submitted to EPA is included as **Attachment A**. The Clayton County Water Authority reserves the right to inspect any disposal site for compliance with Class "A" biosolids standards and any other issues. The Current "Residual Biosolids Management" contract is with ERTH Products Inc. at a price of \$79.00 per wet ton. In addition, all CCWA solids are approved for disposal at the Republic Services Pine Ridge Landfill located at 105 Bailey Jester Rd. Griffin, GA, 30224. A copy of CCWA's approval for landfill is included as **Attachment B**.

The Contractor must provide the necessary insurance and other requirements as per attached "Risk Management Requirements".

I have read and understand the scope of work, conditions, and requirements. I also understand, and have provided, all documentation required to be included in this Request for Bid. Omission of any part of the requested documentation may result in the bid being deemed unresponsive by the CCWA.

Signed:		
Name (Printed):		
Title:		
Company:	 	 
Date:		

Division 2	Bid Requirements
Section 4: Bid Form	
Bid of	
(Hereinafter "Bidder"), organized and existing under the laws of t	he State of
doing business as (ir partnership," or "an individual" or such other business entity desig	
To the Clayton County Water Authority (hereinafter "Owner").	
In compliance with the Request for Bids, Bidder hereby proposes <b>Residual Biosolids Management</b> in strict accordance with enumerated in the Request for Bids, within the time set forth the stated below.	the bid documents as
By submission of this bid, Bidder certifies, and in the case of join certifies as to the party's own organization that this bid has been a without consultation, communication, or agreement as to any mattany other Bidder or with any competitor. Bidder also certifie Instructions to Bidders.	rrived at independently er relating to this bid with
In submitting this bid, Bidder certifies Bidder is qualified to do be Georgia as required by laws, rules, and regulations or, if allowed lobtain such qualification prior to contract award.	
Bidder accepts the terms and conditions of the Documents.	
BID: The undersigned proposes to supply, in all respects, sound and c document the goods for the amounts as shown on this Bid Form.	
ADDENDA: Bidder acknowledges receipt of the following Addenda:	

Division 2	Bid Requirements			
Section 4: Bid Form				
WE BID AS FOLLOWS:				
Residual Biosolids Management - Transportation and Disposal <u>per wet</u> ton (for all three CCWA facilities).	\$*			
ton (for all tilles out A lasintes).				
	<ul> <li>Per wet ton bid amount must not reflect the 5% bid discount offered by CCWA.</li> </ul>			
To obtain the 5% beneficial reuse discount referre your company MUST be compliant with the EPA's Please check if your company meets this requires	s 40 CFR Part 503 regulations.			
If checked, bidders must submit product docume confirm compliance.	ntation including testing and reports to			
As per the description, general conditions of this bid. Work to be as directed by individual representing Clayton County Water Authority.				
I have read and understand the scope of work, conditions, and requirements. I also understand, and have provided, all documentation required to be included in this Request for Bid. Omission of any part of the requested documentation may result in the bid being deemed unresponsive by the CCWA.				
SUBMITTED BY:				
(COMPANY NAME OF BIDDER)				
If the Bidder is certified as a Small Local Business Enterprise (SLBE) with CCWA, the CCWA SLBE Certification number must be entered below, as well as the County where the business is located in.				
CCWA SLBE Certification No	County:			
Bid Discount % (please check one):  10%	☐ 7.5% ☐ N/A (Not a SLBE)			

<u>Division 2</u>		Bid Requirements
Section 4: Bid Form		
Submitted by:		
(COMPANY NAME OF BIDDER)		
By: (OFFICER NAME)		
(SIGNATURE)		
(TITLE)	(DATE)	
(COMPANY ADDRESS)		
(CITY, STATE, ZIP CODE)		
PHONE NUMBER:		
EMAIL ADDRESS:		
LICENSE NUMBER (If applicable):		
DATE:		

# **Bid Requirements Division 2 Section 6: Bidder Qualification Information** COMPANY NAME OF BIDDER: NUMBER OF YEARS IN BUSINESS **BUSINESS ADDRESS OF COMPANY: TELEPHONE NUMBER:** POINT OF CONTACT NAME: POINT OF CONTACT EMAIL ADDRESS: **COMPANY TAX ID NUMBER: COMPANY WEBSITE: ENTITY TYPE:** ☐ Individual/Sole Proprietor ■ Employee Owned Company ☐ Privately Held Corporation/LLC ☐ Partnership ■ Publicly Owned Company ■ Attorney ☐ Other (specify): NAME OF PRINCIPAL OFFICERS:

# **Bid Requirements**

**Section 6: Bidder Qualification Information** 

#### **REFERENCES**

The Contractor shall include a minimum of 3 references of similar work completed in the last 3 years (2 of which preferably from a municipal/county utility). All references shall include the name of a current contact and phone number.

Company/Government Entity Name:	
Contact Name:	
Contact Title:	
Address:	
Phone Number:	
Company/Government Entity Name:	
Contact Name:	
Contact Title:	
Address:	
Phone Number:	
Company/Government Entity Name:	
Contact Name:	
Contact Title:	
Address:	
Phone Number:	

# Division 2 Bid Requirements

# **Section 6: Bidder Qualification Information**

# **QUESTIONNAIRE:**

COMPANY NAME:		<del> </del>		
No. of Years in Business:	No.	of Employees:		
No. of Municipal Customers:	No. of Com	No. of Commercial Customers:		
Are Your Employees Contracted				
Method of Transportation:				
Name of Transportation Compa	ny:			
Transportation Company Location	on:			
1 <sup>st</sup> Dump Trailer Tag #:	Dimension:	Load Capacity:		
2 <sup>nd</sup> Dump Trailer Tag #:	Dimension:	Load Capacity:	· · · · · · · · · · · · · · · · · · ·	
3 <sup>rd</sup> Dump Trailer Tag #:	Dimension:	Load Capacity:		
4 <sup>th</sup> Dump Trailer Tag #:	Dimension:	Load Capacity:		
Other Dump Trailer Tag #:	Dimension:	Load Capacity:		
Please check the boxes if req	uirements will be met:			
containers will not be allow	ust be provided for Case ailer for this bid shall ed for this bid.			
Method of Disposal:				
Name of Disposal Company:				
Disposal Company Location:				
Solid Waste Permit Information:				

# **Bid Requirements**

# **Section 7: Contractor Affidavit & Agreement**

		· ·
A.	Co O.0 coi sha red coi	rsuant to the Georgia Security and Immigration Compliance Act of 2006, the ntractor understands and agrees that compliance with the requirements of C.G.A. § 13-10-91 and Georgia Department of Labor Rule 300-1002 are nditions of this Agreement. The Contractor further agrees that such compliance all be attested by the Contractor through execution of the contractor affidavinguired by Georgia Department of Labor Rule 300-10-107, or a substantially similar intractor affidavit. The Contractor's fully executed affidavit is attached hereto as hibit and is incorporated into this Agreement by reference herein.
B.	em	initialing in the appropriate line below, the Contractor certifies that the following aployee-number category as identified in O.C.G.A. § 13-10-91 is applicable to the ntractor:
	1. 2. 3.	500 or more employees; 100 or more employees; Fewer than 100 employees.
C.	con	Contractor understands and agrees that, in the event the Contractor employs of tracts with any subcontractor or subcontractors in connection with this Agreement Contractor shall:
	1.	Secure from each such subcontractor an indication of the employee-number category as identified in O.C.G.A. § 13-10-91 that is applicable to the subcontractor;
	2.	Secure from each such subcontractor an attestation of the subcontractor's compliance with O.C.G.A. § 13-10-91 and Georgia Department of Labor Rule 300-10-102 by causing each such subcontractor to execute the subcontractor affidavir required by Georgia Department of Labor Rule 300-10-108, or a substantially similar subcontractor affidavit. The Contractor further understands and agrees that the Contractor shall require the executed subcontractor affidavit to become a part of the agreement between the Contractor and each such subcontractor. The Contractor agrees to maintain records of each subcontractor attestation required hereunder for inspection by the <u>Clayton County Water Authority</u> at any time."
Со	ntrac	ctor
Au	thori	zed Signature:
	me:	
Titl		
Dat	ie:	

# **Bid Requirements**

# **Section 7: Contractor Affidavit & Agreement**

#### CONTRACTOR AFFIDAVIT AND AGREEMENT

By executing this affidavit, the undersigned contractor verifies its compliance with <u>O.C.G.A.</u> <u>13-10-91</u>, stating affirmatively that the individual, firm, or corporation which is contracting with the Clayton County Water Authority has registered with, is participating in, uses, and will continue to use for the duration of the contract, the federal work authorization program - EEV/Basic Pilot Program operated by the U. S. Citizenship and Immigration Services Bureau of the U.S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA), commonly known as E-Verify, in accordance with the applicability provisions established in <u>O.C.G.A.</u> <u>13-10-91</u>.

The undersigned further agrees that, in connection with the physical performance of services pursuant to this contract with the Clayton County Water Authority, the contractor will only employ or contract with subcontractor(s), who can present a similar affidavit verifying the subcontractor's compliance with <u>O.C.G.A. 13-10-91</u>. Contractor further agrees to maintain records of such compliance and provide a copy of each such verification to the Clayton County Water Authority within five days of the subcontractor(s) presenting such affidavit(s) to the contractor.

EEV / Basic Pilot Program* User Identification Number Enter four to seven-digit numbers	
BY: Authorized Officer or Agent (Contractor Name)	Date
Title of Authorized Officer or Agent of Contractor	
Printed Name of Authorized Officer or Agent	
SUBSCRIBED AND SWORN BEFORE ME ON THIS	
THE DAY OF 20	
Notary Public	My Commission Expires

# **Bid Requirements**

# **Section 7: Contractor Affidavit & Agreement**

# SUBCONTRACTOR AFFIDAVIT AND AGREEMENT

By executing this affidavit, the undersigned subcontract O.C.G.A. 13-10-91, stating affirmatively that the individual engaged in the physical performance of services under a contract of the physical performance of services under a contract of the physical performance of the physica	al, firm or corporation which is
Clayton County Water Authority has registered with, is continue to use for the duration of the contract the federa EEV/Basic Pilot Program operated by the U. S. Citizen Bureau of the U.S. Department of Homeland Security, Security Administration (SSA), commonly known as E-Vapplicability provisions and deadlines established in O.C.G.	participating in, uses, and will al work authorization program - ship and Immigration Services in conjunction with the Social Verify, in accordance with the
The undersigned further agrees that, in connection with services pursuant to this contract with	
Authority, the subcontractor will only employ or contract with present a similar affidavit verifying the sub-subcontractor's 10-91. The undersigned further agrees that the Subcontractor compliance and provide a copy of each such verification to of the sub-subcontractor(s) presenting such affidavit(s) to the	s compliance with O.C.G.A. 13- ctor will maintain records of such to the Contractor within five days
EEV / Basic Pilot Program* User Identification Number Enter four to seven-digit numbers	
BY: Authorized Officer or Agent (Subcontractor Name)	Date
Title of Authorized Officer or Agent of Subcontractor	
Printed Name of Authorized Officer or Agent	
SUBSCRIBED AND SWORN BEFORE ME ON THIS THE _ 20	DAY OF
Notary Public	My Commission Expires

# Division 2 Bid Requirements

# Section 8: Small Local Business Enterprises (SLBE) - General Information

#### 8.1 Program Overview

Clayton County Water Authority (CCWA) has implemented a Small Local Business Enterprise Program to promote full and open competition in all government procurement and purchasing. Bid discounts for the use of Small Local Business Enterprises (SLBE's) are set on a contract by contract basis for each specific prime contract with subcontracting possibilities. CCWA wants to ensure that Bidders are non-discriminatory in their process of selecting subcontractors. CCWA also wants to encourage Bidders to utilize small, minority or woman-owned businesses whenever possible. All forms included in this solicitation must be completed for Bidder to be considered responsive.

SLBE means a locally-based small business operating inside or outside of Clayton County, which meets the following criteria:

- A) Independently owned and operated business concern whose average annual gross receipts for the previous three years must not exceed (1) Construction Firms \$18,250,000; (2) Professional Services Firms \$5,500,000; (3) Architectural Firms \$3,750,000; (4) Engineering Firms \$7,500,000, and (5) Goods and Services less than 250 employees.
- B) Locally based, meaning located and operating in Clayton County or the ten (10) counties of Cherokee, Cobb, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry, Rockdale and Spalding for at least one year prior to submitting application for certification.

If a firm is locally-based in one of the counties mentioned above, is currently certified as a small business through Clayton County, the City of Atlanta, DeKalb County, or the Georgia Department of Transportation, and can provide evidence of its certification, the firm will be provisionally accepted as a SLBE, provided that they complete the official certification application for CCWA within two (2) years following the date of provisional certification. If a firm meets these qualifications, but is not currently certified as a small business, then the firm must complete an application for certification with CCWA no later than seven (7) business days following the deadline for bid submission.

SLBE's must perform a commercially useful function, which means performance of provision of real and actual services under the contract or subcontract with CCWA. Factors such as the nature and amount of the work subcontracted; whether the SLBE has the skill and expertise to perform the work for which it has been certified; whether the SLBE actually performs, manages or supervises the work; and whether the SLBE intends to purchase commodities and/or services

# Division 2 Bid Requirements

# Section 8: Small Local Business Enterprises (SLBE) - General Information

from a non-SLBE and simply resell them will be considered in determining if the SLBE is performing a commercially useful function.

Participation in the SLBE program is not a requirement to participate in contracting with CCWA. The use of an SLBE is a requirement when bid discounts are to be sought. The Bidder will be required to complete the required forms as outlined in the following section.

#### 8.2 Overview of Bid Discount

Bid discounts are incentives that allow an original bid amount to be discounted for evaluation purposes in determining the lowest responsive, responsible bidder, while the original bid amount will be the basis for contract award.

Example: A \$100,000 bid with a 7.5% bid discount would be evaluated at \$92,500. However, \$100,000 would be paid to the successful bidder.

Bid Discounts will be applied to CCWA certified SLBE prime bidders <u>only</u>. The use of certified SLBE sub-contractors will not establish eligibility to receive Bid Discounts. Depending on the bidder's location, Bid Discounts will range between 7.5% and 10%.

The calculation of SLBE bid discounts shall be as follows:

There will be an applied tiered discount to bids based on what county the SLBE business is located.

- > 10 percent for SLBE's in Clayton County.
- > 7.5 percent for SLBE's within the next surrounding 10 counties (Cherokee, Cobb, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry, Rockdale and Spalding).
- (1) Discounts are given to Bidders who are SLBE prime bidders *only*.
- (2) In the event of a tie bid between a discounted bidder and a nondiscounted bidder, the discounted bidder (SLBE) will be recommended for the contract.

By signing the bid, the bidder is certifying that he/she has complied with the requirements of this program. Please contact Contracts, Compliance and Risk Management at <a href="mailto:ccwa.us">ccwa.slbe</a> program@ccwa.us for more information on CCWA's SLBE Program or visit our website at <a href="mailto:www.ccwa.us">www.ccwa.us</a>.

May 2021

# Division 3 Contract Forms

**Section 1: Agreement Form** 

# STATE OF GEORGIA COUNTY OF CLAYTON

# AGREEMENT FOR ONGOING PROVISION OF GOODS AND SERVICES

This Agreement made and entered into	to this day of	
2019, for <b>Residual Biosolids Management</b> , b	between the CLAYTON COUNTY WAT	ER
AUTHORITY (hereinafter "the Authority") and		
(hereinafter "the Contractor"), witnesseth:		

**WHEREAS**, the Authority is contracting with the Contractor for the provision of certain goods and services described below for the term specified herein;

**NOW THEREFORE**, the parties agree as follows:

 DESCRIPTION OF GOODS AND SERVICES: The Contractor shall provide the goods and services to the Authority in such quantities as the Authority requires for Residual Biosolids Management, as described in the Request for Bid dated May 2021.

#### **GOODS**:

The Contractor must furnish any and all items necessary including but not limited to labor, tools, materials, equipment and machinery necessary to fully provide the services as indicated by this document. This includes furnishing dump trailers for each CCWA facility when requested by the Department Director and/or Plant Manager.

#### **SERVICES**:

The scope of work shall consist of transporting and disposing of dewatered sludge produced at the Clayton County Water Authority's Northeast WRF, Casey WRRF, and Shoal Creek WRF, via dump trailers with a capacity not to exceed 30 tons per load. The trucks will transport the wastewater residuals to a mutually agreed upon disposal site. Trailers shall be clean before being returned to Clayton County Water Authority sites.

#### **QUANTITIES AND SCHEDULE:**

The estimated annual quantity is 6000 - 7000 wet tons. The frequency of transporting from the Northeast WRF is estimated to be up to one (1) truckload per day for five (5) days per week. An increased frequency to two (2) truckloads per day and/or six (6) days per week may be required if

# **Section 1: Agreement Form**

deemed necessary by the Department Director or Plant Manager. The frequency of transporting from Shoal Creek WRF is estimated to be up to one (1) truckload per day for four (4) days per week. An increase in frequency to (1) truckload per day for five (5) days per week may be required if deemed necessary by the Department Director or Plant Manager. The frequency of transporting from Casey WRRF is estimated to be one (1) truckload per day for up to seven (7) days per week. An increase in frequency to (2) truckload per day for up to (7) days per week. Casey WRRF currently operates a Pelletizing Facility and will not require services unless deemed necessary by the Department Director or Plant Manager. The Clayton County Water Authority reserves the right to purchase more or less based on actual need.

2. <u>COSTS</u>: Upon each transporting and disposal, the Authority shall pay and the Contractor shall receive the prices stipulated in the Bid hereto attached and dated \_\_\_\_\_ as full compensation for everything furnished by the Contractor relative to the above described goods and services.

The Contractor must submit a completed and signed Form SLBE-4 (Monthly SLBE Participation Report) to the Authority with each invoice. The Authority shall pay the Contractor net 30 days upon receipt of the invoice and the completed SLBE-4 Form, and upon acceptance of the work in accordance with the specifications.

The Authority will accept invoices on a once per week basis. Payments will be made via US Mail.

- 3. <u>TERM OF AGREEMENT</u>: The term of this Agreement shall commence on or about the 1<sup>st</sup> day of September 2021. The Agreement shall remain in effect until August 31, 2022.
- 4. **RENEWAL PROVISIONS:** The contract may be extended for a second and/or third year by mutual written consent from both parties with no changes is contract terms, conditions, and prices.
- 5. <u>INITIATION OF INDIVIDUAL PROJECTS:</u> Each individual project shall begin with a Purchase Order (a "PO"), a blank copy of which is attached to this Agreement and incorporated into the terms hereby agreed to. The Contractor agrees to the terms and conditions contained in the PO; however, in the event of a conflict between the terms of this Agreement and the terms of the PO, the terms of this Agreement shall control.
- 6. **WARRANTY ON SERVICES RENDERED:** The Contractor warrants that its

# **Section 1: Agreement Form**

workmanship will conform to all specifications and will perform as specified. Upon receipt of written notice of a defect in workmanship, the Contractor shall repair the defect in a timely manner at no expense to the Authority.

7. WARRANTY ON GOODS PROVIDED: The Contractor warrants its goods for a period of two (2) years from the date of final acceptance. Furthermore, the Contractor warrants that goods ordered to specifications will conform thereto and to any drawings, samples, or other description furnished or adopted by the Authority, and will be fit and sufficient for the purpose intended; and that all goods are merchantable, of good material and workmanship, and free from defect. Such warranties, together with the Contractor's service warranties and quarantees, if any shall survive inspection, test, acceptance of, and payment for the goods and shall run to the Authority, its successors, assigns, customers at any tier, and ultimate user and joint users. Notices of any defect or nonconformity shall be given by the Authority to the Contractor within fifteen (15) months after acceptance by ultimate user; provided however that in the event the goods are designed by the Contractor, notice must be given within three (3) years after acceptance by ultimate user. The rights and remedies of the Authority concerning latent defects shall exist indefinitely and shall not be affected in clause. The Authority may, at its option, and in addition to other remedies available at law, either (i) return for credit, (ii) require prompt correction or replacement of the defective or nonconforming goods, or (iii) have the defective items corrected or replaced at the Contractor's expense and deduct the cost thereof from any monies due the Contractor. The return to the Contractor of any defective or non-conforming goods and delivery to the Authority of any corrected or replaced goods shall be at the Contractor's expense. Goods required to be corrected or replaced shall be at the Contractor's expense. Goods required to be corrected or replaced shall be subject to the provision of this paragraph and the paragraph of this Agreement entitled "inspection" on the same manner and to the same extent as goods originally delivered under this Agreement. In addition to correcting or replacing any defective or nonconforming goods, the Contractor shall also reimburse the Authority for all costs and expenses incurred by the Authority in connection with inspection and discovery of the defects, identifying and correcting the cause of such defects and all other activities reasonably undertaken by the Authority to obtain conforming goods or attempting to obtain from the ultimate user a waiver to permit the defective goods to be used with all or part of the defective conditions.

# <u>Division 3</u> Contract Forms

# **Section 1: Agreement Form**

- 8. **INSPECTION:** The Authority shall have the right to inspect the goods supplied hereunder at any time during the manufacture or fabrication thereof at the Contractor's facilities or elsewhere. Such inspection may include, without limitation, raw materials, components, work in process, and completed products as well as drawings, specifications, and released data. Final inspection and acceptance shall be after delivery to the delivery point designated by the Authority. If any inspection or test is made by the Authority at the Contractor's facility or elsewhere, the Contractor shall provide reasonable facilities and assistance for the inspection personnel. The Authority may reject all goods supplied hereunder, which are found to be defective. Goods so rejected may be returned to the Contractor at the Contractor's expense. No inspection, examination or test, regardless of extensiveness or type, and no approval give in connection with any such inspection, examination or test, whether under this Agreement or another contract for the same or similar goods, shall relieve it, of any obligation to comply fully with all requirements of this Agreement, including the obligation to produce gods that conform to all requirements of the drawings, specifications and any other Contract Documents. At the Authority's request, the Contractor shall repair or replace defective goods at the Contractor's expense. Failure to inspect goods, failure to discover defects in goods or payment for goods shall not constitute acceptance or limit any of the Authority's rights, including without limitation those under the WARRANTY provisions of this Agreement. In the event inspection reveals a defect or defects and schedule urgency requires that the defect or defects be corrected by the Authority to support production, all cost of such correction, including without limitation installation and removal, will be charged to the Contractor; such charges will also include time and material and appropriate indirect and overhead expenses. The Contractor shall maintain in inspection system acceptable to the Authority covering the goods furnished hereunder.
- 9. <u>CONTRACTOR'S AFFIDAVITS</u>: The Contractor shall issue a "Standard Contractor's Affidavit Interim Waiver and Release Upon Payment" and a "Standard Contractor's Affidavit Unconditional Waiver and Release upon Final Payment" provided by the Authority before receiving any interim or final payment for any services performed.
- 10. **ASSIGNMENT AND SUBCONTRACTING:** The Contractor shall not assign this Agreement or any portion of this Agreement, nor shall the Contractor sub contract for goods or completed or substantially completed services

# **Section 1: Agreement Form**

purchased hereunder without the prior express written consent of the Authority. No assignment or subcontract by the Contractor, including any assignment or subcontract to which the Authority consents, shall in any way relieve the Contractor from complete and punctual performance of this Agreement, including without limitation all of the Contractor's obligations under the WARRANTY provisions of this Agreement.

- 11. THE AUTHORITY'S ASSISTANCE AND COOPERATION: During the Contractor's performance of this Agreement, the Authority may, but has no obligation to, provide assistance to, or cooperate with, the Contractor in activities that facilitate the proper performance and completion of this Agreement by the Contractor. Such assistance and cooperation may include without limitation: (i) providing engineering or other analysis or advice on correcting problems; (ii) refraining from strict enforcement of time schedule requirements under this Agreement; (iii) permitting use of test materials or documentation not performed or produced under this Agreement. Such assistance or cooperation by the Authority shall not be construed, and the Contractor agrees that it will not claim that any such assistance or cooperation operates, to relieve the Contractor from complete, proper and punctual performance of all the Contractor's obligations under this Agreement.
- 12. WORK ON THE AUTHORITY'S DESIGNATED PREMISES: In the event that the Contractor, the Contractor's employees or agents or the Contractor's subcontractors enter the Authority's designated premises for any reason in connection with this Agreement, the Contractor and such other parties shall observer all security requirements and all plant safety, plant protection, and traffic regulations. The Contractor shall defend, indemnify, and hold the Authority harmless from all claims, actions, demands, loss, and causes of action, arising from injury, including death, to any person, or damage to any property, when such injury or damage results in whole or in part from the acts or omissions of the Contractor, the Contractor's employees or agents or the Contractor's subcontractor, save and except damage caused by the sole negligence of the Authority. The Contractor, and any subcontractors used by the Contractor in connection with this Agreement, shall carry Workmen's Compensation and Employees' Liability Insurance to cover the Contractor's and any subcontractor's legal liability on account of accidents to their employees. The Contractor and any subcontractor shall carry adequate Comprehensive General Liability and adequate Comprehensive Automobile Liability Insurance covering

# **Section 1: Agreement Form**

accidents to their employees. The Contractor and any subcontractor shall carry adequate Comprehensive General Liability and adequate Comprehensive Automobile Liability Insurance covering legal liability of the Contractor and any subcontractor on account of accidents arising out of the operations of the Contractor or any subcontractor and resulting in bodily injury, including death, being sustained by any person or persons, or in any damage to property. At the Authority's request, the Contractor shall furnish to the Authority certificates from the Contractor's insurers showing such coverage in effect and agreeing to give the Authority thirty (30) days prior written notice of cancellation of the coverage.

13. **RISK MANAGEMENT REQUIREMENTS**: The Contractor shall abide by the Authority's applicable Risk Management Requirements, attached to this Agreement as Exhibit A and hereby incorporated into this Agreement.

#### 14. **TERMINATION FOR DEFAULT:**

- (a) The Authority may, subject to the provisions of subparagraph (c) below, by written notice of default to the Contractor, terminate the whole or any part of this Agreement in any one of the following circumstances; (i) if the Contractor fails to perform this Agreement within the time specified herein or any extension thereof; or (ii) if the Contractor fails to perform any of the other provisions of this Agreement, or so fails to make progress as to endanger performance of this Agreement in accordance with its terms, and does not cure such failure within a period of ten (10) days or longer period (as the Authority may authorize in writing) after receipt of notice from the Authority specifying such failure.
- (b) In the event the Authority terminates this Agreement in whole or in part as provided in subparagraph (a) above, the Authority may procure, upon such terms and in such manner as the Authority may deem appropriate, services, similar to those so terminated, and the Contractor shall be liable to the Authority for any Excess costs for the same, including without limitation all cost and expenses of the type specified in the "WARRANTY" paragraph of this Agreement; provided, that the Contractor shall continue the performance of this Agreement to the extent not terminated hereunder.
- (c) Except with regard to defaults of subcontractors, the Contractor shall not be liable for any excess costs if the failure to perform this Agreement arises out of causes beyond the control and without the fault of negligence of the Contractor such causes may include, but are

# **Section 1: Agreement Form**

not limited to, acts of God, or of the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, flood, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather, but in every case the failure to perform must be beyond the control and without the fault or negligence of the Contractor. If the failure to perform is caused by the default of a subcontractor, and if such default arises out of causes beyond the control of both the Contractor and the subcontractor, and without the fault of negligence of either of them, the Contractor shall not be liable for any excess costs for failure to perform, unless the services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit the Contractor to meet the required delivery schedule. The term "subcontractor" shall mean subcontractor at any tier.

- (d) If, after notice of termination of this Agreement under the provisions of this paragraph, it is determined for any reason that the Contractor was not in default under the provisions above or that the default was excusable under the provisions of this paragraph, the rights and obligations of the parties shall be the same as if the notice of termination has been issued pursuant to the "Termination for Convenience" paragraph of this Agreement.
- (e) The rights and remedies of the Authority provided in this paragraph shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Agreement.
- TERMINATION FOR CONVENIENCE: The Authority may at any time by written notice terminate all or any part of this Agreement for the Authority's convenience. If this Agreement is terminated, in whole or in part, for the Authority's convenience, the Contractor shall be paid an amount, to be mutually agreed upon, which shall be adequate to cover the actual and reasonable cost paid by the Contractor for the actual goods and labor reasonably used by the Contractor to perform the work under this Agreement to the effective date of termination, plus a reasonable profit thereon; provided that no amount shall be paid to the Contractor for (i) any anticipatory profits related to work under this Agreement not yet performed, or (ii) costs incurred due to the Contractor's failure to terminate work as ordered on the effective date of termination. In no event shall the total amount paid under the provisions of this paragraph exceed the prices set forth in this Agreement for the work terminated.

# **Section 1: Agreement Form**

- 16. **DISPUTES:** Pending resolution of any dispute hereunder, the Contractor shall proceed diligently with the performance of work in accordance with the Authority's direction.
- 17. **NOTICES**: All notices required or permitted to be given hereunder shall be deemed to be properly given if delivered in writing personally or sent by United States certified or registered mail addressed to the Contractor or the Authority, as the case may be, with postage thereon fully prepaid. The effective time shall be at the time of mailing.
- 18. <u>ATTORNEYS' FEES</u>: The Contractor shall pay reasonable attorneys' fees to the Authority should the Authority be required to incur attorneys' fees in enforcing the provisions of this Agreement or in the collection of any monies herein required to be paid by the Contractor to the Authority.
- 19. COUNTERPARTS AND ELECTRONIC SIGNATURES: This Agreement may be executed in one or more counterparts, each of which will be deemed to be an original, but all of which together will constitute one and the same instrument. An executed signature page delivered via facsimile transmission or electronic signature shall be deemed as effective as an original executed signature page.

[SIGNATURES ON NEXT PAGE]

Division 3	Contract Forms
Section 1: Agreement Form	
IN WITNESS WHEREOF thisda	ay of, 20,
said parties have hereunto set their seals the	
Executed on behalf of:	
CLAYTON COUNTY WATER AUTHORITY	CONTRACTOR
Ву:	By:
Name:	
Title: General Manager	
Attest:	Attest:
Name:	
Title:	
Date:	
[Corporate Seal]	[Corporate Seal]

## Division 3 Contract Forms

**Section 1: Agreement Form** 

#### **EXHIBIT A**

## **RISK MANAGEMENT REQUIREMENTS**

The Contractor will provide minimum insurance coverage and limits as per the following: The Contractor will file with the Authority Certificates of Insurance, certifying the required insurance coverages and stating that each policy has been endorsed to provide thirty (30) day notice to the Authority in the event that coverage is cancelled, non-renewed or the types of coverage or limits of liability are reduced below those required. All bonds and insurance coverage must be placed with an insurance company approved by Authority Management, admitted to do business in the State of Georgia, and rated Secure ("B+" or better) by A.M. Best Company in the latest edition of Property and Casualty Ratings, or rated by Standard & Poors Insurance Ratings, latest edition as Secure ("BBB" or better). Worker's Compensation self-insurance for individual Contractors must be approved by the Worker's Compensation Board, State of Georgia and/or Self-Insurance pools approved by the Insurance Commissioner, State of Georgia.

## **CONTRACTS FOR UP TO \$50,000**

Worker's Compensation – Worker's Compensation coverage on a statutory basis for the State of Georgia with an Employer's Liability limit of \$100,000 each Accident, Disease \$100,000 each employee, \$500,000 Disease policy limit.

**Automobile Liability** – Automobile liability coverage for owned, hired and non-owned vehicles in the amount of \$500,000 combined single limit.

Commercial General Liability – Coverage to be provided on "occurrence" not "claims made" basis. The coverage is to include Contractual liability, Per Project Limit of Liability, losses caused by Explosion, Collapse and Underground ("xcu") perils, the "Clayton County Water Authority" is to be added as an Additional Insured and Products and Completed Operations coverage is to be maintained for three (3) years following completion of work.

## **CONTRACTS FOR MORE THAN \$50,000**

Worker's Compensation – Worker's Compensation coverage on a statutory basis for the State of Georgia with an Employer's Liability limit of \$1,000,000. The increased Employer's Liability limit may be provided by an Umbrella or Excess Liability policy.

**Automobile Liability** - Automobile liability coverage for owned, hired and non-owned vehicles in the amount of \$1,000,000 combined single limit.

Commercial General Liability – Coverage to be provided on "occurrence" not "claims made" basis. The coverage is to include Contractual liability, Per Project Limit of Liability, losses caused by Explosion, Collapse and Underground ("xcu") perils, the "Clayton County Water Authority" is to be added as an Additional Insured and Products and Completed Operations coverage is to be maintained for three (3) years following completion of work.

May 2021

## Division 3 Contract Forms

**Section 1: Agreement Form** 

# EXHIBIT A RISK MANAGEMENT REQUIREMENTS (Cont'd)

**CONTRACTS FOR UP TO \$50,000** 

**CONTRACTS FOR MORE THAN \$50,000** 

## **LIMITS OF LIABILITY:**

\$1,000,000 Per Occurrence

\$1,000,000 Personal and Advertising

\$50,000 Fire Damage\*

\$5,000 Medical Payments\*

\$1,000,000 General Aggregate

\$1,000,000 Products/Completed Operations per

Occurrence and Aggregate

Owner's Protective Liability – The Authority's Management may, in its discretion, require Owner's Protective Liability in some situations.

Umbrella and/or Excess Liability – The umbrella or Excess Liability Policy may be used to combine with underlying policies to obtain the limits required. The Management of the Authority may elect to require higher limits.

Owner's Protective Liability – The Authority's Management may, in its discretion, require Owner's Protective Liability in some situations.

#### **END OF SECTION**

<sup>\*</sup>These are automatic minimums

Division 3	Contract Forms
Section 4: Non-Collusion Certificate	
STATE OF, CO	UNTY OF
· · · · · · · · · · · · · · · · · · ·	d officer duly authorized by law to administer ths
who, after being first duly sworn, depose an persons or employees who have acted for c	
Contract with the Clayton County Water Aut Biosolids Management, and that said	
prevented or attempted to prevent by any m	nted or endeavored to prevent anyone from
ATTEST:	Ву:
By:	By:
Title:	Title:
Sworn to and subscribed before me this	day of 20
Notary Public:	My Commission expires:

**END OF SECTION** 

## **Division 4**

## **General Requirements**

## **Section 1: Specifications**

## 4.1 DESCRIPTION OF WORK

The Clayton County Water Authority will dewater the wastewater sludge at its Northeast, Casey, and Shoal Creek Water Reclamation Facilities to approximately 16-35% solids. Solids from all three facilities will require further processing to be land applied. The successfully bidder will remove and dispose the dewatered solids from all plants via dump trailers with a capacity not to exceed 30 tons per load. Shoal Creek and Northeast WRFs have two (2) loading bays, while Casey Pelletizing site has only one (1) loading conveyor. All three sites have truck scales. The trucks will transport the wastewater residuals to a mutually agreed upon disposal site.

Trailers shall be clean before being returned to Clayton County Water Authority sites. Trailers must be left on site for loading by a screw conveyor system.

The contractor shall agree to provide any necessary labor and equipment for removal and transporting. This includes furnishing dump trailers for each CCWA facility when requested by the Department Director and/or Plant Manager. The estimated annual quantity is 6000 - 7000 wet tons. The frequency of transporting from the Northeast WRF is estimated to be up to one (1) truckload per day for five (5) days per week. An increased frequency to two (2) truckloads per day and/or six (6) days per week may be required if deemed necessary by the Department Director or Plant Manager. The frequency of transporting from Shoal Creek WRF is estimated to be up to one (1) truckload per day for four (4) days per week. An increase in frequency to one (1) truckload per day for five (5) days per week may be required if deemed necessary by the Department Director or Plant Manager. The frequency of transporting from Casey WRF is estimated to be one (1) truckload per day for up to seven (7) days per week. An increase in frequency to (2) truckload per day for up to (7) days per week may be required if deemed necessary by the Department Director or Plant Manager. Casey WRF currently operates a Pelletizing Facility and will not require services unless deemed necessary by the Department Director or Plant Manager. The Clayton County Water Authority reserves the right to purchase more or less based on actual need.

## 4.2 SCOPE OF WORK

The scope of work shall consist the transporting and disposing of dewatered sludge produced at the Clayton County Water Authority's Northeast WRF at 6900 Old Macon Highway, Rex, Georgia, 30281, transporting and disposing of dewatered sludge produced at the Clayton County Water Authority's Casey WRF

## **Division 4**

## **General Requirements**

## **Section 1: Specifications**

at 8890 Roberts Road, Jonesboro, Georgia, 30238 and transporting and disposing of dewatered sludge produced at the Clayton County Water Authority's Shoal Creek WRF located at 301 Hampton Road, Hampton, Georgia, 30228.

The contractor shall not make any changes from these specifications without written permission from the Director of Water Reclamation or their authorized designated representative.

The work shall be under the direct control and supervision of the Water Reclamation Department of the Clayton County Water Authority with regard to quantities, work quality, method of operation, scheduling and furnishings of stated materials or services.

Change orders beyond the original term shall be mutually agreed and based upon written authorization from Clayton County Water Authority.

The contractor shall correct defects in any work performed before the completed project will be eligible for payment. Defects shall include, but are not limited to: lack of signed manifests, improper disposal methods or non-approved disposal site. Payment terms shall be net 30 days.

The contractor's work shall fully conform to any applicable O.S.H.A. guidelines and the Clayton County Water Authority Safety Program. The safety of the traveling public shall be of paramount importance during transportation.

The Director of Water Reclamation of the Clayton County Water Authority on an annual basis will offer this work to the successful Bidder. If the Contractor awarded the contract rejects the work or cannot respond to the scheduling requirements (to be identified by the CCWA Director of Water Reclamation at the time of the offer) of an offered project, the Water Authority will then offer the work to the next qualified lowest bidder. The contractor shall understand that the offered work is scheduled and the work must be performed at the scheduled time. Failure to respond to work requests at the appropriate scheduled time may result in the termination of the contract with the contractor.

Work shall be authorized by the standard Clayton County Water Authority purchase order system, referencing the estimated quantities, prices per transported load and manifest number.

#### **END OF SECTION**

## **ATTACHMENT A**





March 05, 2021

Jennifer Brandon Clayton Co Water Authority 688 Flint River Road Jonesboro, GA 30238

RE: Project: Shoal Creek Sludge

Pace Project No.: 92523530

#### Dear Jennifer Brandon:

Enclosed are the analytical results for sample(s) received by the laboratory on February 23, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services Asheville
- Pace Analytical Services Charlotte
- Pace Analytical Services Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

John Stanton

john.stanton@pacelabs.com

gon D. Starte

(770)734-4200 Project Manager

**Enclosures** 

cc: Van Beaty, Clayton Co Water Authority

Tony Somerville, Clayton Co Water Authority





#### **CERTIFICATIONS**

Project: Shoal Creek Sludge

Pace Project No.: 92523530

**Pace Analytical Services Charlotte** 

9800 Kincey Ave. Ste 100, Huntersville, NC 28078 Louisiana/NELAP Certification # LA170028 North Carolina Drinking Water Certification #: 37706 North Carolina Field Services Certification #: 5342

North Carolina Wastewater Certification #: 12

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804 Florida/NELAP Certification #: E87648

North Carolina Drinking Water Certification #: 37712

**Pace Analytical Services Peachtree Corners** 

110 Technology Pkwy, Peachtree Corners, GA 30092 Florida DOH Certification #: E87315 Georgia DW Inorganics Certification #: 812 South Carolina Certification #: 99006001 Florida/NELAP Certification #: E87627 Kentucky UST Certification #: 84 Virginia/VELAP Certification #: 460221

North Carolina Wastewater Certification #: 40 South Carolina Certification #: 99030001 Virginia/VELAP Certification #: 460222

North Carolina Certification #: 381 South Carolina Certification #: 98011001



## **SAMPLE ANALYTE COUNT**

Project: Shoal Creek Sludge

Pace Project No.: 92523530

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92523530001	Shoal Creek Sludge Cake	9071B	WAM	1	PASI-C
		EPA 6010D	DRB, KH	8	PASI-GA
		EPA 6010D	DRB	7	PASI-GA
		EPA 8270E	PKS	18	PASI-C
		EPA 8260D	SAS	14	PASI-C
		SW-846	KDF	1	PASI-C
		EPA 9095B	SMK	1	PASI-A
		EPA 350.1 Rev 2.0 1993 Mod.	KDF1	1	PASI-A
		EPA 353.2 Rev 2.0 1993	CJL	3	PASI-A

PASI-A = Pace Analytical Services - Asheville PASI-C = Pace Analytical Services - Charlotte

PASI-GA = Pace Analytical Services - Peachtree Corners, GA



## **ANALYTICAL RESULTS**

Project: Shoal Creek Sludge

Pace Project No.: 92523530

Date: 03/05/2021 09:53 AM

Sample: Shoal Creek Sludge Cake	Lab ID: 925	23530001	Collected: 02/23/2	1 08:32	Received: 02	2/23/21 11:58 <b>I</b>	Matrix: Solid	
Results reported on a "dry weight" b	asis and are adj	usted for p	ercent moisture, sa	mple s	ize and any dilu	tions.		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
9071 SGT-HEM, TPH	Analytical Meth	nod: 9071B	Preparation Method	: 9071E	<b>,</b>			
	Pace Analytica	l Services -	Charlotte					
Total Petroleum Hydrocarbons	ND	mg/kg	566	1	03/04/21 11:45	03/04/21 14:16		N2
6010D ATL ICP	Analytical Meth	nod: EPA 60	10D Preparation Me	thod: E	PA 3050B			
	Pace Analytica	l Services -	Peachtree Corners,	GA				
Arsenic	ND	mg/kg	5.9	1	03/01/21 14:42	03/02/21 19:54	7440-38-2	
Barium	282	mg/kg	2.0	1		03/02/21 00:51		
Cadmium	ND	mg/kg	2.0	1		03/02/21 00:51		
Chromium	13.7	mg/kg	2.0	1		03/02/21 00:51		
Lead	6.6	mg/kg	4.9	1		03/02/21 19:54		
Phosphorus	33800	mg/kg	3930	100	03/01/21 14:42			
Selenium	ND	mg/kg	7.9	1		03/02/21 00:51		
Silver	ND	mg/kg	2.0	1		03/02/21 00:51		
COLOR ATL ICR TOLR	Analytical Moth		10D Droporation Ma	thad. F	TDA 2010A			
6010D ATL ICP, TCLP	•		10D Preparation Me			1-11-0-05		
			PA 1311; 02/25/21 15		ilai ph: 8.89; Fina	I pH: 6.05		
	Pace Analytica	I Services -	Peachtree Corners,	GA				
Arsenic	ND	mg/L	0.30	1	02/26/21 11:51	02/26/21 20:40	7440-38-2	
Barium	ND	mg/L	0.50	1	02/26/21 11:51	02/26/21 20:40	7440-39-3	
Cadmium	ND	mg/L	0.10	1		02/26/21 20:40		
Chromium	ND	mg/L	0.10	1		02/26/21 20:40		
_ead	ND	mg/L	0.25	1		02/26/21 20:40		
Selenium	ND	mg/L	0.40	1		02/26/21 20:40		
Silver	ND	mg/L	0.10	1	02/26/21 11:51	02/26/21 20:40	7440-22-4	
3270E TCLP RVE	Analytical Meth	nnd: EPA 82	70E Preparation Me	thod: F	PΔ 3510C			
SZIVE FOLI KVE	•		PA 1311; 02/24/21 15			I n LI · E		
	Pace Analytica			.14 11111	liai pi i. 5.56, i ilia	i pi i. 5		
1,4-Dichlorobenzene	ND	ug/L	50.0	1	02/25/21 14:44	02/26/21 14:07	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	50.0	1		02/26/21 14:07		
Hexachloro-1,3-butadiene	ND	ug/L	50.0	1		02/26/21 14:07		
Hexachlorobenzene	ND	ug/L	50.0	1		02/26/21 14:07		
Hexachloroethane	ND	ug/L	50.0	1		02/26/21 14:07		
2-Methylphenol(o-Cresol)	ND	ug/L	50.0	1	02/25/21 14:44			
3&4-Methylphenol(m&p Cresol)	231	ug/L	50.0	1		02/26/21 14:07		
Nitrobenzene	ND	ug/L	50.0	1		02/26/21 14:07		
Pentachlorophenol	ND	ug/L	100	1		02/26/21 14:07		
Pyridine	ND	ug/L	50.0	1		02/26/21 14:07		
-yndine 2,4,5-Trichlorophenol	ND ND	ug/L ug/L	50.0	1		02/26/21 14:07		
2,4,6-Trichlorophenol	ND ND	ug/L ug/L	50.0	1		02/26/21 14:07		
z,4,6-meniorophenoi <b>Surrogates</b>	ואט	ug/L	50.0	ı	02/23/21 14.44	02/20/21 14.07	00-00-2	
Nitrobenzene-d5 (S)	79	%	10-144	1	02/25/21 14:44	02/26/21 14:07	4165-60-0	
2-Fluorobiphenyl (S)	74	%	10-130	1		02/26/21 14:07		
Terphenyl-d14 (S)	137	%	34-163	1		02/26/21 14:07		
Phenol-d6 (S)	43	%	10-130	1	02/25/21 14:44			



## **ANALYTICAL RESULTS**

Project: Shoal Creek Sludge

Pace Project No.: 92523530

Date: 03/05/2021 09:53 AM

Sample: Shoal Creek Sludge Cake	Lab ID: 9252	23530001	Collected: 02/23/2	21 08:3	2 Received: 02	2/23/21 11:58 N	latrix: Solid	
Results reported on a "dry weight" b	asis and are adj	usted for p	ercent moisture, sa	mple s	size and any dilu	tions.		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
3270E TCLP RVE	Analytical Meth	od: EPA 82	270E Preparation Me	thod: E	EPA 3510C			
	Leachate Meth	od/Date: E	PA 1311; 02/24/21 15	:14 Ini	tial pH: 5.38; Fina	l pH: 5		
	Pace Analytica	Services -	Charlotte					
Surrogates								
2-Fluorophenol (S)	56	%	10-130	1	02/25/21 14:44	02/26/21 14:07	367-12-4	
2,4,6-Tribromophenol (S)	89	%	10-144	1	02/25/21 14:44	02/26/21 14:07	118-79-6	
3260D MSV TCLP	Analytical Meth	od: EPA 82	260D Leachate Meth	od/Dat	e: EPA 1311; 03/0	1/21 13:34		
	Pace Analytica							
Benzene	ND	ug/L	100	20		03/02/21 12:18	71-43-2	
2-Butanone (MEK)	ND	ug/L	200	20		03/02/21 12:18	78-93-3	
Carbon tetrachloride	ND	ug/L	100	20		03/02/21 12:18	56-23-5	
Chlorobenzene	ND	ug/L	100	20		03/02/21 12:18	108-90-7	
Chloroform	ND	ug/L	100	20		03/02/21 12:18	67-66-3	
,4-Dichlorobenzene	ND	ug/L	100	20		03/02/21 12:18	106-46-7	
,2-Dichloroethane	ND	ug/L	100	20		03/02/21 12:18	107-06-2	
,1-Dichloroethene	ND	ug/L	100	20		03/02/21 12:18	75-35-4	
etrachloroethene	ND	ug/L	100	20		03/02/21 12:18	127-18-4	
richloroethene	ND	ug/L	100	20		03/02/21 12:18	79-01-6	
/inyl chloride	ND	ug/L	100	20		03/02/21 12:18	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	89	%	70-130	20		03/02/21 12:18	17060-07-0	
Toluene-d8 (S)	111	%	67-135	20		03/02/21 12:18	2037-26-5	
l-Bromofluorobenzene (S)	103	%	70-130	20		03/02/21 12:18	460-00-4	
Percent Moisture	Analytical Meth	od: SW-84	6					
	Pace Analytica	Services -	Charlotte					
Percent Moisture	87.6	%	0.10	1		02/24/21 17:12		N2
095 Paint Filter Liquid Test	Analytical Meth	od: EPA 90	)95B					
•	Pace Analytica							
Free Liquids	Pass		1.0	1		03/02/21 11:47		T3
850.1 Ammonia	Analytical Meth Pace Analytica		50.1 Rev 2.0 1993 Mo	od. Pre	paration Method:	EPA 350.1 Rev 2	2.0 1993 Mod.	
Nitrogen, Ammonia	4650	mg/kg	70.7	1	02/24/21 10:22	02/24/21 14:54	7664-41-7	
353.2 Nitrogen, NO2/NO3	Analytical Meth Pace Analytica		53.2 Rev 2.0 1993 Pr Asheville	reparat	ion Method: EPA 3	353.2 Kev 2.0 19	93	
Nitrogen, NO2 plus NO3	ND	mg/kg	30.4	1	02/23/21 22:14	02/24/21 01:23		
litrogen, Nitrate	ND	mg/kg	30.4	1		02/24/21 01:23		
Nitrogen, Nitrite	ND	mg/kg	30.4	1	02/23/21 22:14			



Project: Shoal Creek Sludge

Pace Project No.: 92523530

Date: 03/05/2021 09:53 AM

QC Batch: 604217 Analysis Method: 9071B

QC Batch Method: 9071B Analysis Description: 9071B SGT-HEM, TPH Gravimetric

Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92523530001

METHOD BLANK: 3183111 Matrix: Solid

Associated Lab Samples: 92523530001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Total Petroleum Hydrocarbons mg/kg ND 68.9 03/04/21 14:16 N2

LABORATORY CONTROL SAMPLE: 3183112

Spike LCS LCS % Rec
Parameter Units Conc. Result % Rec Limits Qualifiers

Total Petroleum Hydrocarbons mg/kg 667 570 86 78-114 N2

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3183113 3183114

MS MSD 92523517001 Spike Spike

MS MSD MS MSD % Rec Parameter Units % Rec Limits **RPD** Qual Result Conc. Conc. Result Result % Rec 477 Total Petroleum Hydrocarbons mg/kg 3230 3310 1600 2220 35 53 78-114 32 M1, N2, R1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Shoal Creek Sludge

Pace Project No.: 92523530

Date: 03/05/2021 09:53 AM

QC Batch: 603326 Analysis Method: EPA 6010D
QC Batch Method: EPA 3050B Analysis Description: 6010D ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92523530001

METHOD BLANK: 3178799 Matrix: Solid

Associated Lab Samples: 92523530001

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Arsenic	mg/kg	ND	3.0	03/02/21 19:24	
Barium	mg/kg	ND	1.0	03/02/21 00:36	
Cadmium	mg/kg	ND	1.0	03/02/21 00:36	
Chromium	mg/kg	ND	1.0	03/02/21 00:36	
Lead	mg/kg	ND	2.5	03/02/21 19:24	
Phosphorus	mg/kg	ND	20.0	03/02/21 00:36	
Selenium	mg/kg	ND	4.0	03/02/21 00:36	
Silver	mg/kg	ND	1.0	03/02/21 00:36	

LABORATORY CONTROL SAMPLE:	3178800	0. "				
_		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Arsenic	mg/kg	94.3	93.0	99	80-120	
Barium	mg/kg	94.3	97.2	103	80-120	
Cadmium	mg/kg	94.3	93.6	99	80-120	
Chromium	mg/kg	94.3	96.9	103	80-120	
Lead	mg/kg	94.3	94.8	101	80-120	
Phosphorus	mg/kg	94.3	95.1	101	80-120	
Selenium	mg/kg	94.3	92.1	98	80-120	
Silver	mg/kg	94.3	90.8	96	80-120	

MATRIX SPIKE & MATRIX SP	PIKE DUPLICAT	E: 31788	01		3178803						
			MS	MSD							
	925	24325001	Spike	Spike	MS	MSD	MS	MSD	% Rec		
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual
Arsenic	mg/kg	7.3	121	117	119	121	92	97	75-125	1	
Barium	mg/kg	300	121	117	444	456	119	134	75-125	3 N	<i>I</i> 11
Cadmium	mg/kg	ND	121	117	117	116	97	99	75-125	1	
Chromium	mg/kg	19.3	121	117	136	134	97	99	75-125	1	
Lead	mg/kg	ND	121	117	139	142	112	119	75-125	2	
Phosphorus	mg/kg	305	121	117	393	462	72	135	75-125	16 N	<i>l</i> 11
Selenium	mg/kg	ND	121	117	112	114	91	97	75-125	3	
Silver	mg/kg	ND	121	117	115	113	92	94	75-125	2	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Shoal Creek Sludge

Pace Project No.: 92523530

QC Batch: 602906 Analysis Method: EPA 6010D

QC Batch Method: EPA 3010A Analysis Description: 6010D ATL TCLP

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92523530001

METHOD BLANK: 3173475 Matrix: Water

3176674

Associated Lab Samples: 92523530001

LABORATORY CONTROL SAMPLE:

Date: 03/05/2021 09:53 AM

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.30	02/26/21 19:51	
Barium	mg/L	ND	0.50	02/26/21 19:51	
Cadmium	mg/L	ND	0.10	02/26/21 19:51	
Chromium	mg/L	ND	0.10	02/26/21 19:51	
Lead	mg/L	ND	0.25	02/26/21 19:51	
Selenium	mg/L	ND	0.40	02/26/21 19:51	
Silver	mg/L	ND	0.10	02/26/21 19:51	

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Arsenic	mg/L	10	9.3	93	80-120	
Barium	mg/L	10	9.2	92	80-120	
Cadmium	mg/L	10	9.3	93	80-120	
Chromium	mg/L	10	9.5	95	80-120	

Lead mg/L 10 9.6 96 80-120 Selenium mg/L 10 10.2 102 80-120 Silver mg/L 10 9.3 93 80-120

MATRIX SPIKE & MATRIX SP	PIKE DUPLICAT	E: 31766	75		3176676						
	924	523436001	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual
Arsenic	mg/L	ND	10	10	10.5	10.2	105	102	75-125		
Barium	mg/L	ND	10	10	9.7	9.7	97	97	75-125	0	
Cadmium	mg/L	ND	10	10	10.1	10.0	101	100	75-125	0	
Chromium	mg/L	ND	10	10	9.7	9.8	97	97	75-125	1	
Lead	mg/L	ND	10	10	9.7	9.8	97	98	75-125	1	
Selenium	mg/L	ND	10	10	10.7	10.4	106	102	75-125	3	
Silver	mg/L	ND	10	10	9.9	10.0	99	100	75-125	1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Shoal Creek Sludge

Pace Project No.: 92523530

Date: 03/05/2021 09:53 AM

QC Batch: 603513 Analysis Method: EPA 8260D

QC Batch Method: EPA 8260D Analysis Description: 8260D MSV TCLP

Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92523530001

METHOD BLANK: 3179462 Matrix: Water

Associated Lab Samples: 92523530001

Demonstra	11.26	Blank	Reporting	A l l	0
Parameter	Units	Result	Limit	Analyzed	Qualifiers
,1-Dichloroethene	ug/L	ND	5.0	03/02/21 11:08	
,2-Dichloroethane	ug/L	ND	5.0	03/02/21 11:08	
,4-Dichlorobenzene	ug/L	ND	5.0	03/02/21 11:08	
P-Butanone (MEK)	ug/L	ND	10.0	03/02/21 11:08	
Benzene	ug/L	ND	5.0	03/02/21 11:08	
Carbon tetrachloride	ug/L	ND	5.0	03/02/21 11:08	
Chlorobenzene	ug/L	ND	5.0	03/02/21 11:08	
Chloroform	ug/L	ND	5.0	03/02/21 11:08	
etrachloroethene	ug/L	ND	5.0	03/02/21 11:08	
richloroethene	ug/L	ND	5.0	03/02/21 11:08	
'inyl chloride	ug/L	ND	5.0	03/02/21 11:08	
,2-Dichloroethane-d4 (S)	%	95	70-130	03/02/21 11:08	
-Bromofluorobenzene (S)	%	101	70-130	03/02/21 11:08	
oluene-d8 (S)	%	107	67-135	03/02/21 11:08	

LABORATORY CONTROL SAMPLE:	3179461					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,1-Dichloroethene	ug/L	50	54.3	109	70-132	
1,2-Dichloroethane	ug/L	50	49.9	100	70-130	
1,4-Dichlorobenzene	ug/L	50	50.8	102	70-130	
2-Butanone (MEK)	ug/L	100	99.8	100	70-133	
Benzene	ug/L	50	51.1	102	70-130	
Carbon tetrachloride	ug/L	50	52.6	105	70-130	
Chlorobenzene	ug/L	50	51.0	102	70-130	
Chloroform	ug/L	50	50.5	101	70-130	
Tetrachloroethene	ug/L	50	49.4	99	70-130	
Trichloroethene	ug/L	50	54.6	109	70-130	
Vinyl chloride	ug/L	50	43.1	86	59-142	
1,2-Dichloroethane-d4 (S)	%			104	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Toluene-d8 (S)	%			97	67-135	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Shoal Creek Sludge

Pace Project No.: 92523530

Date: 03/05/2021 09:53 AM

MATRIX SPIKE & MATRIX SPIR	L DOI LIOAI	E: 31794	MS	MSD	3179464						
	925	524406001	Spike	Spike	MS	MSD	MS	MSD	% Rec		
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qua
1,1-Dichloroethene	ug/L	ND	50	50	51.8	53.7	104	107	70-158	4	
1,2-Dichloroethane	ug/L	ND	50	50	47.4	48.0	95	96	67-138	1	
1,4-Dichlorobenzene	ug/L	ND	50	50	50.4	51.9	101	104	70-133	3	
2-Butanone (MEK)	ug/L	ND	100	100	85.1	85.6	85	86	61-147	1	
Benzene	ug/L	ND	50	50	49.3	50.4	99	101	67-150	2	
Carbon tetrachloride	ug/L	ND	50	50	54.2	57.6	108	115	70-147	6	
Chlorobenzene	ug/L	ND	50	50	50.6	51.8	101	104	70-137	2	
Chloroform	ug/L	ND	50	50	50.0	53.4	100	107	70-144	7	
Tetrachloroethene	ug/L	ND	50	50	47.3	48.6	93	96	70-139	3	
Trichloroethene	ug/L	ND	50	50	49.9	54.3	100	109	70-149	9	
Vinyl chloride	ug/L	ND	50	50	41.7	41.5	83	83	55-172	1	
1,2-Dichloroethane-d4 (S)	%						100	102	70-130		
4-Bromofluorobenzene (S)	%						99	101	70-130		
Toluene-d8 (S)	%						101	101	67-135		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Shoal Creek Sludge

Pace Project No.: 92523530

Date: 03/05/2021 09:53 AM

QC Batch: 602641 Analysis Method: EPA 8270E

QC Batch Method: EPA 3510C Analysis Description: 8270E TCLP MSSV

Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92523530001

METHOD BLANK: 3173201 Matrix: Water

Associated Lab Samples: 92523530001

Parameter	Units	Blank Result	Reporting Limit	Analyzad	Qualifiers
Farameter	UTIILS			Analyzed	
1,4-Dichlorobenzene	ug/L	ND	50.0	02/25/21 17:11	
2,4,5-Trichlorophenol	ug/L	ND	50.0	02/25/21 17:11	
2,4,6-Trichlorophenol	ug/L	ND	50.0	02/25/21 17:11	
2,4-Dinitrotoluene	ug/L	ND	50.0	02/25/21 17:11	
2-Methylphenol(o-Cresol)	ug/L	ND	50.0	02/25/21 17:11	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	50.0	02/25/21 17:11	
Hexachloro-1,3-butadiene	ug/L	ND	50.0	02/25/21 17:11	
Hexachlorobenzene	ug/L	ND	50.0	02/25/21 17:11	
Hexachloroethane	ug/L	ND	50.0	02/25/21 17:11	
Nitrobenzene	ug/L	ND	50.0	02/25/21 17:11	
Pentachlorophenol	ug/L	ND	100	02/25/21 17:11	
Pyridine	ug/L	ND	50.0	02/25/21 17:11	
2,4,6-Tribromophenol (S)	%	126	10-144	02/25/21 17:11	
2-Fluorobiphenyl (S)	%	99	10-130	02/25/21 17:11	
2-Fluorophenol (S)	%	83	10-130	02/25/21 17:11	
Nitrobenzene-d5 (S)	%	116	10-144	02/25/21 17:11	
Phenol-d6 (S)	%	64	10-130	02/25/21 17:11	
Terphenyl-d14 (S)	%	142	34-163	02/25/21 17:11	

LABORATORY CONTROL SAMPLE:	3175330					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	500	345	69	18-130	
2,4,5-Trichlorophenol	ug/L	500	637	127	35-130	
2,4,6-Trichlorophenol	ug/L	500	593	119	31-130	
2,4-Dinitrotoluene	ug/L	500	600	120	37-136	
2-Methylphenol(o-Cresol)	ug/L	500	488	98	35-130	
3&4-Methylphenol(m&p Cresol)	ug/L	500	485	97	34-130	
Hexachloro-1,3-butadiene	ug/L	500	276	55	11-130	
Hexachlorobenzene	ug/L	500	626	125	38-130	
Hexachloroethane	ug/L	500	294	59	14-130	
Nitrobenzene	ug/L	500	518	104	36-130	
Pentachlorophenol	ug/L	1000	1450	145	23-149	
Pyridine	ug/L	500	325	65	10-130	
2,4,6-Tribromophenol (S)	%			141	10-144	
2-Fluorobiphenyl (S)	%			78	10-130	
2-Fluorophenol (S)	%			66	10-130	
Nitrobenzene-d5 (S)	%			93	10-144	
Phenol-d6 (S)	%			54	10-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Shoal Creek Sludge

Pace Project No.: 92523530

Terphenyl-d14 (S)

Terphenyl-d14 (S)

Date: 03/05/2021 09:53 AM

LABORATORY CONTROL SAMPLE: 3175330

Spike LCS LCS % Rec

145

34-163

138

143

34-163

Parameter Units Conc. Result % Rec Limits Qualifiers

%

%

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3175331 3175332 MS MSD MS 92523680001 MS MSD MSD % Rec Spike Spike % Rec **RPD** Parameter Units Result Conc. Conc. Result Result % Rec Limits Qual ND 1,4-Dichlorobenzene 500 500 422 10-130 ug/L 443 84 89 5 ND 2,4,5-Trichlorophenol ug/L 500 500 709 721 142 144 10-143 2 M1 ND 2,4,6-Trichlorophenol ug/L 500 500 680 671 136 134 10-147 1 ND 2,4-Dinitrotoluene ug/L 500 500 674 655 135 131 29-148 3 ND 500 2-Methylphenol(o-Cresol) ug/L 500 538 581 108 116 20-130 8 3&4-Methylphenol(m&p ND ug/L 500 500 526 568 105 114 16-130 8 Cresol) ND Hexachloro-1,3-butadiene ug/L 500 500 409 404 82 81 10-130 Hexachlorobenzene ug/L ND 500 500 626 654 125 131 29-130 5 M1 ug/L ND 500 500 393 402 79 10-130 2 Hexachloroethane 80 Nitrobenzene ug/L ND 500 500 586 604 117 121 25-130 3 ND Pentachlorophenol ug/L 1000 1000 1330 1440 133 144 10-175 8 ug/L ND Pyridine 500 500 348 412 70 82 10-130 17 2,4,6-Tribromophenol (S) % 132 138 10-144 2-Fluorobiphenyl (S) % 97 93 10-130 2-Fluorophenol (S) % 68 78 10-130 Nitrobenzene-d5 (S) % 104 108 10-144 % Phenol-d6 (S) 57 63 10-130

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



SW-846

Project: Shoal Creek Sludge

Pace Project No.: 92523530

QC Batch: 602385

Analysis Method: QC Batch Method: SW-846 Analysis Description: Dry Weight/Percent Moisture

Pace Analytical Services - Charlotte Laboratory:

Associated Lab Samples: 92523530001

SAMPLE DUPLICATE: 3174089

35609501001 Dup RPD Parameter Units Result Result Qualifiers 22.1 Percent Moisture % 18.9 15 N2

SAMPLE DUPLICATE: 3174090

Date: 03/05/2021 09:53 AM

92523696002 Dup Parameter Units Result Result **RPD** Qualifiers 92.2 % 0 N2 Percent Moisture 92.2

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project:

Shoal Creek Sludge

Pace Project No.:

92523530

QC Batch:

QC Batch Method:

603143

EPA 9095B

Analysis Method:

EPA 9095B

Analysis Description:

Fail

9095 PAINT FILTER LIQUID TEST

Laboratory:

Pace Analytical Services - Asheville

Associated Lab Samples: 92523530001

Parameter

SAMPLE DUPLICATE: 3177941

Date: 03/05/2021 09:53 AM

Units

92523634005 Result

Dup Result

RPD

Fail

Qualifiers

Free Liquids

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Shoal Creek Sludge

Pace Project No.: 92523530

Date: 03/05/2021 09:53 AM

QC Batch: 602171 Analysis Method: EPA 350.1 Rev 2.0 1993 Mod.

QC Batch Method: EPA 350.1 Rev 2.0 1993 Mod. Analysis Description: 350.1 Ammonia

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92523530001

METHOD BLANK: 3172791 Matrix: Solid

Associated Lab Samples: 92523530001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Nitrogen, Ammonia mg/kg ND 9.6 02/24/21 14:42

LABORATORY CONTROL SAMPLE: 3172792

Spike LCS LCS % Rec
Parameter Units Conc. Result % Rec Limits Qualifiers

Nitrogen, Ammonia mg/kg 490 488 100 90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3172793 3172794

MSD MS 70161122001 Spike Spike MS MSD MS MSD % Rec Parameter Units % Rec Limits **RPD** Qual Result Conc. Conc. Result Result % Rec 4670 3 M1 Nitrogen, Ammonia mg/kg 2030 1990 6820 7020 107 119 90-110

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Shoal Creek Sludge

Pace Project No.: 92523530

QC Batch: 602088

QC Batch Method: EPA 353.2 Rev 2.0 1993

Analysis Method:

EPA 353.2 Rev 2.0 1993

Analysis Description: 353.2 Nitrate + Nitrite

Laboratory:

Pace Analytical Services - Asheville

Associated Lab Samples: 92523530001

METHOD BLANK: 3172585

Date: 03/05/2021 09:53 AM

Matrix: Solid

Associated Lab Samples: 92523530001

Blank Reporting Qualifiers Parameter Units Result Limit Analyzed Nitrogen, Nitrate ND 4.0 02/24/21 01:17 mg/kg Nitrogen, Nitrite ND 4.0 02/24/21 01:17 mg/kg Nitrogen, NO2 plus NO3 ND mg/kg 4.0 02/24/21 01:17

LABORATORY CONTROL SAMPLE: 3172586

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/kg		14.8	99	90-110	
Nitrogen, Nitrite	mg/kg	10	9.9	99	90-110	
Nitrogen, NO2 plus NO3	mg/kg	25	24.7	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3172588 MS MSD MSD 92523533001 Spike Spike MS MS MSD % Rec Parameter Conc. Result % Rec **RPD** Qual Units Result Conc. Result % Rec Limits Nitrogen, Nitrate mg/kg ND 73.4 73.4 70.0 90-110 2 71.3 95 97 mg/kg ND 49.1 46.5 90-110 Nitrogen, Nitrite 49.1 46.7 96 95 0 ND Nitrogen, NO2 plus NO3 mg/kg 122 122 117 118 94 95 90-110 1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



#### **QUALIFIERS**

Project: Shoal Creek Sludge

Pace Project No.: 92523530

#### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

#### **ANALYTE QUALIFIERS**

Date: 03/05/2021 09:53 AM

- M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- N2 The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
- R1 RPD value was outside control limits.
- T3 Insufficient sample received from client to perform the analysis per EPA method requirements.



## **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: Shoal Creek Sludge

Pace Project No.: 92523530

Date: 03/05/2021 09:53 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92523530001	Shoal Creek Sludge Cake	9071B	604217	9071B	604256
92523530001	Shoal Creek Sludge Cake	EPA 3050B	603326	EPA 6010D	603392
92523530001	Shoal Creek Sludge Cake	EPA 3010A	602906	EPA 6010D	602993
92523530001	Shoal Creek Sludge Cake	EPA 3510C	602641	EPA 8270E	602732
92523530001	Shoal Creek Sludge Cake	EPA 8260D	603513		
92523530001	Shoal Creek Sludge Cake	SW-846	602385		
92523530001	Shoal Creek Sludge Cake	EPA 9095B	603143		
92523530001	Shoal Creek Sludge Cake	EPA 350.1 Rev 2.0 1993 Mod.	602171	EPA 350.1 Rev 2.0 1993 Mod.	602235
92523530001	Shoal Creek Sludge Cake	EPA 353.2 Rev 2.0 1993	602088	EPA 353.2 Rev 2.0 1993	602090

Analysis	Total Phosphorus  Total Metals  TCLP Semi-Volatiles  TCLP Volatiles  TCLP Metals  TPH (Total petroleum Hydrocarbor	ns	x x x x x x					Additional Information:			MO#: 92523530		92523530
	Paint Filter 503 Parameters	$\dashv$	×					4	25	50	Ø.	1158	
	Composite/Grab		g					8:32	Time: 🐠: 05	: 10:05	Time: 10:18	: [[8	
		Pres.	Ice					Time:	Time	Time:	Time	Time:	
4	CLAY CLAY CLAY TH TH Ater Reclam 688 Flin Jonesbord 478-7496 nit #: GA00	Sample Description	Shoal Creek Sludge Cake					Wings Date: 2-15-21	Date:	Ø Date:	م, Date:	Pull Date:	1 1
	(770) W Verr	Time	8:32			:		Share Wingst		Jas Jews Jas	•	.\ ~	
		Date	2-23-21					Sampled By:	Relinquished By:	Received By:	Relinquished By:	Received By: K	

#### 

Asheville Eden Greenwood _	_ Huntersville	Raleigh	Mechanicsville Atlanta Kernersville
Sample Condition Upon Receipt  Clastau  Clastau  Descript  Clastau  Descript  Upon Receipt  Upon Receipt	County W	Proje <u>Voutev</u> f □Client	PM: JS Due Date: 03/04/21 CLIENT: GA-ClaytonWW
tody Seal Present? Yes ANO Se	als Intact? . Yes	□No	Date/Initials Person Examining Contents: 2/28/21 K
ermometer:  1R Gun ID: THE 33  Correction Facoler Temp:  Add/Subtract	Type of Ice: ctor: - (°C) - 0-2	Other	Biological Tissue Frozen?  Yes None  None  Temp should be above freezing to 6°C  Samples out of temp criteria. Samples on ice, cooling process
oler Temp Corrected (°C):  DA Regulated Soil ( \sum N/A, water sample)  I samples originate in a quarantine zone within the l	United States: CA, NY, or So	C (check maps)?	has begun
Lites Chie			Comments/Discrepancy:
Chain of Custody Present?	€ Yes □No	□N/A 1.	
Samples Arrived within Hold Time?	∰Yes □No	□N/A 2.	(4)
Short Hold Time Analysis (<72 hr.)?	□Yes □NO	□N/A 3.	
Rush Turn Around Time Requested?	☐Yes ☐No		
Sufficient Volume?	Æres □No	□N/A 5.	CLIENT PROVIDED
Correct Containers Used? -Pace Containers Used?	ØYES □NO □YES ØHO	□N/A 6. □N/A	
Containers Intact?	☐Yes □No	□N/A 7.	
Dissolved analysis: Samples Field Filtered?	☐Yes ☐No	<u>□N/A</u> 8.	
Sample Labels Match COC?  -Includes Date/Time/ID/Analysis Matrix:	□Yes <b>©</b> No	□N/A 9.	. Take and time samples not present.
Headspace in VOA Vials (>5-6mm)?	□Yes □No	€N/A 1	0.
Trip Blank Present?	Yes No		1.
Trip Blank Custody Seals Present?	□Yes □No	EIN/A	
COMMENTS/SAMPLE DISCREPANCY			Field Data Required? ☐Yes ☐No
CLIENT NOTIFICATION/RESOLUTION			Lot ID of split containers:
Person contacted:		Date/Time	:
Project Manager SCURF Review:	<i></i>		Date:
Project Manager SRF Review:			Date:





March 05, 2021

Jennifer Brandon Clayton Co Water Authority 688 Flint River Road Jonesboro, GA 30238

RE: Project: Northeast Sludge Cake

Pace Project No.: 92523533

#### Dear Jennifer Brandon:

Enclosed are the analytical results for sample(s) received by the laboratory on February 23, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services Asheville
- Pace Analytical Services Charlotte
- Pace Analytical Services Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

John Stanton

john.stanton@pacelabs.com (770)734-4200

gon D. Starte

Project Manager

**Enclosures** 

cc: Van Beaty, Clayton Co Water Authority
Tony Somerville, Clayton Co Water Authority





#### **CERTIFICATIONS**

Project: Northeast Sludge Cake

Pace Project No.: 92523533

**Pace Analytical Services Charlotte** 

9800 Kincey Ave. Ste 100, Huntersville, NC 28078 Louisiana/NELAP Certification # LA170028 North Carolina Drinking Water Certification #: 37706 North Carolina Field Services Certification #: 5342

North Carolina Wastewater Certification #: 12

**Pace Analytical Services Asheville** 

2225 Riverside Drive, Asheville, NC 28804 Florida/NELAP Certification #: E87648

North Carolina Drinking Water Certification #: 37712

**Pace Analytical Services Peachtree Corners** 

110 Technology Pkwy, Peachtree Corners, GA 30092 Florida DOH Certification #: E87315 Georgia DW Inorganics Certification #: 812 South Carolina Certification #: 99006001 Florida/NELAP Certification #: E87627 Kentucky UST Certification #: 84 Virginia/VELAP Certification #: 460221

North Carolina Wastewater Certification #: 40 South Carolina Certification #: 99030001 Virginia/VELAP Certification #: 460222

North Carolina Certification #: 381 South Carolina Certification #: 98011001



## **SAMPLE ANALYTE COUNT**

Project: Northeast Sludge Cake

Pace Project No.: 92523533

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92523533001	Northeast Sludge Cake	9071B	WAM	1	PASI-C
		EPA 6010D	DRB, KH	7	PASI-GA
		EPA 6010D	DRB	8	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 7471B	VB	1	PASI-GA
		EPA 8270E	PKS	18	PASI-C
		EPA 8260D	SAS	14	PASI-C
		SW-846	KDF	1	PASI-C
		EPA 9095B	SMK	1	PASI-A
		TKN+NO3+NO2 Calculation	EWS	1	PASI-A
		EPA 350.1 Rev 2.0 1993 Mod.	KDF1	1	PASI-A
		EPA 351.2 Rev 2.0 1993	MFO	1	PASI-A
		EPA 353.2 Rev 2.0 1993	CJL	3	PASI-A

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA



Date: 03/05/2021 09:51 AM

## **ANALYTICAL RESULTS**

Project: Northeast Sludge Cake

Sample: Northeast Sludge Cake	Lab ID: 925		Collected: 02/22/2				Matrix: Solid	
Results reported on a "dry weight	" basis and are adj	usted for per			size and any dilui	ions.		
Parameters	Results —	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
9071 SGT-HEM, TPH	Analytical Meth	od: 9071B P	Preparation Method:	9071E	3			
ŕ	Pace Analytica	l Services - C	harlotte					
Total Petroleum Hydrocarbons	519	mg/kg	363	1	03/04/21 11:45	03/04/21 14:16		N2
6010D ATL ICP	Analytical Meth	od: EPA 6010	0D Preparation Me	thod: E	PA 3050B			
	•		eachtree Corners,					
Arsenic	5.4	mg/kg	3.7	1	03/01/21 14:42	03/02/21 20:03	7440-38-2	
Barium	295	mg/kg	1.2	1		03/02/21 20:03		
Cadmium	ND		1.2	1		03/02/21 00:56		
		mg/kg						
Chromium	24.2	mg/kg	1.2	1		03/02/21 00:56		
_ead	4.1	mg/kg	3.1	1		03/02/21 00:56		
Selenium	6.4	mg/kg	5.0	1		03/02/21 00:56		
Silver	1.2	mg/kg	1.2	1	03/01/21 14:42	03/02/21 00:56	7440-22-4	
6010D ATL ICP, TCLP	Analytical Meth	od: EPA 601	0D Preparation Me	thod: E	PA 3010A			
	Leachate Meth	od/Date: EPA	A 1311; 02/25/21 15	:30 Ini	tial pH: 9.05; Fina	l pH: 5.45		
	Pace Analytica	l Services - P	eachtree Corners,	GA				
Arsenic	ND	mg/L	0.30	1	02/26/21 11:51	02/26/21 20:44	7440-38-2	
Barium	ND	mg/L	0.50	1	02/26/21 11:51	02/26/21 20:44	7440-39-3	
Cadmium	ND	mg/L	0.10	1	02/26/21 11:51	02/26/21 20:44	7440-43-9	
Chromium	ND	mg/L	0.10	1		02/26/21 20:44		
_ead	ND	mg/L	0.25	1		02/26/21 20:44		
Phosphorus	32.9	mg/L	0.50	1	02/26/21 11:51			
Selenium	ND	mg/L	0.40	1		02/26/21 20:44		
Silver	ND	mg/L	0.10	1		02/26/21 20:44		
		-					-	
7470 Mercury, TCLP	•		0A Preparation Me			l ml l. E 4E		
			\ 1311; 02/25/21 15 eachtree Corners, (		tiai pH: 9.05; Fina	i pm: 5.45		
-	•	-	·					
Mercury	ND	mg/L	0.0050	1	03/01/21 09:15	03/01/21 14:10	7439-97-6	
7471 Mercury	Analytical Meth	od: EPA 747	1B Preparation Me	thod: E	PA 7471B			
	Pace Analytica	l Services - P	eachtree Corners,	GA				
Mercury	ND	mg/kg	0.30	1	03/02/21 10:35	03/02/21 13:08	7439-97-6	
3270E TCLP RVE	Analytical Meth	od: FPA 827	0E Preparation Me	thod: F	PA 3510C			
21.02.102.101	•		A 1311; 02/24/21 15			InH· 5		
	Pace Analytica		•	. 1 - 1111	iiai pi i. 5.77, i iia	i pi i. 5		
	,							
1,4-Dichlorobenzene	ND	ug/L	50.0	1		02/26/21 14:32		
2,4-Dinitrotoluene	ND	ug/L	50.0	1		02/26/21 14:32		
Hexachloro-1,3-butadiene	ND	ug/L	50.0	1		02/26/21 14:32		
Hexachlorobenzene	ND	ug/L	50.0	1	02/25/21 14:44	02/26/21 14:32	118-74-1	
Hexachloroethane	ND	ug/L	50.0	1	02/25/21 14:44	02/26/21 14:32	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	50.0	1	02/25/21 14:44	02/26/21 14:32	95-48-7	
8&4-Methylphenol(m&p Cresol)	ND	ug/L	50.0	1	02/25/21 14:44	02/26/21 14:32	15831-10-4	
Nitrobenzene	ND	ug/L	50.0	1	02/25/21 14:44	02/26/21 14:32	98-95-3	



## **ANALYTICAL RESULTS**

Project: Northeast Sludge Cake

Pace Project No.: 92523533

Date: 03/05/2021 09:51 AM

Sample: Northeast Sludge Cake	Lab ID: 925		Collected: 02/22/2				/latrix: Solid	
Results reported on a "dry weight" _	_	_		-	_			_
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
3270E TCLP RVE	Analytical Meth	nod: EPA 82	70E Preparation Me	thod: E	EPA 3510C			
	Leachate Meth	od/Date: EF	PA 1311; 02/24/21 15	:14 In	itial pH: 5.44; Fina	l pH: 5		
	Pace Analytica				•	•		
Pentachlorophenol	ND	ug/L	100	1	02/25/21 14:44	02/26/21 14:32	87-86-5	
Pyridine	ND	ug/L	50.0	1	02/25/21 14:44	02/26/21 14:32	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	50.0	1	02/25/21 14:44	02/26/21 14:32	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	50.0	1	02/25/21 14:44	02/26/21 14:32	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	80	%	10-144	1	02/25/21 14:44	02/26/21 14:32	4165-60-0	
2-Fluorobiphenyl (S)	73	%	10-130	1	02/25/21 14:44	02/26/21 14:32	321-60-8	
Terphenyl-d14 (S)	145	%	34-163	1	02/25/21 14:44	02/26/21 14:32	1718-51-0	
Phenol-d6 (S)	45	%	10-130	1	02/25/21 14:44	02/26/21 14:32	13127-88-3	
2-Fluorophenol (S)	56	%	10-130	1	02/25/21 14:44	02/26/21 14:32	367-12-4	
2,4,6-Tribromophenol (S)	87	%	10-144	1	02/25/21 14:44	02/26/21 14:32	118-79-6	
3260D MSV TCLP	Analytical Meth	nod: EPA 82	60D Leachate Metho	od/Dat	e: EPA 1311: 03/0	1/21 13:34		
	Pace Analytica				,			
Benzene	ND	ug/L	100	20		03/02/21 12:35	71-43-2	
2-Butanone (MEK)	ND	ug/L	200	20		03/02/21 12:35		
Carbon tetrachloride	ND	ug/L	100	20		03/02/21 12:35	56-23-5	
Chlorobenzene	ND	ug/L	100	20		03/02/21 12:35		
Chloroform	ND	ug/L	100	20		03/02/21 12:35		
1,4-Dichlorobenzene	ND	ug/L	100	20		03/02/21 12:35		
1,2-Dichloroethane	ND	ug/L	100	20		03/02/21 12:35		
1,1-Dichloroethene	ND	ug/L	100	20		03/02/21 12:35	75-35-4	
Tetrachloroethene	ND	ug/L	100	20		03/02/21 12:35	127-18-4	
Trichloroethene	ND	ug/L	100	20		03/02/21 12:35		
Vinyl chloride	ND	ug/L	100	20		03/02/21 12:35	75-01-4	
Surrogates		Ü						
1,2-Dichloroethane-d4 (S)	87	%	70-130	20		03/02/21 12:35	17060-07-0	
Toluene-d8 (S)	111	%	67-135	20		03/02/21 12:35	2037-26-5	
4-Bromofluorobenzene (S)	104	%	70-130	20		03/02/21 12:35	460-00-4	
Percent Moisture	Analytical Meth	nod: SW-840	6					
	Pace Analytica	l Services -	Charlotte					
Percent Moisture	80.7	%	0.10	1		02/24/21 17:12		N2
9095 Paint Filter Liquid Test	Analytical Meth	nod: EPA 90	95B					
	Pace Analytica							
Free Liquids	Pass		1.0	1		03/02/21 11:47		T3
Total Nitrogen Calculation	Analytical Meth	nod: TKN+N	IO3+NO2 Calculation	ı				
	Pace Analytica							
Nitrogen	83000	mg/kg	40.0	1		03/02/21 14:56	7727-37-9	
0 9 0 11	30000	9/119	40.0	•		33,32,21 14.00		



## **ANALYTICAL RESULTS**

Project: Northeast Sludge Cake

Pace Project No.: 92523533

Date: 03/05/2021 09:51 AM

Results reported on a "dry weight"	basis and are adj	usted for per	cent moisture, sa	mple s	size and any dilu	tions.		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia	Analytical Meth Pace Analytica		1 Rev 2.0 1993 Mo sheville	od. Pre	eparation Method:	EPA 350.1 Rev 2	.0 1993 Mod.	
Nitrogen, Ammonia	5040	mg/kg	97.5	2	02/24/21 10:22	02/24/21 15:19	7664-41-7	
351.2 Total Kjeldahl Nitrogen	Analytical Meth Pace Analytica		2 Rev 2.0 1993 Pr sheville	eparat	ion Method: EPA 3	351.2 Rev 2.0 199	93	
Nitrogen, Kjeldahl, Total	83000	mg/kg	2580	10	02/26/21 21:38	02/27/21 07:16	7727-37-9	
353.2 Nitrogen, NO2/NO3	Analytical Meth Pace Analytica		2 Rev 2.0 1993 Pr sheville	eparat	ion Method: EPA 3	353.2 Rev 2.0 199	93	
Nitrogen, NO2 plus NO3 Nitrogen, Nitrate Nitrogen, Nitrite	ND ND ND	mg/kg mg/kg mg/kg	19.6 19.6 19.6	1 1 1	02/23/21 22:14	02/24/21 01:19 02/24/21 01:19 02/24/21 01:19	14797-55-8 14797-65-0	



Project: Northeast Sludge Cake

Pace Project No.: 92523533

Date: 03/05/2021 09:51 AM

QC Batch: 604217 Analysis Method: 9071B

QC Batch Method: 9071B Analysis Description: 9071B SGT-HEM, TPH Gravimetric

Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92523533001

METHOD BLANK: 3183111 Matrix: Solid

Associated Lab Samples: 92523533001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Total Petroleum Hydrocarbons mg/kg ND 68.9 03/04/21 14:16 N2

LABORATORY CONTROL SAMPLE: 3183112

Spike LCS LCS % Rec
Parameter Units Conc. Result % Rec Limits Qualifiers

Total Petroleum Hydrocarbons mg/kg 667 570 86 78-114 N2

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3183113 3183114

MSD MS 92523517001 Spike Spike MS MSD MS MSD % Rec Parameter Units % Rec Limits **RPD** Qual Result Conc. Conc. Result Result % Rec

Total Petroleum Hydrocarbons mg/kg 477 3230 3310 1600 2220 35 53 78-114 32 M1,N2,R1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Northeast Sludge Cake

Pace Project No.: 92523533

Date: 03/05/2021 09:51 AM

QC Batch: 603326 Analysis Method: EPA 6010D
QC Batch Method: EPA 3050B Analysis Description: 6010D ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92523533001

METHOD BLANK: 3178799 Matrix: Solid

Associated Lab Samples: 92523533001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	ND	3.0	03/02/21 19:24	
Barium	mg/kg	ND	1.0	03/02/21 00:36	
Cadmium	mg/kg	ND	1.0	03/02/21 00:36	
Chromium	mg/kg	ND	1.0	03/02/21 00:36	
Lead	mg/kg	ND	2.5	03/02/21 19:24	
Selenium	mg/kg	ND	4.0	03/02/21 00:36	
Silver	mg/kg	ND	1.0	03/02/21 00:36	

LABORATORY CONTROL SAMPLE:	3178800					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Arsenic	mg/kg	94.3	93.0	99	80-120	
Barium	mg/kg	94.3	97.2	103	80-120	
Cadmium	mg/kg	94.3	93.6	99	80-120	
Chromium	mg/kg	94.3	96.9	103	80-120	
Lead	mg/kg	94.3	94.8	101	80-120	
Selenium	mg/kg	94.3	92.1	98	80-120	
Silver	ma/ka	94.3	90.8	96	80-120	

MATRIX SPIKE & MATRIX SPI	KE DUPLICAT	E: 31788	01		3178803						
			MS	MSD							
	925	24325001	Spike	Spike	MS	MSD	MS	MSD	% Rec		
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD Qua	al
Arsenic	mg/kg	7.3	121	117	119	121	92	97	75-125	1	
Barium	mg/kg	300	121	117	444	456	119	134	75-125	3 M1	
Cadmium	mg/kg	ND	121	117	117	116	97	99	75-125	1	
Chromium	mg/kg	19.3	121	117	136	134	97	99	75-125	1	
Lead	mg/kg	ND	121	117	139	142	112	119	75-125	2	
Selenium	mg/kg	ND	121	117	112	114	91	97	75-125	3	
Silver	mg/kg	ND	121	117	115	113	92	94	75-125	2	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Northeast Sludge Cake

Pace Project No.: 92523533

Date: 03/05/2021 09:51 AM

QC Batch: 602906 Analysis Method: EPA 6010D

QC Batch Method: EPA 3010A Analysis Description: 6010D ATL TCLP

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92523533001

METHOD BLANK: 3173475 Matrix: Water

Associated Lab Samples: 92523533001

5 .	11.5	Blank	Reporting		0 ""
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.30	02/26/21 19:51	
Barium	mg/L	ND	0.50	02/26/21 19:51	
Cadmium	mg/L	ND	0.10	02/26/21 19:51	
Chromium	mg/L	ND	0.10	02/26/21 19:51	
Lead	mg/L	ND	0.25	02/26/21 19:51	
Phosphorus	mg/L	ND	0.50	02/26/21 19:51	
Selenium	mg/L	ND	0.40	02/26/21 19:51	
Silver	mg/L	ND	0.10	02/26/21 19:51	

LABORATORY CONTROL SAMPLE:	3176674					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Arsenic	mg/L	10	9.3	93	80-120	_
Barium	mg/L	10	9.2	92	80-120	
Cadmium	mg/L	10	9.3	93	80-120	
Chromium	mg/L	10	9.5	95	80-120	
Lead	mg/L	10	9.6	96	80-120	
Phosphorus	mg/L	10	9.7	97	80-120	
Selenium	mg/L	10	10.2	102	80-120	
Silver	mg/L	10	9.3	93	80-120	

MATRIX SPIKE & MATRIX SP	PIKE DUPLICAT	E: 31766	75		3176676						
			MS	MSD							
	925	23436001	Spike	Spike	MS	MSD	MS	MSD	% Rec		
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual
Arsenic	mg/L	ND	10	10	10.5	10.2	105	102	75-125	3	
Barium	mg/L	ND	10	10	9.7	9.7	97	97	75-125	0	
Cadmium	mg/L	ND	10	10	10.1	10.0	101	100	75-125	0	
Chromium	mg/L	ND	10	10	9.7	9.8	97	97	75-125	1	
Lead	mg/L	ND	10	10	9.7	9.8	97	98	75-125	1	
Phosphorus	mg/L	0.99	10	10	11.5	11.5	105	105	75-125	0	
Selenium	mg/L	ND	10	10	10.7	10.4	106	102	75-125	3	
Silver	mg/L	ND	10	10	9.9	10.0	99	100	75-125	1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Northeast Sludge Cake

Pace Project No.: 92523533

Date: 03/05/2021 09:51 AM

QC Batch: 602875 Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury TCLP, ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92523533001

METHOD BLANK: 3173475 Matrix: Water

Associated Lab Samples: 92523533001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Mercury mg/L ND 0.0050 03/01/21 14:12

LABORATORY CONTROL SAMPLE: 3176532

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Mercury mg/L 0.017 0.017 100 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3176530 3176531

MSD MS 92520503001 Spike Spike MS MSD MS MSD % Rec Parameter Units % Rec Limits **RPD** Qual Result Conc. Conc. Result Result % Rec ND 0.017 0.017 0.016 Mercury mg/L 0.017 93 88 75-125 6



Project: Northeast Sludge Cake

Pace Project No.: 92523533

Date: 03/05/2021 09:51 AM

QC Batch: 602882 Analysis Method: EPA 7471B

QC Batch Method: EPA 7471B Analysis Description: 7471 Mercury

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92523533001

METHOD BLANK: 3176568 Matrix: Solid

Associated Lab Samples: 92523533001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Mercury mg/kg ND 0.24 03/02/21 13:01

LABORATORY CONTROL SAMPLE: 3176569

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Mercury 0.31 0.28 91 80-120 mg/kg

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3176570 3176571

MSD MS 92524170001 Spike Spike MS MSD MS MSD % Rec Parameter Units Conc. Result % Rec Limits **RPD** Qual Result Conc. Result % Rec ND Mercury mg/kg 0.32 0.33 0.33 0.33 48 46 75-125 0 M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Northeast Sludge Cake

Pace Project No.: 92523533

Date: 03/05/2021 09:51 AM

QC Batch: 603513 Analysis Method: EPA 8260D

QC Batch Method: EPA 8260D Analysis Description: 8260D MSV TCLP

Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92523533001

METHOD BLANK: 3179462 Matrix: Water

Associated Lab Samples: 92523533001

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	5.0	03/02/21 11:08	
1,2-Dichloroethane	ug/L	ND	5.0	03/02/21 11:08	
1,4-Dichlorobenzene	ug/L	ND	5.0	03/02/21 11:08	
2-Butanone (MEK)	ug/L	ND	10.0	03/02/21 11:08	
Benzene	ug/L	ND	5.0	03/02/21 11:08	
Carbon tetrachloride	ug/L	ND	5.0	03/02/21 11:08	
Chlorobenzene	ug/L	ND	5.0	03/02/21 11:08	
Chloroform	ug/L	ND	5.0	03/02/21 11:08	
Tetrachloroethene	ug/L	ND	5.0	03/02/21 11:08	
Trichloroethene	ug/L	ND	5.0	03/02/21 11:08	
Vinyl chloride	ug/L	ND	5.0	03/02/21 11:08	
1,2-Dichloroethane-d4 (S)	%	95	70-130	03/02/21 11:08	
4-Bromofluorobenzene (S)	%	101	70-130	03/02/21 11:08	
Toluene-d8 (S)	%	107	67-135	03/02/21 11:08	

LABORATORY CONTROL SAMPLE:	: 3179461					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,1-Dichloroethene	ug/L	50	54.3	109	70-132	_
1,2-Dichloroethane	ug/L	50	49.9	100	70-130	
1,4-Dichlorobenzene	ug/L	50	50.8	102	70-130	
2-Butanone (MEK)	ug/L	100	99.8	100	70-133	
Benzene	ug/L	50	51.1	102	70-130	
Carbon tetrachloride	ug/L	50	52.6	105	70-130	
Chlorobenzene	ug/L	50	51.0	102	70-130	
Chloroform	ug/L	50	50.5	101	70-130	
Tetrachloroethene	ug/L	50	49.4	99	70-130	
Trichloroethene	ug/L	50	54.6	109	70-130	
Vinyl chloride	ug/L	50	43.1	86	59-142	
1,2-Dichloroethane-d4 (S)	%			104	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Toluene-d8 (S)	%			97	67-135	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Northeast Sludge Cake

Pace Project No.: 92523533

Date: 03/05/2021 09:51 AM

MATRIX SPIKE & MATRIX SPIR	KE DUPLICAT	E: 31794	63		3179464						
			MS	MSD							
	925	524406001	Spike	Spike	MS	MSD	MS	MSD	% Rec		
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual
1,1-Dichloroethene	ug/L	ND	50	50	51.8	53.7	104	107	70-158	4	
1,2-Dichloroethane	ug/L	ND	50	50	47.4	48.0	95	96	67-138	1	
1,4-Dichlorobenzene	ug/L	ND	50	50	50.4	51.9	101	104	70-133	3	
2-Butanone (MEK)	ug/L	ND	100	100	85.1	85.6	85	86	61-147	1	
Benzene	ug/L	ND	50	50	49.3	50.4	99	101	67-150	2	
Carbon tetrachloride	ug/L	ND	50	50	54.2	57.6	108	115	70-147	6	
Chlorobenzene	ug/L	ND	50	50	50.6	51.8	101	104	70-137	2	
Chloroform	ug/L	ND	50	50	50.0	53.4	100	107	70-144	7	
Tetrachloroethene	ug/L	ND	50	50	47.3	48.6	93	96	70-139	3	
Trichloroethene	ug/L	ND	50	50	49.9	54.3	100	109	70-149	9	
Vinyl chloride	ug/L	ND	50	50	41.7	41.5	83	83	55-172	1	
1,2-Dichloroethane-d4 (S)	%						100	102	70-130		
4-Bromofluorobenzene (S)	%						99	101	70-130		
Toluene-d8 (S)	%						101	101	67-135		



Project: Northeast Sludge Cake

Pace Project No.: 92523533

Date: 03/05/2021 09:51 AM

QC Batch: 602641 Analysis Method: EPA 8270E

QC Batch Method: EPA 3510C Analysis Description: 8270E TCLP MSSV

Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92523533001

METHOD BLANK: 3173201 Matrix: Water

Associated Lab Samples: 92523533001

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	50.0	02/25/21 17:11	
2,4,5-Trichlorophenol	ug/L	ND	50.0	02/25/21 17:11	
2,4,6-Trichlorophenol	ug/L	ND	50.0	02/25/21 17:11	
2,4-Dinitrotoluene	ug/L	ND	50.0	02/25/21 17:11	
2-Methylphenol(o-Cresol)	ug/L	ND	50.0	02/25/21 17:11	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	50.0	02/25/21 17:11	
Hexachloro-1,3-butadiene	ug/L	ND	50.0	02/25/21 17:11	
Hexachlorobenzene	ug/L	ND	50.0	02/25/21 17:11	
Hexachloroethane	ug/L	ND	50.0	02/25/21 17:11	
Nitrobenzene	ug/L	ND	50.0	02/25/21 17:11	
Pentachlorophenol	ug/L	ND	100	02/25/21 17:11	
Pyridine	ug/L	ND	50.0	02/25/21 17:11	
2,4,6-Tribromophenol (S)	%	126	10-144	02/25/21 17:11	
2-Fluorobiphenyl (S)	%	99	10-130	02/25/21 17:11	
2-Fluorophenol (S)	%	83	10-130	02/25/21 17:11	
Nitrobenzene-d5 (S)	%	116	10-144	02/25/21 17:11	
Phenol-d6 (S)	%	64	10-130	02/25/21 17:11	
Terphenyl-d14 (S)	%	142	34-163	02/25/21 17:11	

LABORATORY CONTROL SAMPLE:	3175330					
_		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	500	345	69	18-130	
2,4,5-Trichlorophenol	ug/L	500	637	127	35-130	
2,4,6-Trichlorophenol	ug/L	500	593	119	31-130	
2,4-Dinitrotoluene	ug/L	500	600	120	37-136	
2-Methylphenol(o-Cresol)	ug/L	500	488	98	35-130	
3&4-Methylphenol(m&p Cresol)	ug/L	500	485	97	34-130	
Hexachloro-1,3-butadiene	ug/L	500	276	55	11-130	
Hexachlorobenzene	ug/L	500	626	125	38-130	
Hexachloroethane	ug/L	500	294	59	14-130	
Nitrobenzene	ug/L	500	518	104	36-130	
Pentachlorophenol	ug/L	1000	1450	145	23-149	
Pyridine	ug/L	500	325	65	10-130	
2,4,6-Tribromophenol (S)	%			141	10-144	
2-Fluorobiphenyl (S)	%			78	10-130	
2-Fluorophenol (S)	%			66	10-130	
Nitrobenzene-d5 (S)	%			93	10-144	
Phenol-d6 (S)	%			54	10-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Northeast Sludge Cake

Pace Project No.: 92523533

Date: 03/05/2021 09:51 AM

LABORATORY CONTROL SAMPLE: 3175330

Spike LCS LCS % Rec

Parameter Units Conc. Result % Rec Limits Qualifiers

Terphenyl-d14 (S) % 145 34-163

MATRIX SPIKE & MATRIX SPI	KE DUPLICAT	E: 31753	31		3175332						
			MS	MSD							
	925	523680001	Spike	Spike	MS	MSD	MS	MSD	% Rec		
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qua
1,4-Dichlorobenzene	ug/L	ND	500	500	422	443	84	89	10-130		
2,4,5-Trichlorophenol	ug/L	ND	500	500	709	721	142	144	10-143	2 N	Л1
2,4,6-Trichlorophenol	ug/L	ND	500	500	680	671	136	134	10-147	1	
2,4-Dinitrotoluene	ug/L	ND	500	500	674	655	135	131	29-148	3	
2-Methylphenol(o-Cresol)	ug/L	ND	500	500	538	581	108	116	20-130	8	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	500	500	526	568	105	114	16-130	8	
Hexachloro-1,3-butadiene	ug/L	ND	500	500	409	404	82	81	10-130	1	
Hexachlorobenzene	ug/L	ND	500	500	626	654	125	131	29-130	5 N	<i>I</i> 11
Hexachloroethane	ug/L	ND	500	500	393	402	79	80	10-130	2	
Nitrobenzene	ug/L	ND	500	500	586	604	117	121	25-130	3	
Pentachlorophenol	ug/L	ND	1000	1000	1330	1440	133	144	10-175	8	
Pyridine	ug/L	ND	500	500	348	412	70	82	10-130	17	
2,4,6-Tribromophenol (S)	%						132	138	10-144		
2-Fluorobiphenyl (S)	%						97	93	10-130		
2-Fluorophenol (S)	%						68	78	10-130		
Nitrobenzene-d5 (S)	%						104	108	10-144		
Phenol-d6 (S)	%						57	63	10-130		
Terphenyl-d14 (S)	%						138	143	34-163		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Northeast Sludge Cake

Pace Project No.: 92523533

QC Batch: 602385

QC Batch Method: SW-846 Analysis Method:

SW-846

Analysis Description:

Dry Weight/Percent Moisture

Laboratory:

Pace Analytical Services - Charlotte

Associated Lab Samples: 92523533001

SAMPLE DUPLICATE: 3174089

Parameter

Units

35609501001 Dup Result Result

22.1

RPD Qualifiers

18.9 15 N2

SAMPLE DUPLICATE: 3174090

92523696002 Result

Dup Result

Qualifiers

Parameter Percent Moisture

Date: 03/05/2021 09:51 AM

Percent Moisture

%

Units

%

92.2

**RPD** 0 N2 92.2



Project: Northeast Sludge Cake

Pace Project No.: 92523533

QC Batch: 603143 Analysis Method:

QC Batch Method: EPA 9095B Analysis Description: 9095 PAINT FILTER LIQUID TEST

Laboratory: Pace Analytical Services - Asheville

EPA 9095B

Associated Lab Samples: 92523533001

SAMPLE DUPLICATE: 3177941

Date: 03/05/2021 09:51 AM

92523634005 Dup
Parameter Units Result RPD Qualifiers

Free Liquids Fail Fail



Northeast Sludge Cake Project:

Pace Project No.: 92523533

QC Batch: 602171

QC Batch Method: EPA 350.1 Rev 2.0 1993 Mod. Analysis Method: Analysis Description: EPA 350.1 Rev 2.0 1993 Mod.

350.1 Ammonia

Laboratory:

Pace Analytical Services - Asheville

92523533001 Associated Lab Samples:

METHOD BLANK: 3172791

Matrix: Solid

Associated Lab Samples: 92523533001

Parameter

Parameter

Reporting

Blank Result

Limit

Qualifiers Analyzed

Nitrogen, Ammonia ND 9.6 02/24/21 14:42 mg/kg

Units

Units

LABORATORY CONTROL SAMPLE: 3172792

mg/kg

Spike Conc.

LCS Result

LCS % Rec % Rec Limits

Qualifiers

Nitrogen, Ammonia 490 488 100 90-110 mg/kg

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3172793

MSD

MS Spike

Spike

MS MSD Result

7020

MS

MSD % Rec

% Rec Limits

**RPD** 

Parameter Nitrogen, Ammonia

Date: 03/05/2021 09:51 AM

70161122001 Units Result

4670

Conc.

2030

Conc.

1990

Result 6820

3172794

% Rec 107 119

90-110

Qual 3 M1



Project: Northeast Sludge Cake

Pace Project No.: 92523533

Date: 03/05/2021 09:51 AM

QC Batch: 603046

QC Batch Method: EPA 351.2 Rev 2.0 1993

Analysis Method: EPA 351.2 Rev 2.0 1993

Analysis Description: 351.2 TKN

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92523533001

METHOD BLANK: 3177616 Matrix: Solid

Associated Lab Samples: 92523533001

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Nitrogen, Kjeldahl, Total mg/kg ND 50.0 02/27/21 06:46

LABORATORY CONTROL SAMPLE: 3177617

Spike LCS LCS % Rec
Parameter Units Conc. Result % Rec Limits Qualifiers

Nitrogen, Kjeldahl, Total mg/kg 1000 959 96 90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3177618 3177619

MS MSD

92523517001 Spike Spike MS MSD MS MSD % Rec Parameter Units % Rec Limits **RPD** Qual Result Conc. Conc. Result Result % Rec

Nitrogen, Kjeldahl, Total mg/kg 39100 4660 4660 59900 71100 444 684 90-110 17 M6, R1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Northeast Sludge Cake

Pace Project No.: 92523533

Date: 03/05/2021 09:51 AM

QC Batch: 602088

QC Batch Method: EPA 353.2 Rev 2.0 1993

Analysis Method: EPA 353.2 Rev 2.0 1993

Analysis Description: 353.2 Nitrate + Nitrite

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92523533001

METHOD BLANK: 3172585 Matrix: Solid

Associated Lab Samples: 92523533001

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/kg	ND	4.0	02/24/21 01:17	
Nitrogen, Nitrite	mg/kg	ND	4.0	02/24/21 01:17	
Nitrogen, NO2 plus NO3	mg/kg	ND	4.0	02/24/21 01:17	

LABORATORY CONTROL SAMPLE: 3172586 LCS Spike LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Nitrogen, Nitrate 15 14.8 99 90-110 mg/kg Nitrogen, Nitrite 99 mg/kg 10 9.9 90-110 Nitrogen, NO2 plus NO3 25 99 90-110 mg/kg 24.7

MATRIX SPIKE & MATRIX SPIR	E DUPLICAT	E: 31725	87		3172588						
			MS	MSD							
	925	523533001	Spike	Spike	MS	MSD	MS	MSD	% Rec		
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual
Nitrogen, Nitrate	mg/kg	ND	73.4	73.4	70.0	71.3	95	97	90-110	2	
Nitrogen, Nitrite	mg/kg	ND	49.1	49.1	46.7	46.5	96	95	90-110	0	
Nitrogen, NO2 plus NO3	mg/kg	ND	122	122	117	118	94	95	90-110	1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



#### **QUALIFIERS**

Project: Northeast Sludge Cake

Pace Project No.: 92523533

#### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

## **ANALYTE QUALIFIERS**

Date: 03/05/2021 09:51 AM

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery	M1	Matrix spike recovery	exceeded QC limits.	Batch accepte	ed based on laborator	v control sample	(LCS) recover
---	----	-----------------------	---------------------	---------------	-----------------------	------------------	---------------

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

N2 The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A

complete list of accreditations/certifications is available upon request.

R1 RPD value was outside control limits.

T3 Insufficient sample received from client to perform the analysis per EPA method requirements.



# **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: Northeast Sludge Cake

Pace Project No.: 92523533

Date: 03/05/2021 09:51 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92523533001	Northeast Sludge Cake	9071B	604217	9071B	604256
92523533001	Northeast Sludge Cake	EPA 3050B	603326	EPA 6010D	603392
92523533001	Northeast Sludge Cake	EPA 3010A	602906	EPA 6010D	602993
92523533001	Northeast Sludge Cake	EPA 7470A	602875	EPA 7470A	603236
92523533001	Northeast Sludge Cake	EPA 7471B	602882	EPA 7471B	603566
92523533001	Northeast Sludge Cake	EPA 3510C	602641	EPA 8270E	602732
92523533001	Northeast Sludge Cake	EPA 8260D	603513		
92523533001	Northeast Sludge Cake	SW-846	602385		
92523533001	Northeast Sludge Cake	EPA 9095B	603143		
92523533001	Northeast Sludge Cake	TKN+NO3+NO2 Calculation	603648		
92523533001	Northeast Sludge Cake	EPA 350.1 Rev 2.0 1993 Mod.	602171	EPA 350.1 Rev 2.0 1993 Mod.	602235
92523533001	Northeast Sludge Cake	EPA 351.2 Rev 2.0 1993	603046	EPA 351.2 Rev 2.0 1993	603083
2523533001	Northeast Sludge Cake	EPA 353.2 Rev 2.0 1993	602088	EPA 353.2 Rev 2.0 1993	602090

Analysis	Total Phosphorus  Total Metals  TCLP Semi-Volatiles  TCLP Volatiles  TCLP Metals  TPH (Total petroleum Hydrocarbo	ns	x x x x x x x					Additional Information:			M0#:92523533		92523533
Ш	503 Parameters		S ×					4>. او	-0:4	9:45	\$1:0/	35//	
	Composite/Grab	Pres.	) lce (					Time:	Time:	Time: 9	Time:	Time:	
	CLAYTON COUNTY AUTHORITY Water Reclamation Laboratory 688 Flint River Rd. Jonesboro, GA. 30238 (770) 478-7496 Fax (770) 478-7301 Permit #: GA0038423 / GA02-008	Sample Description	Northeast Sludge Cake					Ayres Date: 2.22-21	Date:	Date:	Date: 2-23-21	12/2010 2/28/21	
4	Wate (770) 47	Date Time	2-22-21 4:00				SI)	Sampled By: Healw FAyers	Relinquished By: / He La Sayar	Received By: Jos H Wash	Relinquished By: 12 h W	Received By: \mullet	,

# Page 24 of 24 ace Analytical

Project Manager SRF Review:

## Document Name: Sample Condition Upon Receipt(SCUR)

Document No.:

Document Revised: October 28, 2020 Page 1 of 2

Issuing Authority: Pace Carolinas Quality Office F-CAR-CS-033-Rev.07 Laboratory receiving samples: Atlanta Kernersville Mechanicsville Raleigh Asheville Eden Greenwood Huntersville Sample Condition **Client Name: Upon Receipt** Courier: CLIENT: GA-ClaytonWW ☐ Commercial **Custody Seal Present?** No ☐Yes Seals Intact? Date/Initials Person Examining Contents: 2/28/21 Krzw Packing Material: Bubble Wrap Bubble Bags Avone Other **Biological Tissue Frozen?** ☐Yes ☐N/A Thermometer: □Biue None 1R Gun ID: Type of Ice: Correction Factor: - O.Z Temp should be above freezing to 6°C Cooler Temp: Add/Subtract (°C) Samples out of temp criteria. Samples on ice, cooling process 3.6 Cooler Temp Corrected (\*C): has begun USDA Regulated Soil ( N/A, water sample) Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? Did samples originate from a foreign source (internationally, Yes Ble including Hawaii and Puerto Rico)? Yes Comments/Discrepancy: □No □N/A Chain of Custody Present? ΠNo □N/A Samples Arrived within Hold Time? Short Hold Time Analysis (<72 hr.)? □N/A 3. **NO** 4. Rush Turn Around Time Requested? □N/A ☐Yes CLIENT PROVIDED **Fres** □No Sufficient Volume? □N/A A Pres □No □N/A 6. Correct Containers Used? SAMPLE CONTAINER -Pace Containers Used? □Yes ( No □N/A (Tyes Containers Intact? □No □N/A **□**No DN/A 8. Dissolved analysis: Samples Field Filtered? □Yes 9. Dette and time samples not Sample Labels Match COC? **□**Yes ZÍNO □N/A Present--Includes Date/Time/ID/Analysis Matrix: No 47N/A 10. Headspace in VOA Vials (>5-6mm)? Yes Trip Blank Present? □Yes ∏No. **Æ**N/A EN/A **Trip Blank Custody Seals Present?** Yes No Field Data Required? Yes No COMMENTS/SAMPLE DISCREPANCY Lot ID of split containers: CLIENT NOTIFICATION/RESOLUTION Date/Time: Person contacted: Project Manager SCURF Review:

Date:





March 05, 2021

Jennifer Brandon Clayton Co Water Authority 688 Flint River Road Jonesboro, GA 30238

RE: Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

## Dear Jennifer Brandon:

Enclosed are the analytical results for sample(s) received by the laboratory on February 23, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services Asheville
- Pace Analytical Services Charlotte
- Pace Analytical Services Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

John Stanton

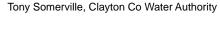
john.stanton@pacelabs.com

gon D. Starte

(770)734-4200 Project Manager

**Enclosures** 

cc: Van Beaty, Clayton Co Water Authority







## **CERTIFICATIONS**

Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

**Pace Analytical Services Charlotte** 

9800 Kincey Ave. Ste 100, Huntersville, NC 28078 Louisiana/NELAP Certification # LA170028 North Carolina Drinking Water Certification #: 37706 North Carolina Field Services Certification #: 5342

North Carolina Wastewater Certification #: 12

Florida/NELAP Certification #: E87627 Kentucky UST Certification #: 84 Virginia/VELAP Certification #: 460221

South Carolina Certification #: 99006001

**Pace Analytical Services Asheville** 

2225 Riverside Drive, Asheville, NC 28804 Florida/NELAP Certification #: E87648

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40 South Carolina Certification #: 99030001 Virginia/VELAP Certification #: 460222

**Pace Analytical Services Peachtree Corners** 

110 Technology Pkwy, Peachtree Corners, GA 30092 Florida DOH Certification #: E87315 Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381 South Carolina Certification #: 98011001



# **SAMPLE ANALYTE COUNT**

Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92523517001	Pelletizing Sludge Cake	9071B	WAM	1	PASI-C
		EPA 6010D	DRB, KH	11	PASI-GA
		EPA 6010D	DRB	7	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 7471B	VB	1	PASI-GA
		EPA 8270E	PKS	18	PASI-C
		EPA 8260D	SAS	14	PASI-C
		SW-846	KDF	1	PASI-C
		EPA 9095B	SMK	1	PASI-A
		TKN+NO3+NO2 Calculation	EWS	1	PASI-A
		EPA 350.1 Rev 2.0 1993 Mod.	KDF1	1	PASI-A
		EPA 351.2 Rev 2.0 1993	MFO	1	PASI-A
		EPA 353.2 Rev 2.0 1993	CJL	3	PASI-A

PASI-A = Pace Analytical Services - Asheville PASI-C = Pace Analytical Services - Charlotte

PASI-GA = Pace Analytical Services - Peachtree Corners, GA



# **ANALYTICAL RESULTS**

Project: Pelletizing Sludge Cake

Date: 03/05/2021 09:51 AM

Sample: Pelletizing Sludge Cake	Lab ID: 925	23517001	Collected: 02/23/2	21 09:1	5 Received: 02	/23/21 11:58 N	latrix: Solid	
Results reported on a "dry weigh	t" basis and are adj	usted for pe	rcent moisture, sa	mple s	size and any dilu	tions.		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
9071 SGT-HEM, TPH	Analytical Meth	nod: 9071B F	Preparation Method	: 9071E	3			
	Pace Analytica		•					
Total Petroleum Hydrocarbons	477	mg/kg	345	1	03/04/21 11:45	03/04/21 14:16		M1,N2 R1
6010D ATL ICP	Analytical Moth	and: EDA 601	0D Preparation Me	othod: E	EDA 2050B			ΝI
00 10D ATE ICF			eachtree Corners,		-1 A 3030D			
	,		,					
Arsenic	ND	mg/kg	3.6	1		03/02/21 19:44		
Cadmium	ND	mg/kg	1.2	1		03/02/21 00:46		
Chromium	15.1	mg/kg	1.2	1		03/02/21 00:46		
Copper	166	mg/kg	4.8	1		03/02/21 00:46		
Lead	14.5	mg/kg	3.0	1		03/02/21 00:46		
Molybdenum	ND	mg/kg	4.8	1		03/02/21 00:46		
Nickel	11.7	mg/kg	2.4	1		03/02/21 00:46		
Phosphorus	19800	mg/kg	2410	100		03/02/21 19:49		
Potassium Solonium	3060 5.9	mg/kg	24.1 4.8	1 1		03/02/21 19:44 03/02/21 00:46		
Selenium Zinc	291	mg/kg mg/kg	2.4	1		03/02/21 00:46		
ZIIIC	231	mg/kg	2.4	'	03/01/21 14.42	03/02/21 00.40	7440-00-0	
6010D ATL ICP, TCLP	Analytical Meth	nod: EPA 601	0D Preparation Me	ethod: E	EPA 3010A			
	Leachate Meth	od/Date: EPA	1311; 02/25/21 15	:30 Ini	tial pH: 8.73; Fina	l pH: 5.95		
	Pace Analytica	l Services - P	eachtree Corners,	GA				
Arsenic	ND	mg/L	0.30	1	02/26/21 11:51	02/26/21 20:35	7440-38-2	
Barium	ND	mg/L	0.50	1		02/26/21 20:35		
Cadmium	ND	mg/L	0.10	1		02/26/21 20:35		
Chromium	ND	mg/L	0.10	1		02/26/21 20:35		
Lead	ND	mg/L	0.25	1		02/26/21 20:35		
Selenium	ND	mg/L	0.40	1	02/26/21 11:51	02/26/21 20:35	7782-49-2	
Silver	ND	mg/L	0.10	1	02/26/21 11:51	02/26/21 20:35	7440-22-4	
7470 Mercury, TCLP	Analytical Meth	od: FPA 747	0A Preparation Me	thod: F	- ΡΔ 7470Δ			
7470 Mercury, TCLI	•		1311; 02/25/21 15			I n∐· 5 05		
					liai pi i. 0.73, Filia	i pi i. 5.95		
	Pace Analytica	ii Services - P	eachtree Corners,	GA				
Mercury	ND	mg/L	0.0050	1	03/01/21 09:15	03/01/21 14:08	7439-97-6	
7471 Mercury	Analytical Meth	nod: EPA 747	1B Preparation Me	ethod: E	PA 7471B			
·	· ·		eachtree Corners,					
Mercury	ND	mg/kg	0.29	1	03/02/21 10:35	03/02/21 13:05	7439-97-6	
8270E TCLP RVE	Analytical Meth	nod: EPA 827	0E Preparation Me	ethod: E	EPA 3510C			
	•		1311; 02/24/21 15			l pH: 5		
	Pace Analytica				p 0.00, 1 ma	. p. 1. 0		
1,4-Dichlorobenzene	ND	ug/L	50.0	1	02/25/21 14:44	02/26/21 13:42	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	50.0	1	02/25/21 14:44	02/26/21 13:42	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	50.0	1	02/25/21 14:44	02/26/21 13:42	87-68-3	
Hexachlorobenzene	ND	ug/L	50.0	1	02/25/21 14:44	02/26/21 13:42	118-74-1	



#### **ANALYTICAL RESULTS**

Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

Date: 03/05/2021 09:51 AM

Sample: Pelletizing Sludge Cake Lab ID: 92523517001 Collected: 02/23/21 09:15 Received: 02/23/21 11:58 Matrix: Solid Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions. **Parameters** Results Units Report Limit DF Prepared Analyzed CAS No. Qual 8270E TCLP RVE Analytical Method: EPA 8270E Preparation Method: EPA 3510C Leachate Method/Date: EPA 1311; 02/24/21 15:14 Initial pH: 5.09; Final pH: 5 Pace Analytical Services - Charlotte Hexachloroethane ND ug/L 50.0 02/25/21 14:44 02/26/21 13:42 67-72-1 1 ND 50.0 02/25/21 14:44 02/26/21 13:42 95-48-7 2-Methylphenol(o-Cresol) ug/L 1 53.0 50.0 02/25/21 14:44 02/26/21 13:42 15831-10-4 3&4-Methylphenol(m&p Cresol) ug/L 1 Nitrobenzene ND ug/L 50.0 02/25/21 14:44 02/26/21 13:42 98-95-3 1 Pentachlorophenol ND ug/L 100 1 02/25/21 14:44 02/26/21 13:42 87-86-5 Pyridine ND ug/L 50.0 1 02/25/21 14:44 02/26/21 13:42 110-86-1 2,4,5-Trichlorophenol ND ug/L 50.0 02/25/21 14:44 02/26/21 13:42 95-95-4 1 2,4,6-Trichlorophenol ND 50.0 02/25/21 14:44 02/26/21 13:42 88-06-2 ug/L Surrogates % 119 10-144 02/25/21 14:44 02/26/21 13:42 4165-60-0 Nitrobenzene-d5 (S) 1 2-Fluorobiphenyl (S) % 10-130 02/25/21 14:44 02/26/21 13:42 321-60-8 115 1 Terphenyl-d14 (S) 166 % 34-163 1 02/25/21 14:44 02/26/21 13:42 1718-51-0 SO Phenol-d6 (S) 70 % 10-130 02/25/21 14:44 02/26/21 13:42 13127-88-3 1 2-Fluorophenol (S) 86 % 10-130 1 02/25/21 14:44 02/26/21 13:42 367-12-4 2,4,6-Tribromophenol (S) 123 % 10-144 02/25/21 14:44 02/26/21 13:42 118-79-6 1 8260D MSV TCLP Analytical Method: EPA 8260D Leachate Method/Date: EPA 1311; 03/01/21 13:34 Pace Analytical Services - Charlotte Benzene ND ug/L 100 20 03/02/21 12:00 71-43-2 2-Butanone (MEK) 324 ug/L 200 20 03/02/21 12:00 78-93-3 Carbon tetrachloride ND ug/L 100 20 03/02/21 12:00 56-23-5 Chlorobenzene ND ua/L 100 20 03/02/21 12:00 108-90-7 Chloroform ND 100 20 ug/L 03/02/21 12:00 67-66-3 ND 20 1.4-Dichlorobenzene ug/L 100 03/02/21 12:00 106-46-7 ND 20 1.2-Dichloroethane 100 03/02/21 12:00 107-06-2 ug/L ND 20 1,1-Dichloroethene 100 03/02/21 12:00 75-35-4 ug/L 20 03/02/21 12:00 127-18-4 ND Tetrachloroethene ug/L 100 Trichloroethene ND ug/L 100 20 03/02/21 12:00 79-01-6 Vinvl chloride ND ug/L 100 20 03/02/21 12:00 75-01-4 Surrogates 94 % 20 1,2-Dichloroethane-d4 (S) 70-130 03/02/21 12:00 17060-07-0 113 % 20 03/02/21 12:00 2037-26-5 Toluene-d8 (S) 67-135 4-Bromofluorobenzene (S) 100 % 20 70-130 03/02/21 12:00 460-00-4 Analytical Method: SW-846 **Percent Moisture** Pace Analytical Services - Charlotte Percent Moisture 79.6 0.10 1 02/24/21 17:12 N2 Analytical Method: EPA 9095B 9095 Paint Filter Liquid Test Pace Analytical Services - Asheville Free Liquids Pass 1.0 03/02/21 11:31 1



# **ANALYTICAL RESULTS**

Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

Date: 03/05/2021 09:51 AM

Sample: Pelletizing Sludge Cake	Lab ID: 925		Collected: 02/23/2				Matrix: Solid	
Results reported on a "dry weight" l	basis and are adj	usted for p	ercent moisture, sa	mple s	size and any dilu	itions.		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Total Nitrogen Calculation	Analytical Meth	nod: TKN+N	O3+NO2 Calculation					
	Pace Analytica	l Services -	Asheville					
Nitrogen	39100	mg/kg	40.0	1		03/02/21 14:56	7727-37-9	
350.1 Ammonia	Analytical Meth Pace Analytica		0.1 Rev 2.0 1993 Mo Asheville	d. Pre	eparation Method:	EPA 350.1 Rev 2	2.0 1993 Mod.	
Nitrogen, Ammonia	2450	mg/kg	46.2	1	02/24/21 10:22	02/24/21 14:52	7664-41-7	
351.2 Total Kjeldahl Nitrogen	Analytical Meth	nod: EPA 35	1.2 Rev 2.0 1993 Pr	eparati	ion Method: EPA	351.2 Rev 2.0 19	93	
	Pace Analytica	l Services -	Asheville					
Nitrogen, Kjeldahl, Total	39100	mg/kg	2450	10	02/26/21 21:38	02/27/21 07:29	7727-37-9	M6,R1
353.2 Nitrogen, NO2/NO3	Analytical Meth	nod: EPA 35	3.2 Rev 2.0 1993 Pr	eparati	ion Method: EPA	353.2 Rev 2.0 19	93	
	Pace Analytica	l Services -	Asheville					
Nitrogen, NO2 plus NO3	ND	mg/kg	18.1	1	02/23/21 22:14	02/24/21 01:24		
Nitrogen, Nitrate	ND	mg/kg	18.1	1	02/23/21 22:14	02/24/21 01:24	14797-55-8	
Nitrogen, Nitrite	ND	mg/kg	18.1	1	02/23/21 22:14	02/24/21 01:24	14797-65-0	



Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

Date: 03/05/2021 09:51 AM

QC Batch: 604217 Analysis Method: 9071B

QC Batch Method: 9071B Analysis Description: 9071B SGT-HEM, TPH Gravimetric

Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92523517001

METHOD BLANK: 3183111 Matrix: Solid

Associated Lab Samples: 92523517001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Total Petroleum Hydrocarbons mg/kg ND 68.9 03/04/21 14:16 N2

LABORATORY CONTROL SAMPLE: 3183112

Spike LCS LCS % Rec
Parameter Units Conc. Result % Rec Limits Qualifiers

Total Petroleum Hydrocarbons mg/kg 667 570 86 78-114 N2

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3183113 3183114

MS MSD

92523517001 Spike Spike MS MSD MS MSD % Rec Parameter Units % Rec Limits **RPD** Qual Result Conc. Conc. Result Result % Rec 477 Total Petroleum Hydrocarbons mg/kg 3230 3310 1600 2220 35 53 78-114 32 M1, N2, R1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

Date: 03/05/2021 09:51 AM

QC Batch: 603326 Analysis Method: EPA 6010D
QC Batch Method: EPA 3050B Analysis Description: 6010D ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92523517001

METHOD BLANK: 3178799 Matrix: Solid

Associated Lab Samples: 92523517001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	ND ND	3.0	03/02/21 19:24	
Cadmium	mg/kg	ND	1.0	03/02/21 00:36	
Chromium	mg/kg	ND	1.0	03/02/21 00:36	
Copper	mg/kg	ND	4.0	03/04/21 18:29	
Lead	mg/kg	ND	2.5	03/02/21 19:24	
Molybdenum	mg/kg	ND	4.0	03/02/21 00:36	
Nickel	mg/kg	ND	2.0	03/02/21 00:36	
Phosphorus	mg/kg	ND	20.0	03/02/21 00:36	
Potassium	mg/kg	ND	20.0	03/02/21 00:36	
Selenium	mg/kg	ND	4.0	03/02/21 00:36	
Zinc	mg/kg	ND	2.0	03/02/21 19:24	

LABORATORY CONTROL SAMPLE:	3178800					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Arsenic	mg/kg	94.3	93.0	99	80-120	
Cadmium	mg/kg	94.3	93.6	99	80-120	
Chromium	mg/kg	94.3	96.9	103	80-120	
Copper	mg/kg	94.3	98.0	104	80-120	
Lead	mg/kg	94.3	94.8	101	80-120	
Molybdenum	mg/kg	94.3	96.2	102	80-120	
Nickel	mg/kg	94.3	95.2	101	80-120	
Phosphorus	mg/kg	94.3	95.1	101	80-120	
Potassium	mg/kg	94.3	98.4	104	80-120	
Selenium	mg/kg	94.3	92.1	98	80-120	
Zinc	mg/kg	94.3	91.9	97	80-120	

MATRIX SPIKE & MATRIX SP	IKE DUPLICAT	E: 31788			3178803						
Parameter	925 Units	524325001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Arsenic	mg/kg	7.3	121	117	119	121	92	97	75-125		
Cadmium	mg/kg	ND	121	117	117	116	97	99	75-125	1	
Chromium	mg/kg	19.3	121	117	136	134	97	99	75-125	1	
Copper	mg/kg	ND	121	117	119	118	99	101	75-125	1	
Lead	mg/kg	ND	121	117	139	142	112	119	75-125	2	
Molybdenum	mg/kg	ND	121	117	112	112	93	96	75-125	0	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

Date: 03/05/2021 09:51 AM

MATRIX SPIKE & MATRIX SF	PIKE DUPLICAT	E: 31788	01		3178803						
	925	524325001	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual
Nickel	mg/kg	8.7	121	117	150	152	117	123	75-125		
Phosphorus	mg/kg	305	121	117	393	462	72	135	75-125	16 M	1
Potassium	mg/kg	13500	121	117	15300	14000	1490	402	75-125	9 M	1
Selenium	mg/kg	ND	121	117	112	114	91	97	75-125	3	
Zinc	mg/kg	134	121	117	256	245	101	94	75-125	5	



Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

QC Batch: 602906 Analysis Method: EPA 6010D

QC Batch Method: EPA 3010A Analysis Description: 6010D ATL TCLP

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92523517001

METHOD BLANK: 3173475 Matrix: Water

3176674

Associated Lab Samples: 92523517001

LABORATORY CONTROL SAMPLE:

Date: 03/05/2021 09:51 AM

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.30	02/26/21 19:51	
Barium	mg/L	ND	0.50	02/26/21 19:51	
Cadmium	mg/L	ND	0.10	02/26/21 19:51	
Chromium	mg/L	ND	0.10	02/26/21 19:51	
Lead	mg/L	ND	0.25	02/26/21 19:51	
Selenium	mg/L	ND	0.40	02/26/21 19:51	
Silver	mg/L	ND	0.10	02/26/21 19:51	

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Arsenic	mg/L	10	9.3	93	80-120	
Barium	mg/L	10	9.2	92	80-120	
Cadmium	mg/L	10	9.3	93	80-120	
Chromium	mg/L	10	9.5	95	80-120	

mg/L Lead 10 9.6 96 80-120 Selenium mg/L 10 10.2 102 80-120 Silver mg/L 10 9.3 93 80-120

MATRIX SPIKE & MATRIX SPIKI	E DUPLICAT	E: 31766	75		3176676						
			MS	MSD							
	925	523436001	Spike	Spike	MS	MSD	MS	MSD	% Rec		
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual
Arsenic	mg/L	ND	10	10	10.5	10.2	105	102	75-125	3	
Barium	mg/L	ND	10	10	9.7	9.7	97	97	75-125	0	
Cadmium	mg/L	ND	10	10	10.1	10.0	101	100	75-125	0	
Chromium	mg/L	ND	10	10	9.7	9.8	97	97	75-125	1	
Lead	mg/L	ND	10	10	9.7	9.8	97	98	75-125	1	
Selenium	mg/L	ND	10	10	10.7	10.4	106	102	75-125	3	
Silver	mg/L	ND	10	10	9.9	10.0	99	100	75-125	1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

Date: 03/05/2021 09:51 AM

QC Batch: 602875 Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury TCLP, ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92523517001

METHOD BLANK: 3173475 Matrix: Water

Associated Lab Samples: 92523517001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Mercury mg/L ND 0.0050 03/01/21 14:12

LABORATORY CONTROL SAMPLE: 3176532

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Mercury mg/L 0.017 0.017 100 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3176530 3176531

MSD MS 92520503001 Spike Spike MS MSD MS MSD % Rec Parameter Units % Rec Limits **RPD** Qual Result Conc. Conc. Result Result % Rec ND 0.017 0.017 0.016 Mercury mg/L 0.017 93 88 75-125 6

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

Date: 03/05/2021 09:51 AM

QC Batch: 602882 Analysis Method: EPA 7471B

QC Batch Method: EPA 7471B Analysis Description: 7471 Mercury

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92523517001

METHOD BLANK: 3176568 Matrix: Solid

Associated Lab Samples: 92523517001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Mercury mg/kg ND 0.24 03/02/21 13:01

LABORATORY CONTROL SAMPLE: 3176569

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Mercury 0.31 0.28 91 80-120 mg/kg

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3176570 3176571

MSD MS 92524170001 Spike Spike MS MSD MS MSD % Rec Parameter Units Conc. Result % Rec Limits **RPD** Result Conc. Result % Rec

Mercury mg/kg ND 0.32 0.33 0.33 48 46 75-125 0 M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

## **REPORT OF LABORATORY ANALYSIS**

Qual



Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

Date: 03/05/2021 09:51 AM

QC Batch: 603513 Analysis Method: EPA 8260D

QC Batch Method: EPA 8260D Analysis Description: 8260D MSV TCLP

Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92523517001

METHOD BLANK: 3179462 Matrix: Water

Associated Lab Samples: 92523517001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	5.0	03/02/21 11:08	
1,2-Dichloroethane	ug/L	ND	5.0	03/02/21 11:08	
1,4-Dichlorobenzene	ug/L	ND	5.0	03/02/21 11:08	
2-Butanone (MEK)	ug/L	ND	10.0	03/02/21 11:08	
Benzene	ug/L	ND	5.0	03/02/21 11:08	
Carbon tetrachloride	ug/L	ND	5.0	03/02/21 11:08	
Chlorobenzene	ug/L	ND	5.0	03/02/21 11:08	
Chloroform	ug/L	ND	5.0	03/02/21 11:08	
Tetrachloroethene	ug/L	ND	5.0	03/02/21 11:08	
Trichloroethene	ug/L	ND	5.0	03/02/21 11:08	
Vinyl chloride	ug/L	ND	5.0	03/02/21 11:08	
1,2-Dichloroethane-d4 (S)	%	95	70-130	03/02/21 11:08	
4-Bromofluorobenzene (S)	%	101	70-130	03/02/21 11:08	
Toluene-d8 (S)	%	107	67-135	03/02/21 11:08	

LABORATORY CONTROL SAMPLE:	3179461					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,1-Dichloroethene	ug/L	50	54.3	109	70-132	
1,2-Dichloroethane	ug/L	50	49.9	100	70-130	
1,4-Dichlorobenzene	ug/L	50	50.8	102	70-130	
2-Butanone (MEK)	ug/L	100	99.8	100	70-133	
Benzene	ug/L	50	51.1	102	70-130	
Carbon tetrachloride	ug/L	50	52.6	105	70-130	
Chlorobenzene	ug/L	50	51.0	102	70-130	
Chloroform	ug/L	50	50.5	101	70-130	
Tetrachloroethene	ug/L	50	49.4	99	70-130	
Trichloroethene	ug/L	50	54.6	109	70-130	
Vinyl chloride	ug/L	50	43.1	86	59-142	
1,2-Dichloroethane-d4 (S)	%			104	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Toluene-d8 (S)	%			97	67-135	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

Date: 03/05/2021 09:51 AM

MATRIX SPIKE & MATRIX SPIR	KE DUPLICAT	E: 31794	63		3179464						
			MS	MSD							
	925	524406001	Spike	Spike	MS	MSD	MS	MSD	% Rec		
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual
1,1-Dichloroethene	ug/L	ND	50	50	51.8	53.7	104	107	70-158	4	
1,2-Dichloroethane	ug/L	ND	50	50	47.4	48.0	95	96	67-138	1	
1,4-Dichlorobenzene	ug/L	ND	50	50	50.4	51.9	101	104	70-133	3	
2-Butanone (MEK)	ug/L	ND	100	100	85.1	85.6	85	86	61-147	1	
Benzene	ug/L	ND	50	50	49.3	50.4	99	101	67-150	2	
Carbon tetrachloride	ug/L	ND	50	50	54.2	57.6	108	115	70-147	6	
Chlorobenzene	ug/L	ND	50	50	50.6	51.8	101	104	70-137	2	
Chloroform	ug/L	ND	50	50	50.0	53.4	100	107	70-144	7	
Tetrachloroethene	ug/L	ND	50	50	47.3	48.6	93	96	70-139	3	
Trichloroethene	ug/L	ND	50	50	49.9	54.3	100	109	70-149	9	
Vinyl chloride	ug/L	ND	50	50	41.7	41.5	83	83	55-172	1	
1,2-Dichloroethane-d4 (S)	%						100	102	70-130		
4-Bromofluorobenzene (S)	%						99	101	70-130		
Toluene-d8 (S)	%						101	101	67-135		



Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

Date: 03/05/2021 09:51 AM

QC Batch: 602641 Analysis Method: EPA 8270E

QC Batch Method: EPA 3510C Analysis Description: 8270E TCLP MSSV

Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92523517001

METHOD BLANK: 3173201 Matrix: Water

Associated Lab Samples: 92523517001

Parameter	Llaita	Blank	Reporting	Analyzad	Ovolifiana
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	50.0	02/25/21 17:11	
2,4,5-Trichlorophenol	ug/L	ND	50.0	02/25/21 17:11	
2,4,6-Trichlorophenol	ug/L	ND	50.0	02/25/21 17:11	
2,4-Dinitrotoluene	ug/L	ND	50.0	02/25/21 17:11	
2-Methylphenol(o-Cresol)	ug/L	ND	50.0	02/25/21 17:11	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	50.0	02/25/21 17:11	
Hexachloro-1,3-butadiene	ug/L	ND	50.0	02/25/21 17:11	
Hexachlorobenzene	ug/L	ND	50.0	02/25/21 17:11	
Hexachloroethane	ug/L	ND	50.0	02/25/21 17:11	
Nitrobenzene	ug/L	ND	50.0	02/25/21 17:11	
Pentachlorophenol	ug/L	ND	100	02/25/21 17:11	
Pyridine	ug/L	ND	50.0	02/25/21 17:11	
2,4,6-Tribromophenol (S)	%	126	10-144	02/25/21 17:11	
2-Fluorobiphenyl (S)	%	99	10-130	02/25/21 17:11	
2-Fluorophenol (S)	%	83	10-130	02/25/21 17:11	
Nitrobenzene-d5 (S)	%	116	10-144	02/25/21 17:11	
Phenol-d6 (S)	%	64	10-130	02/25/21 17:11	
Terphenyl-d14 (S)	%	142	34-163	02/25/21 17:11	

LABORATORY CONTROL SAMPLE:	3175330					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	500	345	69	18-130	
2,4,5-Trichlorophenol	ug/L	500	637	127	35-130	
2,4,6-Trichlorophenol	ug/L	500	593	119	31-130	
2,4-Dinitrotoluene	ug/L	500	600	120	37-136	
2-Methylphenol(o-Cresol)	ug/L	500	488	98	35-130	
3&4-Methylphenol(m&p Cresol)	ug/L	500	485	97	34-130	
Hexachloro-1,3-butadiene	ug/L	500	276	55	11-130	
Hexachlorobenzene	ug/L	500	626	125	38-130	
Hexachloroethane	ug/L	500	294	59	14-130	
Nitrobenzene	ug/L	500	518	104	36-130	
Pentachlorophenol	ug/L	1000	1450	145	23-149	
Pyridine	ug/L	500	325	65	10-130	
2,4,6-Tribromophenol (S)	%			141	10-144	
2-Fluorobiphenyl (S)	%			78	10-130	
2-Fluorophenol (S)	%			66	10-130	
Nitrobenzene-d5 (S)	%			93	10-144	
Phenol-d6 (S)	%			54	10-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

Date: 03/05/2021 09:51 AM

LABORATORY CONTROL SAMPLE: 3175330

Spike LCS LCS % Rec

Parameter Units Conc. Result % Rec Limits Qualifiers

Terphenyl-d14 (S) % 145 34-163

MATRIX SPIKE & MATRIX SPI	KE DUPLICAT	E: 31753		1400	3175332						
	00/	-00000004	MS	MSD	МС	MCD	MC	MCD	0/ Daa		
Parameter	928 Units	523680001 Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qua
1,4-Dichlorobenzene	ug/L	ND -	500	500	422	443	84	89	10-130		
2,4,5-Trichlorophenol	ug/L	ND	500	500	709	721	142	144	10-143	2 M	1
2,4,6-Trichlorophenol	ug/L	ND	500	500	680	671	136	134	10-147	1	
2,4-Dinitrotoluene	ug/L	ND	500	500	674	655	135	131	29-148	3	
2-Methylphenol(o-Cresol)	ug/L	ND	500	500	538	581	108	116	20-130	8	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	500	500	526	568	105	114	16-130	8	
Hexachloro-1,3-butadiene	ug/L	ND	500	500	409	404	82	81	10-130	1	
Hexachlorobenzene	ug/L	ND	500	500	626	654	125	131	29-130	5 M	1
Hexachloroethane	ug/L	ND	500	500	393	402	79	80	10-130	2	
Nitrobenzene	ug/L	ND	500	500	586	604	117	121	25-130	3	
Pentachlorophenol	ug/L	ND	1000	1000	1330	1440	133	144	10-175	8	
Pyridine	ug/L	ND	500	500	348	412	70	82	10-130	17	
2,4,6-Tribromophenol (S)	%						132	138	10-144		
2-Fluorobiphenyl (S)	%						97	93	10-130		
2-Fluorophenol (S)	%						68	78	10-130		
Nitrobenzene-d5 (S)	%						104	108	10-144		
Phenol-d6 (S)	%						57	63	10-130		
Terphenyl-d14 (S)	%						138	143	34-163		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



SW-846

Analysis Method:

Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

QC Batch: 602385

QC Batch Method: SW-846 Analysis Description: Dry Weight/Percent Moisture

Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92523517001

SAMPLE DUPLICATE: 3174089

 Percent Moisture
 Units
 35609501001 Result
 Dup Result
 RPD
 Qualifiers

 Percent Moisture
 %
 22.1
 18.9
 15 N2

SAMPLE DUPLICATE: 3174090

Date: 03/05/2021 09:51 AM

		92523696002	Dup		
Parameter	Units Result		Result	RPD	Qualifiers
Percent Moisture	%	92.2	92.2		0 N2

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

QC Batch: 603143 Analysis Method: EPA 9095B

QC Batch Method: EPA 9095B Analysis Description: 9095 PAINT FILTER LIQUID TEST

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92523517001

SAMPLE DUPLICATE: 3177941

Date: 03/05/2021 09:51 AM

92523634005 Dup Parameter Units Result Result RPD Qualifiers

Free Liquids Fail Fail



EPA 350.1 Rev 2.0 1993 Mod.

Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

Date: 03/05/2021 09:51 AM

QC Batch: 602171 Analysis Method:

QC Batch Method: EPA 350.1 Rev 2.0 1993 Mod. Analysis Description: 350.1 Ammonia

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92523517001

METHOD BLANK: 3172791 Matrix: Solid

Associated Lab Samples: 92523517001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Nitrogen, Ammonia mg/kg ND 9.6 02/24/21 14:42

LABORATORY CONTROL SAMPLE: 3172792

Spike LCS LCS % Rec
Parameter Units Conc. Result % Rec Limits Qualifiers

Nitrogen, Ammonia mg/kg 490 488 100 90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3172793 3172794

MSD MS 70161122001 Spike Spike MS MSD MS MSD % Rec Parameter Units % Rec Limits **RPD** Qual Result Conc. Conc. Result Result % Rec 4670 3 M1 Nitrogen, Ammonia mg/kg 2030 1990 6820 7020 107 119 90-110

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

% Rec



#### **QUALITY CONTROL DATA**

Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

Date: 03/05/2021 09:51 AM

QC Batch: 603046

QC Batch Method: EPA 351.2 Rev 2.0 1993

Analysis Method: EPA 351.2 Rev 2.0 1993
Analysis Description: 351.2 TKN

- . .

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92523517001

METHOD BLANK: 3177616 Matrix: Solid

Associated Lab Samples: 92523517001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Nitrogen, Kjeldahl, Total mg/kg ND 50.0 02/27/21 06:46

LABORATORY CONTROL SAMPLE: 3177617

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Nitrogen, Kjeldahl, Total 1000 959 96 90-110 mg/kg

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3177618 3177619

MSD MS 92523517001 Spike Spike MS MSD MS MSD Parameter Units % Rec Result Conc. Conc. Result Result

 Parameter
 Units
 Result
 Conc.
 Conc.
 Result
 Result
 % Rec
 % Rec
 Limits
 RPD
 Qual

 Nitrogen, Kjeldahl, Total
 mg/kg
 39100
 4660
 4660
 59900
 71100
 444
 684
 90-110
 17 M6,R1



Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

QC Batch Method:

QC Batch: 602088

EPA 353.2 Rev 2.0 1993

3172586

Analysis Method: Analysis Description: EPA 353.2 Rev 2.0 1993

353.2 Nitrate + Nitrite

Laboratory:

Pace Analytical Services - Asheville

92523517001 Associated Lab Samples:

METHOD BLANK: 3172585

Date: 03/05/2021 09:51 AM

Matrix: Solid

Associated Lab Samples: 92523517001

Parameter	Units	Blank Units Result		Analyzed	Qualifiers
Nitrogen, Nitrate	mg/kg	ND -	4.0	02/24/21 01:17	
Nitrogen, Nitrite	mg/kg	ND	4.0	02/24/21 01:17	
Nitrogen, NO2 plus NO3	mg/kg	ND	4.0	02/24/21 01:17	

LABORATORY CONTROL SAMPLE: LCS Spike LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Nitrogen, Nitrate 15 14.8 99 90-110 mg/kg Nitrogen, Nitrite 99 mg/kg 10 9.9 90-110

Nitrogen, NO2 plus NO3 25 99 mg/kg 24.7 90-110 MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3172587 3172588

	92523533001		MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual
Nitrogen, Nitrate	mg/kg	ND	73.4	73.4	70.0	71.3	95	97	90-110	2	
Nitrogen, Nitrite	mg/kg	ND	49.1	49.1	46.7	46.5	96	95	90-110	0	
Nitrogen, NO2 plus NO3	mg/kg	ND	122	122	117	118	94	95	90-110	1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



#### **QUALIFIERS**

Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

#### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

#### **ANALYTE QUALIFIERS**

Date: 03/05/2021 09:51 AM

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery	M1	Matrix spike recovery	exceeded QC limits.	Batch accepte	ed based on laborator	v control sample	(LCS) recover
---	----	-----------------------	---------------------	---------------	-----------------------	------------------	---------------

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

N2 The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A

complete list of accreditations/certifications is available upon request.

R1 RPD value was outside control limits.

S0 Surrogate recovery outside laboratory control limits.

#### **REPORT OF LABORATORY ANALYSIS**



#### **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: Pelletizing Sludge Cake

Pace Project No.: 92523517

Date: 03/05/2021 09:51 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92523517001	Pelletizing Sludge Cake	9071B	604217	9071B	604256
92523517001	Pelletizing Sludge Cake	EPA 3050B	603326	EPA 6010D	603392
92523517001	Pelletizing Sludge Cake	EPA 3010A	602906	EPA 6010D	602993
92523517001	Pelletizing Sludge Cake	EPA 7470A	602875	EPA 7470A	603236
92523517001	Pelletizing Sludge Cake	EPA 7471B	602882	EPA 7471B	603566
92523517001	Pelletizing Sludge Cake	EPA 3510C	602641	EPA 8270E	602732
2523517001	Pelletizing Sludge Cake	EPA 8260D	603513		
2523517001	Pelletizing Sludge Cake	SW-846	602385		
2523517001	Pelletizing Sludge Cake	EPA 9095B	603143		
92523517001	Pelletizing Sludge Cake	TKN+NO3+NO2 Calculation	603648		
92523517001	Pelletizing Sludge Cake	EPA 350.1 Rev 2.0 1993 Mod.	602171	EPA 350.1 Rev 2.0 1993 Mod.	602235
92523517001	Pelletizing Sludge Cake	EPA 351.2 Rev 2.0 1993	603046	EPA 351.2 Rev 2.0 1993	603083
2523517001	Pelletizing Sludge Cake	EPA 353.2 Rev 2.0 1993	602088	EPA 353.2 Rev 2.0 1993	602090

#### **REPORT OF LABORATORY ANALYSIS**

Analysis	Total Phosphorus  Total Metals  TCLP Semi-Volatiles  TCLP Volatiles  TCLP Metals  TPH (Total petroleum Hydrocarbo  Paint Filter  503 Parameters  Composite/Grab	ons	× × × × × × × ×					9.15 Additional Information:	70:07	Time: /0: 02	11011	/IC\$7C76 · #OM \$5//	92523517
		Pres.	lce					Time: 9:15	Time:	Time:	Time:	Time:	
	CLAYTON COUNTY AUTHORITY Water Reclamation Laboratory 688 Flint River Rd. Jonesboro, GA. 30238 (770) 478-7496 Fax (770) 478-7301 Permit #: GA0038423 / GA02-008		Pelletizing Sludge Cake					Somney ly Date: 2-23-21	Date: مرابر	ωνυ Date:	100 Date: 2,13,21	11 Hal Puce Date: 2/23/21	1 1 1 1 1
	(770)	Time	9:15					Mas purel	Long	12	V: 505 14	K.W.	
		Date	2.23-21					Sampled By:	Relinquished By:	Received By:	Relinquished By:	Received By:	

	Sample Condition Upon	Receipt(SCUR)	Page 1 of 2
Pace Analytical*	Document I		Issuing Authority:
	F-CAR-CS-033-	Rev.07	Pace Carolinas Quality Office
oratory receiving samples:	☐ Huntersville ☐	Raleigh [ ]	Mechanicsville□ Atlanta☐ Kernersville□
Ipon Receipt  Client Name:	County U	Project #	
rier: Fed Ex UI Commercial Pace		Client	PM: JS Due Date: 03/04/21 CLIENT: GA-ClaytonWW
dy Seal Present? Yes ANO S	ieals intact?	□No	Date/Initials Person Examining Contents: 2/28/21
ing Material: Bubble Wrap	Bubble Bags Avone	Other	Biological Tissue Frozen?
mometer:	(B)	Vet □Blue [	□Yes □N/A □N/A
GIRGun ID: THRA33	Type of Ice:	vec Goine E	# ·
er Temp:	et (°C)	•	emp should be above freezing to 6°C  Samples out of temp criteria. Samples on ice, cooling proces has begun  oid samples originate from a foreign source (internationally,
Yes De-			ncluding Hawaii and Puerto Rico)? Yes Ave
			Comments/Discrepancy:
Chain of Custody Present?	<del>⊈hes</del> □no	□N/A 1.	
Samples Arrived within Hold Time?	GVes □No	□N/A 2.	
Short Hold Time Analysis (<72 hr.)?	□Yes 4□No	□N/A 3.	
Rush Turn Around Time Requested?	□Yes ☑No	□n/A 4.	=
Sufficient Volume?	Gres □No	□N/A 5.	CLIENT PROVIDED
Correct Containers Used?	ADVES INO	□N/A 6.	
-Pace Containers Used?	Yes Wo	□N/A U	SAMPLE CONTAINER
Containers Intact?	(☐Yes □No	□N/A 7.	
Dissolved analysis: Samples Field Filtered?	☐Yes ☐No	<b>△</b> 8.	
Sample Labels Match COC?	☐Yes ZÃO	□N/A 9. D	cute and time samples not
-Includes Date/Time/ID/Analysis Matrix:	S	7	present_
		€N/A 10.	
Headspace in VOA Vials (>5-6mm)?  Trip Blank Present?	☐Yes ☐No☐Yes ☐No	N/A 10.	
Trip Blank Custody Seals Present?	□Yes □No	EN/A	
DMMENTS/SAMPLE DISCREPANCY	Lies Lino		Field Data Required? Yes No
		Lot	ID of split containers:
ENT NOTIFICATION/RESOLUTION	)		
			and the same of th
Person contacted:		Date/Time:	
Project Manager SCURF Review:			Date:

Date:

Document Name:

Page 25 of 25

**Project Manager SRF Review:** 

Document Revised: October 28, 2020

## **ATTACHMENT B**

# Special Waste Profile - Recertification



Disposal Facility: 3708 Pine Ridge La	ndfill GA	Waste Profile #:	Waste Profile #:				
		Sales Rep #:					
I. Generator Information							
Generator Name: Clayton Coun	ty Water Authority W.B. Ca	asey WRF					
Generator Site Address: 688 Flint River Rd							
City: Jonesboro	County: Clayton	State: Georgia	Zip: 30238				
State ID/Reg No:	State Approval/Waste Code:	NA NA	AICS:				
Generator Mailing Address [ ] (if di	fferent)						
City:	County:	State:Select State	Zip:				
Generator Contact Name: Jennife	r Brandon	Email: jennifer.brando	on@ccwa.us				
Phone Number: 770-302-3462	Ext:	Fax Number:					
II. Waste Stream Information							
Name of Waste: Waste Activated Sludge	ə						
Check Section 1 or 2 below			*				
<ul> <li>a. Change of a raw material</li> <li>b. Change in the waste gene</li> <li>c. Change in a physical chara</li> </ul>	<ol> <li>There has been a change in the characteristics of the waste stream due to the following:         <ul> <li>a. Change of a raw material used in the waste generating process.</li> <li>b. Change in the waste generating process itself.</li> <li>c. Change in a physical characteristic of the waste.</li> <li>d. New information has been documented concerning the human health effects of exposure to the waste.</li> </ul> </li> </ol>						
If any of these changes have oc	curred, a new profile sheet must b	e completed, and new analysis and/or					
<ul> <li>must be provided as appropriate.</li> <li>2.  There have been no changes that would alter the physical characteristics of the special waste stream. Updated analytical may be required.</li> </ul>							
III. Representative Sample Certification							
□ No Sample Taken							
✓ Sample Taken Type of Sample Grab Sample  Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent? ✓ Yes No							
Sample Date: 7-9-20	Sample ID Numbers: 92485410	001					

## Special Waste Profile - Recertification



#### IV. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste.

I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue.

I understand that attaching an electronic signature, I am signing this document, consent to complete this transaction and receive all related communication electronically, and agree this document will be binding as though I had physically signed it. A printout of this document may be accepted with the same authority as the original."

If electronic signature is preferred, please submit completed (unsigned) form to your Special Waste Coordinator or Special Waste Sales Executive to initiate signature process.

I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services.

Jennifer Brandon	Environmental Compliance Manage	Clayton County Water Authority
Authorized Representative Name (Printed)	Title (Printed)	Company Name
Luc	Brandon	8-25-20
Authorized Repre	sentative Signature	Date



## **COVER SHEET**

Effective: May 1, 2019

#### FOR

#### VENDOR INFORMATION FORM

The enclosed Vendor Information Form is used by the Clayton County Water Authority (CCWA) for adding vendors to its financial database system that are awarded procurement or service work. This form has two parts. Part 1 is designed to obtain general company information. Completion of this part is required to successfully add the vendors to CCWA's financial database system. Part 2 is intended for information gathering purposes only. While information requested on Part 2 is optional to the vendors, it will help the CCWA obtain business ownership classification description from its vendors.

**Product(s)** / **Service(s) Provided:** Select a NIGP code from the drop-down menu. If the code is unknown, you can search it by clicking the link provided on the form. Go to page 5. At the same time, press CTRL-F. This will open a small FIND box on your screen. In the box, type the key word that best describes your goods or services and click NEXT until you find the best fit. **Write down the 5 digit code number and go to the drop-down menu of this Form to select the code.** 

For the purposes of executing this document, the following definitions apply:

- > Small Local Business Enterprise (SLBE) is one that is at least 51% owned by one or more of the applicant individuals identified and a citizen or lawfully admitted permanent resident of the United States. Independently owned and operated with average annual gross receipts for the previous three years not exceeding (1) Construction Firms- \$18,250,000 (2) Professional Services Firms \$5,500,000, Architectural Firms \$3,750,000, Engineering Firms- \$7,500,000 and Goods & Services less than 250 employees. Locally based, meaning located and operating in Clayton County or the ten (10) counties of Cherokee, Cobb, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry, Rockdale and Spalding for at least one year prior to submitting application for certification.
- ➤ A Woman Business Enterprise (WBE) is one that is at least 51% owned by a Female, who also controls and operates the business, and is a permanent resident of the State of Georgia. The business must have a permanent, functioning office within the State of Georgia and must be lawfully licensed within the relevant jurisdiction.
- A Minority Business Enterprise (MBE) is one that is at least 51% owned by one of the minority groups identified below, who also control and operate the business, and are permanent residents of the State of Georgia. The business must have a permanent, functioning office within the State of Georgia and must be lawfully licensed within the relevant jurisdiction.

#### **Minority Groups:**

Hispanic American

> African American

Native American

> Asian American

Pacific Islander

➤ A Disabled Citizen Enterprise (DCE) of the US refers to a business that is at least 51% owned by one or more disabled US citizens, who also control and operate the business, and are permanent residents of the State of Georgia. The business must have a permanent, functioning office within the State of Georgia, and must be lawfully licensed within the relevant jurisdiction.

Vendor Information Forms should be submitted to the Procurement Department.

For questions related to the verification of certifications, please email ccwa\_slbe\_program@ccwa.us

## **VENDOR INFORMATION FORM**

	PART 1
Vendor Name:	
Phone Number:	Fax #:
E-Mail Address:	
Mailing Address:	
Pay to Address:	
☐ Same as above	
_	noney between banks electronically. If you are interested in ACH payments, please complete all of the attach a copy of a voided check confirming your account information:
Bank Name:	
Routing No.:	Account No.:
Account Name: Remittance to Email .	$\Delta ddrass$ .
	es should send all invoices to: CCWA_Accounts_Payable@ccwa.us
□ P:	ndividual/Sole Proprietor
•	Γax Identification Number (TIN):
Payment Terms:	□ NET 30 DAYS □ Other:
	VICES PROVIDED: GP Code(s)
	For help finding NIGP Codes, click here: NIGP Code Listing
R	equired: A signed W-9 form must be submitted with this form.
	PART 2
<u>(For informat</u>	ion gathering purposes only. You are not required to complete PART 2).
COMPANY'S	OWNERSHIP CLASSIFICATION - See Cover Sheet for additional information.
To partipate in	the Small Local Business Program, please complete the following section:
SLBE Are yo	ou certified?
County of Primary	y Business Located:
If you are certified	d as one of the following classifications, please check the appropriate box:  WBE
* IF <b>MBE</b> , PLEAS CHOOSE ONE ONL	— — — — — — — — — — — — — — — — — — —
Etc.) may be chosen.	Company" has been chosen, no other designation (Hispanic American, African American, This option will serve as your company's classification.  Iformation Forms should be submitted to ccwa slbe program@ccwa.us.

If your company's ownership is certified as SLBE, WBE, MBE, or DCE with the State of Georgia (GDOT) Certification Program, Clayton County, DeKalb County or with the City of Atlanta, please submit a copy of your business certification (including your phone, fax, and email address) to: ccwa\_slbe\_program@ccwa.us Certification from any other entity is not needed at this time.



## **Request for Taxpayer Identification Number and Certification**

▶ Go to www.irs.gov/FormW9 for instructions and the latest information.

Give Form to the requester. Do not send to the IRS.

	I Name (as snown on your income tax return). Name is required on this line, do not leave this line blank.							
	2 Business name/disregarded entity name, if different from above							
in page 3.	3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check following seven boxes.  Individual/sole proprietor or C Corporation S Corporation Partnership	eck only <b>one</b> of the	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):					
e.	single-member LLC		Exempt payee code (if any)					
t Ş	Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partne	rship) ▶						
Print or type c Instruction	Solicition appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes.    Individual/sole proprietor or single-member LLC							
ij	Other (see instructions)		(Applies to accounts maintained outside the U.S.)					
Spe	5 Address (number, street, and apt. or suite no.) See instructions.	Requester's name a	and address (optional)					
See								
•	6 City, state, and ZIP code							
	7 List account number(s) here (optional)							
Par	Taxpayer Identification Number (TIN)							
	your TIN in the appropriate box. The TIN provided must match the name given on line 1 to av	U.U.	curity number					
reside	up withholding. For individuals, this is generally your social security number (SSN). However, the alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other as, it is your employer identification number (EIN). If you do not have a number, see <i>How to ge</i>							
TIN, la		or						
Note:	If the account is in more than one name, see the instructions for line 1. Also see What Name	and Employer	identification number					
Numb	per To Give the Requester for guidelines on whose number to enter.		-					
Par	t II Certification							
Unde	r penalties of perjury, I certify that:							
2. I ar Ser	e number shown on this form is my correct taxpayer identification number (or I am waiting for n not subject to backup withholding because: (a) I am exempt from backup withholding, or (b vice (IRS) that I am subject to backup withholding as a result of a failure to report all interest longer subject to backup withholding; and	) I have not been n	otified by the Internal Revenue					
3. I ar	n a U.S. citizen or other U.S. person (defined below); and							
4. The	e FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting	ng is correct.						
Certif	ication instructions. You must cross out item 2 above if you have been notified by the IRS that you	ou are currently subj	ect to backup withholding because					

you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

## U.S. person ▶ **General Instructions**

Signature of

Section references are to the Internal Revenue Code unless otherwise

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

#### **Purpose of Form**

Sign

Here

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

• Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)

Date ▶

- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

By signing the filled-out form, you:

- 1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
  - 2. Certify that you are not subject to backup withholding, or
- 3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
- 4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting*, later, for further information.

**Note:** If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

**Definition of a U.S. person.** For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- · An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States.

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

**Foreign person.** If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

- 1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
  - 2. The treaty article addressing the income.
- 3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
- 4. The type and amount of income that qualifies for the exemption from tax.
- 5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

**Example.** Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

#### **Backup Withholding**

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

#### Payments you receive will be subject to backup withholding if:

- 1. You do not furnish your TIN to the requester,
- 2. You do not certify your TIN when required (see the instructions for Part II for details),
  - 3. The IRS tells the requester that you furnished an incorrect TIN,
- 4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
- 5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code*, later, and the separate Instructions for the Requester of Form W-9 for more information.

Also see Special rules for partnerships, earlier.

### What is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code*, later, and the Instructions for the Requester of Form W-9 for more information.

#### **Updating Your Information**

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

#### **Penalties**

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

**Criminal penalty for falsifying information.** Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

## **Specific Instructions**

#### Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

**Note: ITIN applicant:** Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

- b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.
- c. Partnership, LLC that is not a single-member LLC, C corporation, or S corporation. Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.
- d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.
- e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

#### Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

#### Line 3

Check the appropriate box on line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3.

IF the entity/person on line 1 is a(n)	THEN check the box for
Corporation	Corporation
<ul> <li>Individual</li> <li>Sole proprietorship, or</li> <li>Single-member limited liability company (LLC) owned by an individual and disregarded for U.S. federal tax purposes.</li> </ul>	Individual/sole proprietor or single- member LLC
LLC treated as a partnership for U.S. federal tax purposes, LLC that has filed Form 8832 or 2553 to be taxed as a corporation, or LLC that is disregarded as an entity separate from its owner but the owner is another LLC that is not disregarded for U.S. federal tax purposes.	Limited liability company and enter the appropriate tax classification. (P= Partnership; C= C corporation; or S= S corporation)
Partnership	Partnership
Trust/estate	Trust/estate

#### Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

#### Exempt payee code.

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

- 1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)
- 2-The United States or any of its agencies or instrumentalities
- 3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- 4—A foreign government or any of its political subdivisions, agencies, or instrumentalities
- 5-A corporation
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission
- 8-A real estate investment trust
- 9—An entity registered at all times during the tax year under the Investment Company Act of 1940
- 10-A common trust fund operated by a bank under section 584(a)
- 11-A financial institution
- 12—A middleman known in the investment community as a nominee or custodian
- 13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for	THEN the payment is exempt for
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 <sup>1</sup>	Generally, exempt payees 1 through 5 <sup>2</sup>
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

<sup>&</sup>lt;sup>1</sup> See Form 1099-MISC, Miscellaneous Income, and its instructions.

**Exemption from FATCA reporting code.** The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B—The United States or any of its agencies or instrumentalities

C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G-A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I-A common trust fund as defined in section 584(a)

J-A bank as defined in section 581

K-A broker

L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M-A tax exempt trust under a section 403(b) plan or section 457(g) plan

**Note:** You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

#### Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, write NEW at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

#### Line 6

Enter your city, state, and ZIP code.

## Part I. Taxpayer Identification Number (TIN)

**Enter your TIN in the appropriate box.** If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

**Note:** See *What Name and Number To Give the Requester,* later, for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at www.SSA.gov. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at www.irs.gov/Businesses and clicking on Employer Identification Number (EIN) under Starting a Business. Go to www.irs.gov/Forms to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to www.irs.gov/OrderForms to place an order and have Form W-7 and/or SS-4 mailed to you within 10 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

**Note:** Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

**Caution:** A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

#### Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code*, earlier.

**Signature requirements.** Complete the certification as indicated in items 1 through 5 below.

<sup>&</sup>lt;sup>2</sup> However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

- 1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.
- 2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.
- **3. Real estate transactions.** You must sign the certification. You may cross out item 2 of the certification.
- **4. Other payments.** You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).
- 5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

## What Name and Number To Give the Requester

	•
For this type of account:	Give name and SSN of:
1. Individual	The individual
Two or more individuals (joint account) other than an account maintained by an FFI	The actual owner of the account or, if combined funds, the first individual on the account 1
3. Two or more U.S. persons (joint account maintained by an FFI)	Each holder of the account
Custodial account of a minor     (Uniform Gift to Minors Act)	The minor <sup>2</sup>
5. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee <sup>1</sup>
b. So-called trust account that is not a legal or valid trust under state law	The actual owner <sup>1</sup>
Sole proprietorship or disregarded entity owned by an individual	The owner <sup>3</sup>
7. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i) (A))	The grantor*
For this type of account:	Give name and EIN of:
Disregarded entity not owned by an individual	The owner
9. A valid trust, estate, or pension trust	Legal entity <sup>4</sup>
10. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
Association, club, religious, charitable, educational, or other tax- exempt organization	The organization
12. Partnership or multi-member LLC	The partnership
13. A broker or registered nominee	The broker or nominee

For this type of account:	Give name and EIN of:
14. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
15. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

- <sup>1</sup> List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.
- <sup>2</sup> Circle the minor's name and furnish the minor's SSN.
- <sup>3</sup> You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.
- <sup>4</sup> List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships*, earlier.

\*Note: The grantor also must provide a Form W-9 to trustee of trust.

**Note:** If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

### **Secure Your Tax Records From Identity Theft**

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN.
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, Identity Theft Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to <code>phishing@irs.gov</code>. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at <code>spam@uce.gov</code> or report them at <code>www.ftc.gov/complaint</code>. You can contact the FTC at <code>www.ftc.gov/idtheft</code> or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see <code>www.ldentityTheft.gov</code> and Pub. 5027.

Visit www.irs.gov/IdentityTheft to learn more about identity theft and how to reduce your risk.

## **Privacy Act Notice**

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

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