



Department of Management Services
Purchasing Division
241 West South Street
Kalamazoo, MI 49007-4796
Phone: 269.337.8020
Fax: 269.337.8500
www.kalamazoo.org

**NON-MANDATORY PRE-BID MEETING – April 24, 2023 @ 10:00
a.m. Wastewater -1415 North Harrison Street, Kalamazoo, MI 49007
Conference Room A**

INVITATION FOR BID (IFB)

The City of Kalamazoo, Michigan is soliciting sealed bids for:

Project Name: Transportation & Disposal of Plant Screenings **Bid Reference #:** 96871-017.0
Department of Public Services – Wastewater Division

IFB ISSUE DATE: April 10, 2023

BID DUE/OPENING DATE: May 4, 2023 @ 3:00 p.m. Local Time
Facsimile Bids Will Not Be Accepted.

MAILING ADDRESS & INSTRUCTIONS

Mail to:
Purchasing Division
241 W. South Street
Kalamazoo, MI 49007

Questions about this IFB should be directed to:
Department Contact: **Jim Cornell,**
Wastewater Division Manager at (269)337-8644
or Treatment Control Analyst at (269) 337-8681

Include on the Envelope the Project Name and Bid Reference Number. All Envelopes Must Be Sealed.

You are invited to submit a bid for this project. Specifications, terms, conditions and instructions for submitting bids are contained herein. This Invitation for Bid with all pages, documents and attachments contained herein, or subsequently added to and made a part hereof, submitted as a fully and properly executed bid shall constitute the contract between the City and the successful bidder when approved and accepted on behalf of the City by an authorized official or agent of the City. Please review the bid document as soon as possible and note the **DEADLINE FOR QUESTIONS** in the Instructions to Bidders.

All bidders shall complete and return the Bid and Award page(s) and submit all information requested herein in order for a bid to be responsive. The bid document shall be returned in its entirety, in a properly identified and sealed envelope to the Purchasing Division at the above address. **BIDS MUST BE RECEIVED BEFORE THE DUE DATE - LATE BIDS WILL NOT BE CONSIDERED.** The City reserves the right to postpone the bid opening for its own convenience.

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STATEMENT OF NO BID

NOTE: If you DO NOT intend to bid on this commodity or service, please complete and return this form immediately. Your response will assist us in evaluating all responses for this important project and to improve our bid solicitation process.

The Purchasing Division of the City of Kalamazoo wishes to keep its bidders list file up-to-date. If, for any reason you cannot supply the commodity/service noted in this bid solicitation, this form must be completed and returned to remain on the particular bid list for future projects of this type.

If you do not respond to this inquiry within the time set for the bid opening date and time noted, we will assume that you can no longer supply this commodity/service, and your name will be removed from this bid list.

- _____ Specifications too "tight", i.e. geared toward one brand or manufacturer only (explain below).
- _____ Specifications are unclear (explain below).
- _____ We are unable to meet specifications.
- _____ Insufficient time to respond to the Invitation for Bid.
- _____ Our schedule would not permit us to perform.
- _____ We are unable to meet bond requirements.
- _____ We are unable to meet insurance requirements.
- _____ We do not offer this product or service.
- _____ Remove us from your bidders list for this commodity or service.
- _____ Other (specify below).

REMARKS: _____

SIGNED: _____ NAME: _____
(Type or Print)

TITLE: _____ DATE: _____ FIRM: _____
NAME: _____
(if any)

ADDRESS: _____
(Street address) (City) (State) (Zip)

PHONE: _____ FAX: _____

EMAIL: _____

**SECTION I
INSTRUCTIONS TO BIDDERS**

1. **EXAMINATION OF BID DOCUMENT**-Before submitting a bid, bidders shall carefully examine the specifications and shall fully inform themselves as to all existing conditions and limitations. The bidder shall indicate in the bid the sum to cover the cost of all items included on the bid form.
2. **PREPARATION OF BID**-The bid shall be legibly prepared in ink or typed. If a unit price or extension already entered by the bidder on the Bid and Award form is to be altered, it shall be crossed out and the new unit price or extension entered above or below and initialed by the bidder with ink. The bid shall be legally signed and the complete address of the bidder given thereon.

All bids shall be tightly sealed in an envelope plainly marked SEALED BID and identified by project name, bid opening date and time. Bids opened by mistake, due to improper identification, will be so documented and resealed. The Purchasing Division will maintain and guarantee confidentiality of the contents until the specified opening date and time. Bids submitted by Fax machine will not be accepted.

3. **EXPLANATION TO BIDDERS**-Any binding explanation desired by a bidder regarding the meaning or interpretation of the Invitation for Bid (IFB) and attachments must be requested in writing, **at least 5 days before the bid opening** so a reply may reach all prospective bidders before the submission of bids. Any information given to a prospective bidder concerning the IFB will be furnished to all prospective bidders as an amendment or addendum to the IFB if such information would be prejudicial to uninformed bidders. Receipt of amendments or addenda by a bidder must be acknowledged in the bid by attachment, or by letter or fax received before the time set for opening of bids. Oral explanation or instructions given prior to the opening will not be binding.
4. **CASH DISCOUNTS**-Discount offered for payment of less than thirty (30) days will not be considered in evaluating bids for award. Offered discounts of less than thirty (30) days will be taken if payment is made within the discount period, even though not considered in evaluation of the bid.
5. **WITHDRAWAL OF BIDS**-Bids may be withdrawn in person by a bidder or authorized representative, provided their identity is made known and a receipt is signed for the bid, but only if the withdrawal is made prior to the exact time set for receipt of bid. No bid may be withdrawn for at least ninety (90) days after bid opening.
6. **ALTERNATE BIDS**-bidders are cautioned that any alternate bid, unless specifically requested or any changes, insertions or omissions to the terms and conditions, specifications or any other requirement of this IFB may be considered non-responsive, and at the option of the City, result in rejection of the alternate bid.
7. **LATE BIDS**-Any bid received at the office designated herein after the exact time specified for receipt will not be considered. (Note: The City reserves the right to consider bids that have been determined by the City to be received late due to mishandling by the City after receipt of the bid and no award has been made.)
8. **UNIT PRICES**-If there is a discrepancy between unit prices and their extension, unit prices shall prevail.

**SECTION II
BID AND AWARD**

The undersigned having become thoroughly familiar with and understanding all of the bid/contract documents incorporated herein, the project site and the local conditions affecting the work, hereby proposes to provide the transportation and disposal of plant screenings for the one-year period of September 1, 2023 through August 31, 2024 as specified herein for the following per ton unit price:

TRANSPORTATION AND DISPOSAL OF PLANT SCREENINGS

	<u>UNIT PRICE</u>	<u>ESTIMATED QUANTITY</u>	<u>EXTENDED TOTAL</u>
1. Cost for transportation and disposal of plant screenings (screenings, grit, scum, etc.) 10-20-30 yard containers	\$_____	2500 tons	\$_____

Bidder/Contractor has examined and carefully studied the bidding documents and attachments, and acknowledges receipt of the following addenda:

Addendum No: _____

Dated: _____

Bidder shall provide all of the information as requested herein with their bid. Failure to do so and/or failure to provide post-bid requested information may be cause for rejecting the bid as non-responsive.

Work shall start within _____ working days after receipt of notification by Contractor of Notice to Proceed, and shall be completed within _____ calendar days thereafter (must be COMPLETE within 240 calendar days).

The City encourages the use of local labor in fulfilling the requirements of this contract.

By my signature below, I certify that the firm bidding on this contract, when making hiring decisions, does not use a past criminal conviction as a bar to or preclude a person with a criminal conviction from being considered for employment with the bidding firm unless otherwise precluded by federal or state law. I further certify that I have read and agree to be bound by the provisions of the City’s Non-Discrimination Clause found in Appendix A and as updated by City Ordinance 1856.

Signed: _____ Name: _____

Title: _____

REFERENCE QUESTIONNAIRE

Please answer the following questions completely.

1. Firm name: _____

2. Established: Year _____ Number of Employees: _____

3. Type of organization:

a. Individual: _____ b. Partnership: _____

c. Corporation: _____ d. Other: _____

4. Former firm name(s) if any, and year(s) in business:

5. Include at least 3 references of contracts for similar work performed over the last five (5) years. Include: owner, contact person and phone number and description of work performed.

5.1 Company Name: _____

Address: _____

Phone: _____

Contact: _____

Type of work or contract: _____

5.2 Company Name: _____

Address: _____

Phone: _____

Contact: _____

Type of work or contract: _____

5.3 Company Name: _____

Address: _____

Phone: _____

Contact: _____

Type of work or contract: _____

I hereby certify that all of the information provided is true and answered to the best of my ability.

Signed: _____ Name: _____
(type or print)

Title: _____ Date: _____

**CITY OF KALAMAZOO
LOCAL PREFERENCE POLICY AND CERTIFICATION**

The lowest responsive Kalamazoo County bidder whose bid is not low but falls within 2% of the lowest responsive bid is afforded the opportunity to become the successful bidder if it agrees to reduce its bid to match the lowest responsive bid. The City of Kalamazoo is the sole determiner whether a bidder is responsible, qualifies as a Kalamazoo County bidder, and if its bid is responsive to the City’s specifications, terms and conditions.

If the lowest Kalamazoo County bidder chooses not to match the lowest bid, the next lowest responsive Kalamazoo County bidder whose bid falls within 2% of the lowest bid, is given the opportunity to match the lowest responsive bid.

To qualify as a Kalamazoo County bidder, the bidder must meet both the following criteria:

1. Have a physical presence in Kalamazoo County by maintaining a permanent office, factory or other facility in Kalamazoo County with employees working in Kalamazoo County.
2. Have paid real or personal property taxes related to said business to the City of Kalamazoo, County of Kalamazoo or other municipal corporation within Kalamazoo County in the previous tax year, except that a non-profit entity need not meet this requirement.

This local preference policy applies only to purchases for materials, supplies, capital outlay, and services for maintenance, repair or operation of City facilities that are over \$25,000. If more than 50% of the contract is sub-contracted to firms located outside of Kalamazoo County that bid does not qualify for the local preference policy outlined above. The local preference policy will not apply if prohibited by law. The Purchasing Agent has the authority to finally determine if the bidder qualifies as a Kalamazoo County bidder as set forth herein. The Purchasing Agent may take into account the permanency of the business in Kalamazoo, and whether the business appears to be claiming to be a Kalamazoo County business solely or primarily to qualify as a Kalamazoo County business under this Resolution, and any other material factors.

CERTIFICATION

If you qualify as a Kalamazoo County bidder and wish to be considered for the local preference provisions as provided above please certify that fact by providing the information requested below and attesting to its accuracy.

Firm Name: _____

Street Address of Business: _____

City, State, and Zip Code: _____

Number of employees working in Kalamazoo County: _____

Name the city or township to which business real and/or personal property taxes are paid or provide non-profit status:

The above information is accurate:

Signature: _____ Date: _____

Title: _____

BIDDERS' QUESTIONNAIRE

The following information will be used, in part, to determine bid responsiveness, therefore, failure to complete this information may result in rejection of the bid as non-responsive.

PLAN OF OPERATION

1. Proposed primary disposal site: _____

Name (if any): _____

Location: _____

Owner: _____

Is this facility in compliance with all provisions of the current operating permit? Yes () No ()
(Attach copy of operating permit)

If answer is no, please explain:

2. Proposed back-up disposal site:

Name (if any): _____

Location: _____

Owner: _____

Is this facility in compliance with all provisions of the current operating permit? Yes () No ()
(Attach copy of operating permit)

If answer is no, please explain: _____

3. Proposed temporary storage site (if needed):

Location: _____

Owner: _____

4. Proposed back-up temporary storage site:

Location: _____ Owner: _____

BIDDERS' QUESTIONNAIRE (cont)

5. Type and number of containers to be utilized:

Type: _____

Number available to be used for KWRP screenings: _____

6. Size of containers to be used:

(1) _____ cu. yd. _____/L x _____/W x _____/H

(2) _____ cu. yd. _____/L x _____/W x _____/H

(3) _____ cu. yd. _____/L x _____/W x _____/H

7. Type and number of trucks to be used:

Type: _____

Number available to be used for KWRP screenings: _____

8. Provide a list of similar projects (not to exceed three) performed over the last five (5) years.

a. Project: _____

Location: _____

Contact: _____ Phone: _____

b. Project: _____

Location: _____

Contact: _____ Phone: _____

c. Project: _____

Location: _____

Contact: _____ Phone: _____

9. Provide a narrative statement describing the general history of the firm's operating organization.

10. Total personnel of firm: _____ Number of drivers with CDL license: _____

I hereby certify that all of the information provided is true and answered to the best of my ability.

Signed: _____ Name: _____
(Type or Print)

Title: _____ Date: _____

CITY OF KALAMAZOO EX-OFFENDER POLICY CHECKLIST

As part of the City’s commitment to reducing unacceptable poverty, encouraging rehabilitation, reducing recidivism and strengthening families in Kalamazoo, the City has updated its Purchasing Policy to ensure that firms with whom the City does business share in this commitment by utilizing hiring practices that do not unfairly deny people with arrest and conviction records gainful employment. *(Important: This requirement also extends to any subcontractors the bidder intends to use to fulfill the contract for goods or services being sought from the City.)*

Part I: Proof that the bidder does not inquire about an individual’s past arrest or criminal history on the bidders employment application form

- Attach a copy of the current application for employment being used by the bidder

Part II: Certification that the bidder does not use an individual’s past arrest or criminal history to unlawfully discriminate against them by checking *one or more* of the following:

- That pursuant to federal or state law bidder is precluded from hiring persons with certain criminal records from holding particular positions or engaging in certain occupations by providing a cite to the applicable statute or regulation; if checking this box, provide a citation to the applicable statute or rule upon which the bidder is relying: _____
- That bidder conducts criminal history background checks only as necessary, and only after making a conditional offer of employment; that any withdrawal of an offer of employment to an individual because of a past criminal history is job-related and consistent with business necessity after the individual has been provided an individualized assessment opportunity to review and challenge or supplement the history of past criminal conduct being relied upon by the bidder;
- That the use by bidder of criminal history background checks complies with the U.S. Equal Employment Opportunity Commission’s Enforcement Guidance on the Consideration of Arrest and Conviction Records in Employment Decisions and that the bidder has not had a determination rendered against it in past 7 years that it discriminated against a person through the use of an individual’s arrest or criminal history

I CERTIFY THAT THE ABOVE STATEMENTS ARE TRUE.

Date

Signature

Printed Name

Position

NOTE: This blanket addendum is for informational purposes only and does not need to be acknowledged by bidders in their submission.

COVID-19 ADDENDUM #2

January 1, 2022

TO: ALL Prospective Bidders
PROJECT: ALL Upcoming Projects

The purpose of this addendum is to clarify and/or modify the sealed bid delivery and bid opening process for all upcoming projects. All work affected is subject to all applicable terms and conditions of the Bidding and Contract Documents.

1. UPDATE TO SEALED BID DELIVERY AND BID OPENING POLICY:

Effective immediately and continuing until further notice, the City of Kalamazoo will return to IN-PERSON bid openings following City Hall guidelines, including Mask Mandate.

BIDS MUST BE RECEIVED BEFORE THE DUE DATE AND TIME – LATE BIDS WILL NOT BE CONSIDERED.

Bidders can submit sealed bids in one of the following ways:

- **Mail your bid**, to be received before the bid due date and time indicated in the bid document, to the City of Kalamazoo at the following address:

City of Kalamazoo
Purchasing Division
241 West South Street
Kalamazoo, MI 49007

- **Deliver your bid to the Treasurer’s Office Payment Drop Box** located in the northwest corner of City Hall before the bid due date and time indicated in the bid document.
- **Deliver your bid to City Hall In Person** before the bid due date and time indicated in the bid document.

All bids shall be tightly sealed in an envelope plainly marked SEALED BID and identified by project name, bid opening date and time. Bids opened by mistake, due to improper identification, will be so documented and resealed. The Purchasing Division will maintain and guarantee confidentiality of the contents until the specified opening date and time. Bids submitted by fax machine or email will not be accepted.

The Purchasing Division will post bid tabulations to the City of Kalamazoo website within 24 hours after the bid opening date and time at: <https://www.kalamazoocity.org/bidopportunities>.

Questions regarding this sealed bid delivery and bid opening policy change related to the COVID-19 virus should be directed to the City of Kalamazoo at (269) 337-8020.

Sincerely,



Michelle Emig
Purchasing Division Manager

I hereby state that all of the information I have provided is true, accurate and complete. I hereby state that I have the authority to submit this bid which will become a binding contract if accepted by the City of Kalamazoo. I hereby state that I have not communicated with nor otherwise colluded with any other bidder, nor have I made any agreement with nor offered/accepted anything of value to/from an official or employee of the City of Kalamazoo that would tend to destroy or hinder free competition.

The firm's identification information provided will be used by the City for purchase orders, payment and other contractual purposes. If the contractual relationship is with, or the payment made to, another firm please provide a complete explanation on your letterhead and attach to your bid. Please provide for accounts payable purposes:

Tax Identification Number (Federal ID): _____

Remittance Address: _____

Financial Contact Name: _____ Financial Contact Phone Number: _____

Financial Contact Email Address: _____

I hereby state that I have read, understand and agree to be bound by all terms and conditions of this bid document.

SIGNED: _____ NAME: _____
(Type or Print)

TITLE: _____ DATE: _____

FIRM NAME: _____
(if any)

ADDRESS: _____
(Street address) (City) (State) (Zip)

PHONE: _____ FAX: _____

EMAIL ADDRESS: _____

FOR CITY USE ONLY - DO NOT WRITE BELOW

SECTION III SPECIFICATIONS

1. SCOPE AND INTENT

This project includes supplying all labor, materials, tools, equipment, supplies, permit fees, disposal fees and all other incidental costs associated with the lawful transportation and lawful disposal in an approved Type II landfill (or approved site) of residual screenings generated by the Kalamazoo Water Reclamation Plant (KWRP) located at 1415 North Harrison Street, Kalamazoo, Michigan.

2. GENERAL

The residual solids are generated twenty-four (24) hours a day, seven (7) days a week, year around. Any interruption in the residual screenings generation at KWRP plant due to the inability or failure of the Contractor to perform his/her duties as specified herein is unacceptable and will be deemed to be a violation of the terms of this contract.

PENALTY CLAUSE: Any unplanned shutdowns due to lack of contractor response time, failure to provide equipment, or failure to provide service, shall be assessed a penalty of up to \$5,000 per occurrence.

The quantity of residual screenings generated is a function of the raw sewage quality entering KWRP. Plant screenings normally generated for disposal are, municipal and industrial screenings, grit screenings, scum, and Vactor residuals from sanitary and storm sewers. The amounts listed are estimates only based on current and projected production rates. Actual rates may be higher or lower, and are for estimating purposes only, and the City gives no guarantee as to the actual volume of residual screenings that may be generated.

3. TRANSPORTATION

The Contractor shall lawfully transport the residual screenings to the Type II landfill disposal site named in the bidder's questionnaire or, if needed, to the approved temporary storage site. All licenses, fees and other incidental costs associated with this transport shall be the responsibility of the Contractor. The Contractor shall abide by all applicable load restrictions, traffic regulations and ordinances to ensure safe and proper transportation. The Contractor shall cover the residual screenings during transport as required by D.O.T. regulations to prevent spillage, excessive odor or other factors.

In the event that spillage does occur in the transportation from KWRP to the disposal site. The contractor must, at a minimum, follow the City's Spill Response Plan. (Attachment B) The Contractor will be responsible for all costs incurred in the clean-up process. The contractor must also provide the City with their own Spill Response Plan on handling spills.

4. ON SITE STAGING AND TEMPORARY STORAGE

Filled containers may be staged on KWRP site with approval of the City or in the designated container staging area, for a time not to exceed 48 hours. Containers must be removed from the staging area and transported off site for disposal or temporary storage, if required.

ON SITE STAGING AND TEMPORARY STORAGE (*cont*)

The Contractor shall provide lawful temporary storage of residual screenings, if needed. It is the responsibility of the Contractor to acquire any and all necessary approvals from all governmental units having jurisdiction over this temporary storage. The temporary storage site selected by the Contractor shall be subject to the approval of the City.

5. DISPOSAL

The Contractor shall provide for lawful disposal of the residual screenings. All applicable state, federal and local permits shall be secured by the Contractor prior to commencing disposal. A copy of the Michigan Department of Environmental Quality Operating Permit shall be submitted with the bid.

The Contractor shall be required by the City to participate in a manifest system with the purpose of accounting for each load of residual solids removed from the City's site. The manifest forms will be supplied by the City and will require the Contractor to secure the signature of the disposal site operator or his/her designate, verifying that the solids have been received and properly disposed.

6. LOADING FACILITIES

The Contractor's containers will be loaded at a City loading facility by City personnel. The City will supply the Contractor with convenient access to and from the loading facility within the boundaries of the Wastewater Treatment facility only. A review of the loading facility can be made with Jim Cornell, Wastewater Division Manager. To schedule an appointment, call (269) 337-8644 or (269) 337-8681.

The Contractor will be required to provide adequate service as to allow continuous City operations with no shutdowns.

7. CONTAINERS

The Contractor shall supply sealed containers for use in the temporary storage and transportation of the residual screenings. 20-30-40 yard containers are preferred for plant screenings. Any container linings deemed necessary by the Contractor or City for effective disposal shall be supplied by the Contractor. If there is a residual solids buildup in the containers, the Contractor will be required to weigh in containers or line the containers, if deemed necessary by the City. The Contractor shall furnish and use container covers for use in the staging, transport and temporary storage if deemed necessary by the City.

The containers shall be compatible with the City's loading facility. Any modification to the City's loading facility to accommodate the Contractor's containers shall be subject to City approval and shall be done at the Contractor's expense. The containers will need to be modified to have a place to attach a hook to the back of the tub. This will allow the tubs to be moved inside the screening building.

A sufficient number of containers shall be provided to prevent interference with the residual solids generating operation. The Contractor will be required to supply a minimum of seven (7) 20, 30, or 40 yard containers for use by the City. Containers may be placed either inside the screen building or at the dump station. The Contractor's containers shall be placed in the City's loading facility (dump station), or inside the screen building by the Contractor. When the containers are full, the containers shall be picked up immediately within 24 hours of notification of need to switch out by the Contractor and transported from the City site. Any movement of containers within the loading facility necessary for effective container loading shall be done by the Contractor. The City shall not be responsible for moving the Contractor's containers.

8. PENALTIES

The Contract Administrator shall have the sole discretion to assess fines for repeated performance deficiencies, including, but not limited to the following:

- Inappropriate behavior as a service representative of the City
- Excessive level of missed collections causing reduced bunker space or other similar complaints
- Other performance deficiencies which the contractor has received prior notice of in writing from the Contract Administrator
- Lack of courtesy and responsiveness
- The failure of the Contractor to account for each and every load of the belt press solids shall be deemed to be a violation of the terms of this contract

The Contract Administrator shall take into consideration:

- Previous occurrences, if any, of the same nature
- Remedial action proposed or implemented by the contractor
- Seriousness of the complaint
- Prior communication regarding the type of complaint under consideration

A minimum assessment of \$200 and a maximum assessment of \$5,000, per occurrence may be levied pursuant to this section.

9. QUALIFICATION OF BIDDERS

All bids will be evaluated by the City using the information provided in the Bidders Questionnaire, the Bid and Award page, and any attachments.

Bids will be considered from only the responsible organizations now or recently engaged in the performance of service contracts comparable to those described in the attached specifications. In order to determine his/her qualifications, each bidder will be requested to furnish a narrative statement listing comparable contracts which he/she has performed; the general history of his/her operating organization; and a staff of regular employees adequate to continuous performance of the work and if requested to do so demonstrate that his/her equipment and/or capability for the work contemplated is sufficient, adequate and suitable.

Criteria used to measure a firm's qualifications as a responsible organization:

- A. Experience of firm, in both terms of longevity and number of projects similar in nature;
- B. References of firms for services performed on similar projects;
- C. Available equipment and containers;
- D. Location of primary, backup and temporary disposal sites;
- E. Total cost.

10. CONTRACT PERIOD AND EXTENSIONS

- 10.1 The contract shall be in effect for a basic one (1) year period commencing on or about September 1, 2023 and continuing through August 31, 2024.
- 10.2 The City may opt to extend this contract for a one (1) year period. Extensions shall not exceed four (4) one-year periods. All extensions shall be upon mutual agreement of both parties.
- 10.3 All contracts and extensions are subject to the approval of the City Commission.

11. PRICES

- 11.1 The unit prices shall be based on routine operation and generation of plant screening residuals. The routine operation shall include transportation and disposal of the following materials:

- Municipal Screenings
- Industrial Screenings
- Grit and Screenings
- Vactor Residuals
- Scum

NOTE: The quantity of total plant residuals stated herein are estimated based on current operating conditions and projected operating conditions. Actual rates may be higher or lower.

- 11.2 Prices quoted shall include freight, demurrage, labor, materials, equipment, taxes, fuel surcharges, and any other incidentals required for the performance of this contract.
- 11.3 Prices shall remain firm for the contract term.

12. SUPERVISORY STATUS

The Wastewater Superintendent or designated representative shall have general authority over this contract. He shall have authority to reject any work which does not conform to this contract, decide questions or interpretations which may arise from these contract documents, and to stop the work whenever such stoppage may be necessary to ensure the proper execution of this contract.

The Contractor shall immediately report to the Wastewater Superintendent any questionable or obvious error or omission, or any ambiguity or inconsistency which may be apparent and shall not proceed with the work until the issue has been resolved.

Any questions relating to the nature of this bid or the contract after award shall be forwarded to Jim Cornell, Wastewater Division Manager, Public Services, Wastewater Treatment Plant, 1415 North Harrison Street, Kalamazoo, MI 49007, (269) 337-8644 or (269) 337-6039.

13. EQUIPMENT, INSPECTION AND LIABILITY

The Wastewater Superintendent shall have the right to inspect all equipment which is to be used in carrying out the terms of this contract. Any such equipment or components which do not comply with local, federal and state codes may be rejected and shall be replaced by the Contractor at no cost to the City.

The Contractor shall assume all liability for any damage to the Contractor's equipment while performing the work herein contracted. No claim of loss or damage will be considered by the City. The Contractor

shall have fully operational backup equipment to assure no lapse in schedule readily available.

14. WORK SCHEDULING

The work shall be performed as outlined herein. Every effort will be made by the City to cooperate with the Contractor in regard to scheduling and the establishment of policies and procedures in addition to those noted herein.

It is expressly understood and agreed by and between the Contractor and the City that the contract time for the completion of the work described herein is a reasonable time, considering all of the applicable factors. It is further understood and agreed that **TIME IS OF THE ESSENCE** in respect to the work contemplated hereunder and the Contractor agrees to do the work covered by the contract in conformity with the provisions set forth herein. Failure on the part of the Contractor to complete the work as specified within the stated time shall constitute default by the Contractor. Regardless of any other provision of this contract, if Contractor fails to perform as herein requested, the Contractor shall be liable to the City for all damages incurred by the City including, but not limited to fees, fines and the like. Contractor shall still remain liable to the City for any other costs or damages due to reasons unrelated to timely performance.

15. PAYMENT

Payment shall be on a monthly basis only, any deviation to this schedule shall require prior approval of the Wastewater Superintendent. The Contractor shall submit an invoice which reflects the amount of residual screenings (by ton weight) removed from the City's site since the previous invoice. Each load of residual screenings may be weighed by a representative of the City at the City's site prior to removal from the site. Payment shall be based on this weight determination. NOTE: A sample of bidders invoice shall be included with submitted bid.

Two (2) copies of all invoices shall be forwarded to the Budget and Accounting Division at 241 West South Street, Kalamazoo, MI 49007. Invoices must correlate hauled waste with KWRP manifest. Billing cycles must be run on a calendar month period.

An additional copy of the invoice shall be forwarded to Kalamazoo Water Reclamation Plant, 1415 N. Harrison St., Kalamazoo, MI 49007, attention Wastewater Superintendent.

Penalties incurred, detailed under Special Requirements, Item 3, shall be invoiced by the City and are due within 30 days.

Services must be billed within 90 days of being provided. The City will not accept invoices for services provided more than 90 days prior to receipt of the invoice in order to prevent double payment for work provided.

16. RESPONSIBILITIES OF CONTRACTOR

- A. The Contractor shall be responsible for the satisfactory and complete execution of the work in accordance with the true intent of the specifications.
- B. The Contractor shall be responsible for protecting and preserving from damage, any and all facilities, public and private which are adjacent to the areas where work is being performed.
- C. The Contractor shall assume all liability from any and all property damage or personal injuries incurred during the course of performing the work herein contracted. No claim of loss, damage or

injury will be considered by the City.

- D. When a disposal site or temporary storage site is to be changed, the Contractor shall notify the City, in writing, in advance of the change.
- E. The Contractor must follow the City's SOP listed in Attachment B in the event of spillage in route to the disposal site.
- F. The Contractor shall assume all clean-up costs and liability in the event of a spill.

17. QUESTIONS

Questions relative to the general bid requirements may be addressed to Gracia Mason, Buyer, at (269) 337-8720. Questions relative to the specifications may be addressed to Jim Cornell, Wastewater Division Manager at (269) 337-8644 or (269) 337-6039. This does not, however, relieve the bidder from Item 3, Page 1.

**SECTION V
INDEMNITY AND INSURANCE**

Contractor, or any of their subcontractors, shall not commence work under this contract until they have obtained the insurance required under this paragraph, and shall keep such insurance in force during the entire life of this contract. All coverage shall be with insurance companies licensed and admitted to do business in the State of Michigan and acceptable to the City of Kalamazoo within ten (10) days of the Notice of Award. The requirements below should not be interpreted to limit the liability of the Contractor. All deductibles and SIR's are the responsibility of the Contractor.

The Contractor shall procure and maintain the following insurance coverage:

Workers' Compensation Insurance including Employers' Liability Coverage, in accordance with all applicable statutes of the State of Michigan.

Commercial General Liability Insurance on an "Occurrence Basis" with limits of liability not less than \$1,000,000 per occurrence and aggregate. Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent, if not already included and (E) XCU coverage if the nature of the contract requires XC or U work.

Automobile Liability including Michigan No-Fault Coverages, with limits of liability not less than \$1,000,000 per occurrence, combined single limit for Bodily Injury, and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles.

Additional Insured: Commercial General Liability and Automobile Liability, as described above, shall include an endorsement stating that the following shall be *Additional Insureds*: The City of Kalamazoo, all elected and appointed officials, all employees and volunteers, all boards, commissions, and/or authorities and board members, including employees and volunteers thereof. It is understood and agreed that by naming the City of Kalamazoo as additional insured, coverage afforded is considered to be primary and any other insurance the City of Kalamazoo may have in effect shall be considered secondary and/or excess.

To the fullest extent permitted by law the Contractor agrees to defend, pay on behalf of, indemnify, and hold harmless the City of Kalamazoo, its elected and appointed officials, employees, agents and volunteers, and others working on behalf of the City of Kalamazoo against any and all claims, demands, suits, or loss, including all costs connected therewith, and for any damages which may be asserted, claimed, or recovered against or from the City of Kalamazoo, by reason of personal injury, including bodily injury or death and/or property damage, including loss of use thereof, which arises out of, or is in any way connected or associated with this contract.

Cancellation Notice: All policies, as described above, shall include an endorsement stating that it is understood and agreed that thirty (30) days, or ten (10) days for non-payment of premium, Advance Written Notice of Cancellation, Non-Renewal, Reduction, and/or Material Change shall be sent to: City of Kalamazoo, Purchasing Department, 241 W. South Street, Kalamazoo, MI 49007.

Proof of Insurance Coverage: The Contractor shall provide the City of Kalamazoo at the time that the contracts are returned by him/her for execution, or within 10 days of Notice of Award, whichever is earlier, a Certificate of Insurance as well as the required endorsements. In lieu of required endorsements, if applicable, a copy of the policy sections where coverage is provided for additional insured and cancellation notice would be acceptable. Copies or certified copies of all policies mentioned above shall be furnished, if so requested.

INDEMNITY AND INSURANCE

Continued

If any of the above coverages expire during the term of this contract, the Contractor shall deliver renewal certificates and/or policies to City of Kalamazoo at least ten (10) days prior to the expiration date.

Scope of Coverage: The above requirements and conditions shall not be interpreted to limit the liability of the Contractor under this Contract, but shall be interpreted to provide the greatest benefit to the City and its officers and employees. The above listed coverages shall protect the Contractor, its employees, agents, representatives and subcontractors against claims arising out of the work performed. It shall be the Contractor's responsibility to provide similar insurance for each subcontractor or to provide evidence that each subcontractor carries such insurance in like amount prior to the time such subcontractor proceeds to perform under the contract.

**SECTION V
TERMS AND CONDITIONS**

1. AWARD OF CONTRACT

- A. This contract will be awarded to that responsible bidder whose bid, conforming to this solicitation, will be most advantageous to the City, price and other factors considered. The City reserves the right to accept or reject any or all bids and waive informalities and minor irregularities in bids received. Other factors include, as an example but not limited to, delivery time, conformance to specifications, incidental costs such as demurrage and deposits, etc.

Notification of award will be in writing by the Purchasing Agent. Upon notification, the Contractor shall submit to the Purchasing Division all required insurance certificates (if required) and such other documentation as may be requested or required hereunder. Upon their receipt and subsequent approval by the City, the Purchasing Agent will forward to the Contractor a written **NOTICE TO PROCEED**. Work shall **NOT** be started until such **NOTICE TO PROCEED** is received by the Contractor.

- B. Unilateral changes in bid prices by the bidder shall not be allowed. However, the City, at its sole option, reserves the right to negotiate with bidders in the event of, but not limited to:
- 1) No bids received;
 - 2) A single bid being received; or
 - 3) Prices bid are over budget and/or unreasonable.

2. COMPLETE CONTRACT

This bid document together with its addenda, amendments, attachments and modifications, when executed, becomes the complete contract between the parties hereto, and no verbal or oral promises or representations made in conjunction with the negotiation of this contract shall be binding on either party.

3. SUBCONTRACTORS - NON ASSIGNMENT

Bidders shall state in writing any and all sub-contractors to be associated with this bid, including the type of work to be performed. The Contractor shall cooperate with the City of Kalamazoo in meeting its commitments and goals with regard to maximum utilization of minority and women-owned business enterprises.

The Contractor hereby agrees and understands that the contract resulting from this solicitation shall not be transferred, assigned or sublet without prior written consent of the City of Kalamazoo.

4. TAXES

The City of Kalamazoo is exempt from all federal excise tax and state sales and use taxes. However, depending upon the situation, the vendor or contractor may not be exempt from said taxes and the City of Kalamazoo is making no representation as to any such exemption.

5. **PAYMENTS**

Unless otherwise specified by the City in this contract, the Contractor will be paid in not more than thirty (30) days after receipt of a properly executed invoice, the sum stipulated herein for supplies delivered and accepted, or service rendered and accepted. Payments are processed by the Budget & Accounting Division after receipt of an original invoice from the Contractor and approval by the department.

6. **CHANGES AND/OR CONTRACT MODIFICATIONS**

The City reserves the right to increase or decrease quantities, service or requirements, or make any changes necessary at any time during the term of this contract, or any negotiated extension thereof. Price adjustments due to any of the foregoing changes shall be negotiated and mutually agreed upon by the Contractor and the City.

Changes of any nature after contract award which reflect an increase or decrease in requirements or costs shall not be permitted without prior approval by the Purchasing Agent. City Commission approval may also be required. **SUCH CHANGES, IF PERFORMED IN ADVANCE OF PURCHASING AGENT APPROVAL, MAY BE SUBJECT TO DENIAL AND NON-PAYMENT.**

7. **LAWS, ORDINANCES AND REGULATIONS**

The Contractor shall keep himself/herself fully informed of all local, state and federal laws, ordinances and regulations in any manner affecting those engaged or employed in the work and the equipment used. Contractor and/or employees shall, at all times, serve and comply with such laws, ordinances and regulations.

Any permits, licenses, certificates or fees required for the performance of the work shall be obtained and paid for by the Contractor.

This contract shall be governed by the laws of the State of Michigan.

8. **RIGHT TO AUDIT**

The City or its designee shall be entitled to audit all of the Contractor's records, and shall be allowed to interview any of the Contractor's employees, throughout the term of this contract and for a period of three years after final payment or longer if required by law to the extent necessary to adequately permit evaluation and verification of:

- A. Contractor compliance with contract requirements,
- B. Compliance with provisions for pricing change orders, invoices or claims submitted by the Contractor or any of his payees.

9. **HOLD HARMLESS**

If the acts or omissions of the Contractor/Vendor or its employees, agents or officers, cause injury to person or property, the Contractor/Vendor shall defend, indemnify and save harmless the City of Kalamazoo, its agents, officials, and employees against all claims, judgments, losses, damages, demands, and payments of any kind to persons or property to the extent occasioned from any claim or demand arising therefrom.

10. **DEFAULT**

The City may at any time, by written notice to the Contractor, terminate this contract and the Contractor's right to proceed with the work, for just cause, which shall include, but is not limited to the following:

- A. Failure to provide insurance and bonds (when called for), in the exact amounts and within the time specified or any extension thereof.
- B. Failure to make delivery of the supplies, or to perform the services within the time specified herein, or any extension thereof.
- C. The unauthorized substitution of articles for those bid and specified.
- D. Failure to make progress if such failure endangers performance of the contract in accordance with its terms.
- E. Failure to perform in compliance with any provision of the contract.
- F. **Standard of Performance** - Contractor guarantees the performance of the commodities, goods or services rendered herein in accordance with the accepted standards of the industry or industries concerned herein, except that if this specification calls for higher standards, then such higher standards shall be provided.

Upon notice by the City of Contractor's failure to comply with such standards or to otherwise be in default of this contract in any manner following the Notice to Proceed, Contractor shall immediately remedy said defective performance in a manner acceptable to the City. Should Contractor fail to immediately correct said defective performance, said failure shall be considered a breach of this contract and grounds for termination of the same by the City.

In the event of any breach of this contract by Contractor, Contractor shall pay any cost to the City caused by said breach including but not limited to the replacement cost of such goods or services with another Contractor.

The City reserves the right to withhold any or all payments until any defects in performance have been satisfactorily corrected.

In the event the Contractor is in breach of this contract in any manner, and such breach has not been satisfactorily corrected, the City may bar the Contractor from being awarded any future City contracts.

- G. All remedies available to the City herein are cumulative and the election of one remedy by the City shall not be a waiver of any other remedy available to the City either listed in this contract or available by operation of law.

11. INDEPENDENT CONTRACTOR

At all times, the Contractor, any of his/her employees, or his/her sub-contractors and their subsequent employees shall be considered independent contractors and not as City employees. The Contractor shall exercise all supervisory control and general control over all workers' duties, payment of wages to Contractor's employees and the right to hire, fire and discipline their employees and workers. As an independent contractor, payment under this contract shall not be subject to any withholding for tax, social security or other purposes, nor shall the Contractor or his/her employees be entitled to sick leave, pension benefit, vacation, medical benefits, life insurance or workers' unemployment compensation or the like.

12. PROJECT SUPERVISOR

The Contractor shall employ an individual to act as Project Supervisor. The Project Supervisor shall be available to the Contractor's workers and the Project Manager at all times by use of a beeper or other reliable means. The Project Supervisor shall prepare daily work plans for the employees, monitor employee performance, attendance and punctuality; and work closely with the City's Project Manager in assuring contract compliance.

13. MEETINGS

The Contractor and/or Project Supervisor shall be available to meet with the Department Head or Project Manager at a mutually agreeable time to discuss problems, issues or concerns relative to the contract. Either party may call a meeting at any time. When such a request for a meeting is made, the meeting date shall, in no case exceed five (5) working days after the request; and, if in the sole opinion of the Department Head, the severity of the circumstance warrants, no more than one (1) working day.

14. INSPECTION OF WORK SITE

Before submitting bids for his/her work, the Contractor shall be responsible for examining the work site and satisfying himself/herself as to the existing conditions under which he/she will be obligated to operate, or that in any way affects the work under this contract. No allowance shall be made subsequently, in behalf of the Contractor, for any negligence on his/her part.

15. CONTRACT PERIOD, EXTENSIONS, CANCELLATION

- A. The contract shall be in effect for the term stated in the specifications.
- B. The City may opt to extend this contract upon mutual agreement of both parties. The number of extensions shall be limited to that stated in the specifications.
- C. The City may, from time to time, find it necessary to continue this contract on a month-to-month basis only, not to exceed a six (6) month period. Such month-to-month extended periods shall be by mutual agreement of both parties, with all provisions of the original contract or any extension thereof remaining in full force and effect.

- D. All contracts, extensions and cost increases are subject to availability of funds and the approval of the City Commission (if required).
- E. Notwithstanding other provisions of this contract, the City reserves the right to cancel the contract due to non-appropriation of funds by the City with thirty (30) days written notice.
- F. Notwithstanding other provisions of this contract, either party may terminate the contract (or any extension thereof) without cause at the end of any twelve (12) month term by giving written notice of such intent at least 60 days prior to the end of said twelve (12) month term.
- G. All notices are in effect commencing with the date of mailing. Written notices may be delivered in person or sent by First Class mail; faxed or emailed to the last known address.
- H. If cancellation is for default of contract due to non-performance, the contract may be canceled at any time (see Item 10, DEFAULT).

APPENDIX A
NON-DISCRIMINATION CLAUSE FOR ALL CITY OF KALAMAZOO CONTRACTS

The Contractor agrees to comply with the Federal Civil Rights Act of 1964 as amended; the Federal Civil Rights Act of 1991 as amended; the Americans With Disabilities Act of 1990 as amended; the Elliott-Larson Civil Rights Act, Act. No. 453, Public Act of 1976 as amended; the Michigan Handicappers Civil Rights Act, Act No. 220, Public Act of 1976 as amended, City Ordinance 1856 and all other applicable Federal and State laws. The Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, sex, age, height, weight, marital status, physical or mental disability, family status, sexual orientation or gender identity that is unrelated to the individual's ability to perform the duties of the particular job or position. Such action shall include, but not be limited to the following: employment, upgrading, demotion or transfer, recruitment advertising, layoff or termination; rates of pay or other forms of compensations; and selection for training, including apprenticeship.
2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, sex, age, height, weight, marital status, physical or mental disability family status, sexual orientation or gender identity that is unrelated to the individuals ability to perform the duties of the particular job or position.
3. If requested by the City, the Contractor shall furnish information regarding practices, policies and programs and employment statistics for the Contractor and subcontractors. The Contractor and subcontractors shall permit access to all books, records and accounts regarding employment practices by agents and representatives of the City duly charged with investigative duties to assure compliance with this clause.
4. Breach of the covenants herein may be regarded as a material breach of the contract or purchasing agreement as provided in the Elliott-Larsen Civil Rights Act and City Ordinance 1856.
5. The Contractor will include or incorporate by reference the provisions of the foregoing paragraphs 1 through 4 in every subcontract or purchase order unless exempted by the rules, regulations or orders of the Michigan Civil Rights Commission* and will provide in every subcontract or purchase order that said provision will be binding upon each subcontractor or seller.
6. The Contractor will not preclude a person with a criminal conviction from being considered for employment unless otherwise precluded by federal or state law (for contracts over \$25,000).

The Elliott-Larson Civil Rights Act, Sec. 202 of Act. No. 453 of 1976 reads in part as follows:

Sec. 202. (1) An employer shall not:

- (a) Fail or refuse to hire, or recruit, or discharge or otherwise discriminate against an individual with respect to employment, compensation, or a term condition or privilege of employment because of religion, race, color, national origin, age, sex, height, weight or marital status.
- (b) Limit, segregate or classify an employee or applicant for employment in a way which deprives or tends to deprive the employee or applicant of an employment opportunity or otherwise adversely affects the status of an employee or applicant because of religion, race, color, national origin, age, sex, height, weight or marital status.
- (c) Segregate, classify or otherwise discriminate against a person on the basis of sex with respect to a term, condition or privilege of employment, including a benefit plan or system.

* Except for contracts entered into with parties employing less than three employees.



Attachment A

TRACE Analytical Laboratories Results

KWRP – Waste Hauling Solids

Trace Analytical Laboratories, Inc.
2241 Black Creek Road
Muskegon, MI 49444-2673



231-773-5998 Phone
888-979-4469 Fax
www.trace-labs.com

November 04, 2022

Ms. Malissa Drzick
Kalamazoo, City of
1415 N. Harrison St.
Kalamazoo, MI 49007

RE: Trace Project 22J0986
Client Project KWRP- Waste Hauling Solids

Dear Ms. Drzick:

Enclosed are your analytical results. The results of this report relate only to the samples listed in the body of this report.

All reports were examined through Trace's validation process to ensure that requirements for quality and completeness were satisfied. All reported analytical results were obtained in accordance with the methods referenced on the reports. Every practical effort was made to meet the reporting limit specifications for this work, however, some results may have raised reporting limits to correct for percent solids.

For clients that require NELAP Accreditation, Trace certifies that these test results meet all requirements of the NELAP Standard, except for those analytes with a "N" notation. These analytes have not been evaluated by NELAP at Trace's discretion and will not be reported unless requested by client.

If you have questions concerning this report, please contact me at 231.773.5998 or by email at jmink@trace-labs.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Jon Mink".

Jon Mink
Senior Project Manager
Enclosures



NJDEP Accreditation No. MI008

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Trace Analytical Laboratories, Inc.
2241 Black Creek Road
Muskegon, MI 49444-2673



231-773-5998 Phone
888-979-4469 Fax
www.trace-labs.com

SAMPLE SUMMARY

Trace Project ID: 22J0986
Client Project ID: KWRP- Waste Hauling Solids

Trace ID	Sample ID	Matrix	Collected By	Date Collected	Date Received
22J0986-01	TCLP Sample	Solid	SJH	10/21/22 08:00	10/21/22 13:15

CERTIFICATE OF ANALYSIS

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AN EXPLANATION OF TERMS AND SYMBOLS WHICH MAY OCCUR IN THIS REPORT

DEFINITIONS

LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
DUP	Matrix Duplicate
RDL	Reporting Detection Limit
MCL	Maximum Contamination Limit
TIC	Tentatively Identified Compound
<, ND or U	Indicates the compound was analyzed for but not detected
*	Indicates a result that exceeds its associated MCL or Surrogate control limits
N	Indicates that the laboratory is not accredited by NELAP for this compound
NA	Indicates that the compound is not available.

NOTE: Samples for volatiles that have been extracted with a water miscible solvent were corrected for the total volume of the solvent/water mixture.
Solid matrices Method Blanks are at 100% solids as such results are the same wet or dry.

DATA QUALIFIERS

Trace ID: 22J0986-01

Analysis: EPA 8270E

2-Fluorophenol	Note 301 : A dilution of 1:5 or greater was required on this sample. Consequently, surrogate recoveries are not available.
Phenol-d5	Note 301 : A dilution of 1:5 or greater was required on this sample. Consequently, surrogate recoveries are not available.

Trace ID: T128765-BLK1

Analysis: EPA 8270E

2-Fluorobiphenyl	Note 802 : One of the base/neutral surrogate recoveries was outside the control limits. Since the other two base/neutral surrogates were within the control limits, no data require qualification.
2-Fluorophenol	Note 801 : One of the acid surrogate recoveries was outside the control limits. Since the other two acid surrogates were within the control limits, no data require qualification.

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 Muskegon, MI 49444-2673



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 www.trace-labs.com

ANALYTICAL RESULTS

Trace Project ID: 22J0986
 Client Project ID: KWRP- Waste Hauling Solids

Trace ID: 22J0986-01 Matrix: Solid Date Collected: 10/21/22 08:00
 Sample ID: TCLP Sample Date Received: 10/21/22 13:15

PARAMETERS	RESULTS UNITS	RDL	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	MCL
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METALS, TCLP

Analysis Method: EPA 6010D

Batch: T128772

Arsenic	<0.30 mg/L	0.30	1	10/25/22	bjv	10/25/22	jma		5.0
Barium	<1.0 mg/L	1.0	1	10/25/22	bjv	10/25/22	jma		100
Cadmium	<0.10 mg/L	0.10	1	10/25/22	bjv	10/25/22	jma		1.0
Chromium	<0.50 mg/L	0.50	1	10/25/22	bjv	10/25/22	jma		5.0
Lead	<0.50 mg/L	0.50	1	10/25/22	bjv	10/25/22	jma		5.0
Selenium	<0.60 mg/L	0.60	1	10/25/22	bjv	10/25/22	jma		1.0
Silver	<0.10 mg/L	0.10	1	10/25/22	bjv	10/25/22	jma		5.0

Analysis Method: EPA 7470A

Batch: T128773

Mercury	<0.010 mg/L	0.010	1	10/25/22	bjv	10/25/22	jma		0.20
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SEMI-VOLATILE ORGANIC COMPOUNDS, TCLP

Analysis Method: EPA 8270E

Batch: T128765

Pyridine	<0.20 mg/L	0.20	5	10/25/22	kbc	10/26/22	avl		5.0
2-Methylphenol (o-Cresol)	<0.025 mg/L	0.025	5	10/25/22	kbc	10/26/22	avl		200
3,4-Methylphenol (m,p Cresol)	<0.025 mg/L	0.025	5	10/25/22	kbc	10/26/22	avl		200
Hexachloroethane	<0.025 mg/L	0.025	5	10/25/22	kbc	10/26/22	avl		3.0
Nitrobenzene	<0.010 mg/L	0.010	5	10/25/22	kbc	10/26/22	avl		2.0
Hexachlorobutadiene	<0.025 mg/L	0.025	5	10/25/22	kbc	10/26/22	avl		0.50
2,4,6-Trichlorophenol	<0.010 mg/L	0.010	5	10/25/22	kbc	10/26/22	avl		2.0
2,4,5-Trichlorophenol	<0.025 mg/L	0.025	5	10/25/22	kbc	10/26/22	avl		400
2,4-Dinitrotoluene	<0.025 mg/L	0.025	5	10/25/22	kbc	10/26/22	avl		0.13
Hexachlorobenzene	<0.025 mg/L	0.025	5	10/25/22	kbc	10/26/22	avl		0.13
Pentachlorophenol	<0.050 mg/L	0.050	5	10/25/22	kbc	10/26/22	avl		100

Surrogates:

2-Fluorophenol	*	%	20-53	5	10/25/22	kbc	10/26/22	avl	301
Phenol-d5	*	%	11-40	5	10/25/22	kbc	10/26/22	avl	301
Nitrobenzene-d5		50 %	36-103	5	10/25/22	kbc	10/26/22	avl	
2-Fluorobiphenyl		58 %	36-119	5	10/25/22	kbc	10/26/22	avl	
2,4,6-Tribromophenol		63 %	30-105	5	10/25/22	kbc	10/26/22	avl	

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ANALYTICAL RESULTS

Trace Project ID: 22J0986
 Client Project ID: KWRP- Waste Hauling Solids

Trace ID: 22J0986-01 Matrix: Solid Date Collected: 10/21/22 08:00
 Sample ID: TCLP Sample Date Received: 10/21/22 13:15

PARAMETERS	RESULTS UNITS	RDL	DILUTION	PREPARED	BY	ANALYZED	BY	NOTES	MCL
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SEMI-VOLATILE ORGANIC COMPOUNDS, TCLP

Terphenyl-d14	69 %	37-109	5	10/25/22	kbc	10/26/22	avl		
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VOLATILE ORGANIC COMPOUNDS, TCLP

Analysis Method: EPA 8260D

Batch: T128951

Vinyl chloride	<0.080 mg/L	0.080	100	10/30/22	nw	10/30/22	nw		0.20
1,1-Dichloroethene	<0.10 mg/L	0.10	100	10/30/22	nw	10/30/22	nw		0.70
2-Butanone	<1.5 mg/L	1.5	100	10/30/22	nw	10/30/22	nw		200
Chloroform	<0.10 mg/L	0.10	100	10/30/22	nw	10/30/22	nw		6.0
Carbon tetrachloride	<0.10 mg/L	0.10	100	10/30/22	nw	10/30/22	nw		0.50
Benzene	<0.10 mg/L	0.10	100	10/30/22	nw	10/30/22	nw		0.50
1,2-Dichloroethane	<0.10 mg/L	0.10	100	10/30/22	nw	10/30/22	nw		0.50
Trichloroethene	<0.10 mg/L	0.10	100	10/30/22	nw	10/30/22	nw		0.50
Tetrachloroethene	<0.10 mg/L	0.10	100	10/30/22	nw	10/30/22	nw		0.70
Chlorobenzene	<0.10 mg/L	0.10	100	10/30/22	nw	10/30/22	nw		100
1,4-Dichlorobenzene	<0.10 mg/L	0.10	100	10/30/22	nw	10/30/22	nw		7.5
Surrogates:									
1,2-Dichloroethane-d4	110 %	68-133	100	10/30/22	nw	10/30/22	nw		
Toluene-d8	104 %	75-120	100	10/30/22	nw	10/30/22	nw		
4-Bromofluorobenzene	101 %	69-119	100	10/30/22	nw	10/30/22	nw		
1,2-Dichlorobenzene-d4	94 %	72-127	100	10/30/22	nw	10/30/22	nw		

WET CHEMISTRY

Analysis Method: ASTM D2974-87

Batch: T128892

Moisture, Percent	64 % by Wt.		1	10/27/22	drm	10/27/22	drm		N
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QUALITY CONTROL RESULTS

Trace Project ID: 22J0986
 Client Project ID: KWRP- Waste Hauling Solids

QC Batch: T128761	Analysis Description: TCLP Extraction, SVOC
QC Batch Method: Leaching procedures	Analysis Method: EPA 1311

Trace Project ID: 22J0986
 Client Project ID: KWRP- Waste Hauling Solids

QC Batch: T128772	Analysis Description: Arsenic, TCLP
QC Batch Method: EPA 3015 Microwave Assisted Digestions for Liquids	Analysis Method: EPA 6010D

METHOD BLANK: T128772-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Silver	mg/L	<0.10	0.10	
Arsenic	mg/L	<0.30	0.30	
Barium	mg/L	<1.0	1.0	
Cadmium	mg/L	<0.10	0.10	
Chromium	mg/L	<0.50	0.50	
Lead	mg/L	<0.50	0.50	
Selenium	mg/L	<0.60	0.60	

METHOD BLANK: T128772-BLK2

Parameter	Units	Blank Result	Reporting Limit	Notes
Silver	mg/L	<0.10	0.10	
Arsenic	mg/L	<0.30	0.30	
Barium	mg/L	<1.0	1.0	
Cadmium	mg/L	<0.10	0.10	
Chromium	mg/L	<0.50	0.50	
Lead	mg/L	<0.50	0.50	
Selenium	mg/L	<0.60	0.60	

LABORATORY CONTROL SAMPLE: T128772-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Silver	mg/L	0.0278	<0.10	90	80-120	
Arsenic	mg/L	0.0556	<0.30	100	80-120	
Barium	mg/L	0.889	<1.0	106	80-120	
Cadmium	mg/L	0.0278	<0.10	107	80-120	
Chromium	mg/L	0.0278	<0.50	105	80-120	
Lead	mg/L	0.0556	<0.50	100	80-120	

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LABORATORY CONTROL SAMPLE: T128772-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Selenium	mg/L	0.0556	<0.60	101	80-120	

Trace Project ID: 22J0986
 Client Project ID: KWRP- Waste Hauling Solids

QC Batch: T128773	Analysis Description: Mercury, TCLP
QC Batch Method: EPA 7470A Prep	Analysis Method: EPA 7470A

METHOD BLANK: T128773-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Mercury	mg/L	<0.010	0.010	

METHOD BLANK: T128773-BLK2

Parameter	Units	Blank Result	Reporting Limit	Notes
Mercury	mg/L	<0.010	0.010	

LABORATORY CONTROL SAMPLE: T128773-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Mercury	mg/L	0.00200	<0.010	111	80-120	

Trace Project ID: 22J0986
 Client Project ID: KWRP- Waste Hauling Solids

QC Batch: T128760	Analysis Description: TCLP Extraction, Metals
QC Batch Method: Leaching procedures	Analysis Method: EPA 1311

Trace Project ID: 22J0986
 Client Project ID: KWRP- Waste Hauling Solids

QC Batch: T128762	Analysis Description: TCLP ZHE, Volatiles
QC Batch Method: Leaching procedures	Analysis Method: EPA 1311

Trace Project ID: 22J0986
 Client Project ID: KWRP- Waste Hauling Solids

QC Batch: T128765	Analysis Description: TCLP Semi-Volatiles
QC Batch Method: EPA 3510C Separatory Funnel Liquid-Liquid Extr.	Analysis Method: EPA 8270E

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METHOD BLANK: T128765-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Pyridine	mg/L	<0.0040	0.0040	
2-Methylphenol (o-Cresol)	mg/L	<0.00050	0.00050	
3,4-Methylphenol (m,p Cresol)	mg/L	<0.00050	0.00050	
Hexachloroethane	mg/L	<0.00050	0.00050	
Nitrobenzene	mg/L	<0.00020	0.00020	
Hexachlorobutadiene	mg/L	<0.00050	0.00050	
2,4,6-Trichlorophenol	mg/L	<0.00020	0.00020	
2,4,5-Trichlorophenol	mg/L	<0.00050	0.00050	
2,4-Dinitrotoluene	mg/L	<0.00050	0.00050	
Hexachlorobenzene	mg/L	<0.00050	0.00050	
Pentachlorophenol	mg/L	<0.0010	0.0010	
2-Fluorophenol (S)	%	18	20-53	801
Phenol-d5 (S)	%	12	11-40	
Nitrobenzene-d5 (S)	%	37	36-103	
2-Fluorobiphenyl (S)	%	35	36-119	802
2,4,6-Tribromophenol (S)	%	46	30-105	
Terphenyl-d14 (S)	%	45	37-109	

LABORATORY CONTROL SAMPLE: T128765-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
2-Methylphenol (o-Cresol)	mg/L	0.100	0.0440	44	30-116	
3,4-Methylphenol (m,p Cresol)	mg/L	0.100	0.0357	36	31-115	
Hexachloroethane	mg/L	0.100	0.0396	40	38-85	
Nitrobenzene	mg/L	0.100	0.0524	52	47-99	
Hexachlorobutadiene	mg/L	0.100	0.0446	45	36-93	
2,4,6-Trichlorophenol	mg/L	0.100	0.0664	66	48-106	
2,4,5-Trichlorophenol	mg/L	0.100	0.0649	65	36-115	
2,4-Dinitrotoluene	mg/L	0.100	0.0746	75	39-105	
Hexachlorobenzene	mg/L	0.100	0.0690	69	52-106	
Pentachlorophenol	mg/L	0.100	0.0662	66	38-102	
2-Fluorophenol (S)	%	0.100	0.0236	24	20-53	
Phenol-d5 (S)	%	0.100	0.0156	16	11-40	
Nitrobenzene-d5 (S)	%	0.100	0.0564	56	36-103	
2-Fluorobiphenyl (S)	%	0.101	0.0599	59	36-119	
2,4,6-Tribromophenol (S)	%	0.100	0.0753	75	30-105	
Terphenyl-d14 (S)	%	0.100	0.0701	70	37-109	

Trace Project ID: 22J0986
 Client Project ID: KWRP- Waste Hauling Solids

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QC Batch: T128951

Analysis Description: TCLP Volatiles

QC Batch Method: EPA 5030B Purge-and-Trap for Aqueous Samples

Analysis Method: EPA 8260D

METHOD BLANK: T128951-BLK1

Parameter	Units	Blank Result	Reporting Limit	Notes
Vinyl chloride	mg/L	<0.050	0.050	
1,1-Dichloroethene	mg/L	<0.050	0.050	
2-Butanone	mg/L	<0.25	0.25	
Chloroform	mg/L	<0.050	0.050	
Carbon tetrachloride	mg/L	<0.050	0.050	
Benzene	mg/L	<0.050	0.050	
1,2-Dichloroethane	mg/L	<0.050	0.050	
Trichloroethene	mg/L	<0.050	0.050	
Tetrachloroethene	mg/L	<0.050	0.050	
Chlorobenzene	mg/L	<0.050	0.050	
1,4-Dichlorobenzene	mg/L	<0.050	0.050	
1,2-Dichloroethane-d4 (S)	%	105	68-133	
Toluene-d8 (S)	%	105	75-120	
4-Bromofluorobenzene (S)	%	100	69-119	
1,2-Dichlorobenzene-d4 (S)	%	97	72-127	

LABORATORY CONTROL SAMPLE: T128951-BS1

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limit	Notes
Vinyl chloride	mg/L	0.0500	<0.050	80	47-184	
1,1-Dichloroethene	mg/L	0.0500	<0.050	85	64-156	
2-Butanone	mg/L	0.0500	<0.25	92	70-130	
Chloroform	mg/L	0.0500	<0.050	92	80-120	
Carbon tetrachloride	mg/L	0.0500	0.0530	106	79-141	
Benzene	mg/L	0.0500	<0.050	98	80-120	
1,2-Dichloroethane	mg/L	0.0500	<0.050	100	80-120	
Trichloroethene	mg/L	0.0500	<0.050	92	69-133	
Tetrachloroethene	mg/L	0.0500	<0.050	96	70-120	
Chlorobenzene	mg/L	0.0500	<0.050	93	80-120	
1,4-Dichlorobenzene	mg/L	0.0500	<0.050	90	80-120	
1,2-Dichloroethane-d4 (S)	%	30.0	32.0	107	68-133	
Toluene-d8 (S)	%	30.0	29.6	99	75-120	
4-Bromofluorobenzene (S)	%	30.0	29.8	99	69-119	
1,2-Dichlorobenzene-d4 (S)	%	30.0	28.8	96	72-127	

MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T128951-MSD1

Original: 22J0986-01

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Notes
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MATRIX SPIKE / MATRIX SPIKE DUPLICATE: T128951-MSD1

Original: **22J0986-01**

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Notes
Vinyl chloride	mg/L	0	5.00	4.39	4.01	88	80	60-153	9	13	
1,1-Dichloroethene	mg/L	0	5.00	4.37	4.17	87	83	60-146	5	15	
2-Butanone	mg/L	0	5.00	5.01	4.60	100	92	60-140	9	23	
Chloroform	mg/L	0	5.00	4.92	4.68	98	94	68-124	5	13	
Carbon tetrachloride	mg/L	0	5.00	5.46	5.36	109	107	68-125	2	12	
Benzene	mg/L	0	5.00	5.12	4.92	102	98	78-114	4	11	
1,2-Dichloroethane	mg/L	0	5.00	5.36	5.06	107	101	63-132	6	11	
Trichloroethene	mg/L	0	5.00	5.00	4.84	100	97	70-117	3	14	
Tetrachloroethene	mg/L	0	5.00	4.87	4.61	97	92	57-126	5	12	
Chlorobenzene	mg/L	0	5.00	4.89	4.61	98	92	75-116	6	12	
1,4-Dichlorobenzene	mg/L	0	5.00	4.69	4.44	94	89	69-118	5	18	
1,2-Dichloroethane-d4 (S)	%		30.0	32.5	32.2	108	108	68-133			
Toluene-d8 (S)	%		30.0	29.0	29.1	97	97	75-120			
4-Bromofluorobenzene (S)	%		30.0	29.8	29.2	99	97	69-119			
1,2-Dichlorobenzene-d4 (S)	%		30.0	28.6	28.5	95	95	72-127			

Trace Project ID: 22J0986

Client Project ID: KWRP- Waste Hauling Solids

QC Batch: T128892

Analysis Description: Percent Moisture

QC Batch Method: % Solids

Analysis Method: ASTM D2974-87

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CHAIN-OF-CUSTODY RECORD

Report Results To:

Company Name: City of Kalamazoo
Report To: Melissa Dizick
Mailing Address: 1415 N Harrison St
City, State, Zip Code: Kalamazoo, MI 49007
Office Phone: Cell Phone: 269-337-8667
Email Address: dzickm@kalamazoo-city.org

Bill To:

PO #: Contact Name:
Billing Address (if different):
City, State, Zip Code:
Phone Number:
Billing Email Address:

Trace Use:

Logged By: [Signature]
Checked By: [Signature]
Soil Volatiles Preserved (circle if applicable):
MeOH Low Level Lab
Sampling Time:

Turnaround Requirements:
 Standard, 5-10 Days
 3 Day*
 1 Day*
 *Results provided end of business day, requires prior approval.

Matrix Key:
 S = Soil / Solid
 W = Water
 SL = Sludge
 OI = Oil
 WI = Wipes
 LW = Liquid Waste
 A = Air
 D = Drinking Water

Trace No.	Date Collected	Time Collected	Client Sample ID	Sampled By: SM	Metals Field Filtered (Y / N)	Matrix	Number of Containers	Preservation							Analysis Requested	Remarks	Possible Health Hazards?	
								Cool	HCl	HNO ₃	H ₂ SO ₄	NaOH	Other					
1	10-21	8:00 AM	TCLP		S		X								X	TCLP Metals - (RCRA-8)		
															X	TCLP Semi-Volatiles		
															X	TCLP Volatiles		
															X	Ra 226, 228		
															X	Lead 210		
															X	Percent Moisture		

Please Sign

Released By	Received By	Date	Time	Released By	Received By	Date	Time
[Signature]	[Signature]	10/21/12	13:15	[Signature]	[Signature]	10/21/12	16:28
[Signature]							

In executing this Chain of Custody, the client acknowledges the terms as set forth at www.trace-labs.com/terms-of-agreement.

Check this box if you would not like your samples analyzed if received outside of the conditions outlined in the Trace Sample Acceptance Policy at www.trace-labs.com/downloads.

Trace ID No.
2250986

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22J0986
 Kalamazoo, City of
 Project Manager: Jon Mink

Sample Log In Checklist

Date:	10/21/22		Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-10 (CF: 0.0°C)	20B12743 (CF: -0.2°C)	Temp Blank	Client Sample
Time:	16:28								
Logged by:	KLB								
Package Description:	Cooler								
Package Temp °C	-0.5	-0.5							
Representative Sample Temp °C	6.9	6.9							

Sample Receipt

- Yes No
- Received on ice or other coolant
- Ice still present upon receipt
- Custody seals present
- Trace Courier Client Drop-off
- Yes No Custody seals intact (if applicable)
- UPS Fed Ex US Mail Other

Sample Condition

- Yes No N/A
- All sample containers arrived unbroken and labeled
- Sufficient sample to run requested analyses
- Correct chemical preservative added to samples
- Samples preserved at Trace
- Chemical preservation verified, check EMD pH test strip used (if applicable)
- pH 0-2.5 (Lot: HC291593) pH 11.0-13.0 (Lot: HC022540) Other
- Air bubbles absent from VOAs

Chain of Custody (COC)

- Yes No
- All bottle labels agree with COC
- COC filled out properly
- COC signed by client

Notes:

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November 28, 2022

Ms. Malissa Drzick
Kalamazoo, City of
1415 N. Harrison St.
Kalamazoo, MI 49007

RE: Trace Project 22J0987
Client Project KWRP- Waste Hauling Solids- TENORM

Dear Ms. Drzick:

Enclosed are your analytical results. The results of this report relate only to the samples listed in the body of this report.

All reports were examined through Trace's validation process to ensure that requirements for quality and completeness were satisfied. All reported analytical results were obtained in accordance with the methods referenced on the reports. Every practical effort was made to meet the reporting limit specifications for this work, however, some results may have raised reporting limits to correct for percent solids.

The results were obtained from Eurofins TestAmerica.

For clients that require NELAC Accreditation, Trace certifies that these test results meet all requirements of the NELAC Standard, except for those analytes with a "N" notation. These analytes have not been evaluated by NELAC at Trace's discretion and will not be reported unless requested by client.

If you have questions concerning this report, please contact me at 231.773.5998 or by email at jmink@trace-labs.com.

Sincerely,

A handwritten signature in black ink that reads "Jon Mink".

Jon Mink
Senior Project Manager

Enclosures



NJDEP Accreditation No. MI008

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Muskegon, MI 49444-2673



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SAMPLE SUMMARY

Trace Project ID: 22J0987
Client Project ID: KWRP- Waste Hauling Solids- TENORM

Trace ID	Sample ID	Matrix	Collected By	Date Collected	Date Received
22J0987-01	TCLP Sample- TENORM	Solid	SJH	10/21/22 08:00	10/21/22 13:15

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AN EXPLANATION OF TERMS AND SYMBOLS WHICH MAY OCCUR IN THIS REPORT

DEFINITIONS

LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
DUP	Matrix Duplicate
RDL	Reporting Detection Limit
MCL	Maximum Contamination Limit
TIC	Tentatively Identified Compound
<, ND or U	Indicates the compound was analyzed for but not detected
*	Indicates a result that exceeds its associated MCL or Surrogate control limits
N	Indicates that the compound has not been evaluated by NELAC
NA	Indicates that the compound is not available.

 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Jon Mink
Trace Analytical Laboratories
2241 Black Creek Rd
Muskegon Michigan 49444

Generated 11/23/2022 4:49:17 PM

JOB DESCRIPTION

TENORM Analysis - 22J0987
SDG NUMBER 22J0987

JOB NUMBER

160-47650-1



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Case Narrative

Client: Trace Analytical Laboratories
Project/Site: TENORM Analysis - 22J0987

Job ID: 160-47650-1
SDG: 22J0987

Job ID: 160-47650-1

Laboratory: Eurofins St. Louis

Narrative

Job Narrative 160-47650-1

Receipt

The sample was received on 10/26/2022 10:55 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved. The temperature of the cooler at receipt was 12.3° C.

RAD

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.

Gamma Prep Batch 587961

Many isotopes requested for analysis do not have any gamma emissions, or the gamma emissions they do have are very poor. Often, such analytes are reported by gamma spectrometry assuming secular equilibrium with a longer-lived parent. The client should ensure that such inference is acceptable for their sample based upon process knowledge. The following assumptions were made for this report:

Inferred from	Reported to Analyte
Th-234	Pa-234
Th-234	U-238
Pb-210	Po-210
Pb-210	Bi-210
Cs-137	Ba-137m
Pb-212	Po-216
Xe-131m	Xe-131
Sb-125	Te-125m
Ag-108m	Ag-108
Rh-106	Ru-106
Pb-212	Th-228
Pb-212	Ra-224
U-235	Th-231
Ac-228	Th-232
Ac-228	Ra-228
Th-227	Ra-223
Th-227	Ac-227
Th-227	Bi-211
Th-227	Pb-211
Bi-214	Ra-226

The detection goal for Pb210 was not met for the following sample analyzed by gamma spectroscopy due to low density of the sample matrix: 22J0987 (160-47650-1). Analytical results are reported with the detection limit achieved.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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SUBCONTRACT ORDER

22J0987

SENDING LABORATORY:

Trace Analytical Laboratories, Inc.
2241 Black Creek Road
Muskegon, MI 49444
Phone: 231.773.5998

RECEIVING LABORATORY:

Eurofins TestAmerica
137515 Rider Trail North
Earth City, MO 63045
Phone :(314) 298-8566

Project Manager: Jon Mink

Note Our New Email address: TraceSubOut@trace-labs.com

PO # 22J0987

Matrix: Solid
Sample ID: TCLP Sample- TENORM 22J0987-01

Sampled: 10/21/22 08:00 TAT: Standard

Sampled By: SJH

Analysis Needed:

TENORM (Radium 226/228, Pb210)



160-47650 Chain of Custody

Released By Hayley Schultz Date 10/21/22

Received By UPS Date

Released By UPS Date

Received By Sierra Woodington Date 10/26/22 1055

Login Sample Receipt Checklist

Client: Trace Analytical Laboratories

Job Number: 160-47650-1

SDG Number: 22J0987

Login Number: 47650

List Number: 1

Creator: Worthington, Sierra M

List Source: Eurofins St. Louis

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Definitions/Glossary

Client: Trace Analytical Laboratories
Project/Site: TENORM Analysis - 22J0987

Job ID: 160-47650-1
SDG: 22J0987

Qualifiers

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Method Summary

Client: Trace Analytical Laboratories
Project/Site: TENORM Analysis - 22J0987

Job ID: 160-47650-1
SDG: 22J0987

Method	Method Description	Protocol	Laboratory
901.1	Radium-226 & Other Gamma Emitters (GS)	EPA	EET SL
Dry and Grind	Preparation, Dry and Grind	None	EET SL
Fill_Geo-21	Fill Geometry, 21-Day In-Growth	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency
None = None

Laboratory References:

EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

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Sample Summary

Client: Trace Analytical Laboratories
Project/Site: TENORM Analysis - 22J0987

Job ID: 160-47650-1
SDG: 22J0987

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-47650-1	22J0987	Solid	10/21/22 08:00	10/26/22 10:55

1

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Client Sample Results

Client: Trace Analytical Laboratories
Project/Site: TENORM Analysis - 22J0987

Job ID: 160-47650-1
SDG: 22J0987

Client Sample ID: 22J0987

Lab Sample ID: 160-47650-1

Date Collected: 10/21/22 08:00

Matrix: Solid

Date Received: 10/26/22 10:55

Method: EPA 901.1 - Radium-226 & Other Gamma Emitters (GS)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2 σ +/-)	(2 σ +/-)						
Lead-210	-0.951	U G	2.17	2.17	5.00	6.23	pCi/g	11/01/22 11:05	11/22/22 10:55	1
Radium-226	0.450		0.275	0.279	1.00	0.332	pCi/g	11/01/22 11:05	11/22/22 10:55	1
Radium-228	0.322	U	0.457	0.458	1.00	0.582	pCi/g	11/01/22 11:05	11/22/22 10:55	1

QC Sample Results

Client: Trace Analytical Laboratories
 Project/Site: TENORM Analysis - 22J0987

Job ID: 160-47650-1
 SDG: 22J0987

Method: 901.1 - Radium-226 & Other Gamma Emitters (GS)

Lab Sample ID: MB 160-587961/1-A
Matrix: Solid
Analysis Batch: 590911

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 587961

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Lead-210	0.4520	U	1.04	1.04	5.00	1.77	pCi/g	11/01/22 11:05	11/22/22 09:46	1
Radium-226	-0.02893	U	0.108	0.108	1.00	0.198	pCi/g	11/01/22 11:05	11/22/22 09:46	1
Radium-228	-0.08568	U	0.159	0.159	1.00	0.251	pCi/g	11/01/22 11:05	11/22/22 09:46	1

Lab Sample ID: LCS 160-587961/2-A
Matrix: Solid
Analysis Batch: 590910

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 587961

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec
				Uncert. (2σ+/-)					Limits
Americium-241	96.1	93.74		9.84		1.02	pCi/g	98	75 - 125
Cesium-137	25.6	24.10		2.56		0.162	pCi/g	94	75 - 125
Cobalt-60	7.33	6.793		0.721		0.0294	pCi/g	93	75 - 125

Lab Sample ID: 160-47665-D-1-C DU
Matrix: Solid
Analysis Batch: 590910

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 587961

Analyte	Sample Sample		DU	DU	Total	RL	MDC	Unit	RER	RER
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					Limit
Lead-210	0.911	U	0.9767	U	1.88	5.00	3.13	pCi/g	0.02	1
Radium-226	0.858		0.9704		0.191	1.00	0.0910	pCi/g	0.28	1
Radium-228	0.789		0.9737		0.192	1.00	0.135	pCi/g	0.49	1

QC Association Summary

Client: Trace Analytical Laboratories
Project/Site: TENORM Analysis - 22J0987

Job ID: 160-47650-1
SDG: 22J0987

Rad

Leach Batch: 587497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-47650-1	22J0987	Total/NA	Solid	Dry and Grind	

Leach Batch: 587896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-47665-D-1-C DU	Duplicate	Total/NA	Solid	Dry and Grind	

Prep Batch: 587961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-47650-1	22J0987	Total/NA	Solid	Fill_Geo-21	587497
MB 160-587961/1-A	Method Blank	Total/NA	Solid	Fill_Geo-21	
LCS 160-587961/2-A	Lab Control Sample	Total/NA	Solid	Fill_Geo-21	
160-47665-D-1-C DU	Duplicate	Total/NA	Solid	Fill_Geo-21	587896

Eurofins St. Louis

Job Notes

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. Pursuant to NELAP, this report shall not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins TestAmerica and its client. All questions regarding this report should be directed to the Eurofins TestAmerica Project Manager.

Louisiana Lab Certification ID (Non-Potable, Solid/Haz. Material): 106151
Florida Lab Certification ID (Drinking Water): E87689.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization



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TRACE

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CHAIN-OF-CUSTODY RECORD

Page _____ of _____

Report Results To:

Bill To:

Trace Use:

Company Name: City of Kalamazoo
 Report To: Malissa Dizick
 Mailing Address: 1415 N Harrison St
 City, State, Zip Code: Kalamazoo, MI 49007
 Office Phone: Cell Phone: 269-337-8667
 Email Address: dzickm@kalamazoochity.org

PO #:
 Contact Name:
 Billing Address (if different):
 City, State, Zip Code:
 Phone Number:
 Billing Email Address:

Logged By: *ML*
 Checked By: *ML*
 Soil Volatiles Preserved (circle if applicable):
 MeOH Low Level Lab
 Sampling Time:

Trace ID No. 0987
 2250986
 10/11/22

Turnaround Requirements:

- Standard, 5-10 Days
 3 Day*
 1 Day*
- Matrix Key:**
 S = Soil / Solid WI = Wipes
 W = Water LW = Liquid Waste
 SL = Sludge A = Air
 OI = Oil D = Drinking Water
- *Results provided end of business day, requires prior approval.

Analysis Requested

Trace No.	Date Collected	Time Collected	Client Sample ID	Metals Field Filtered (Y / N)	Matrix	Number of Containers	Preservation							Remarks	Possible Health Hazards?		
							Cool	HCl	HNO ₃	H ₂ SO ₄	NaOH	Other	TCLP Metals - (RCRA-8)			TCLP Semi-Volatiles	TCLP Volatiles
1	10/21	8:00 AM	TCLP	S		X											
2																	
3																	

Please Sign		In executing this Chain of Custody, the client acknowledges the terms as set forth at www.trace-labs.com/terms-of-agreement.	
Released By	Received By	Date	Time
<i>[Signature]</i>	<i>[Signature]</i>	10/21/22	13:15
<i>[Signature]</i>	<i>[Signature]</i>		
<i>[Signature]</i>	<i>[Signature]</i>		

Check this box if you would not like your samples analyzed if received outside of the conditions outlined in the Trace Sample Acceptance Policy at www.trace-labs.com/downloads. Form 70-Z-1

22J0987
 Kalamazoo, City of
 Project Manager: Jon Mink

Sample Log In Checklist

Date: 10/21/22	Original Observation	Corrected Temperature	IR-9 (CF: +0.1°C)	IR-10 (CF: 0.0°C)	20B12743 (CF: -0.2°C)	Temp Blank	Client Sample
Time: 16:28							
Logged by: KLB							
Package Description: Cooler							
Package Temp °C	-0.5	-0.5					
Representative Sample Temp °C	6.9	6.9					

Sample Receipt

- Yes No
- Received on ice or other coolant
- Ice still present upon receipt
- Custody seals present
- Trace Courier Client Drop-off
- Yes No Custody seals intact (if applicable)
- UPS Fed Ex US Mail Other

Sample Condition

- Yes No N/A
- All sample containers arrived unbroken and labeled
- Sufficient sample to run requested analyses
- Correct chemical preservative added to samples
- Samples preserved at Trace
- Chemical preservation verified, check EMD pH test strip used (if applicable)
- pH 0-2.5 (Lot: HC291593) pH 11.0-13.0 (Lot: HC022540) Other
- Air bubbles absent from VOAs

Chain of Custody (COC)

- Yes No
- All bottle labels agree with COC
- COC filled out properly
- COC signed by client


Notes:



Attachment B

KWRP Hauling SOP

ATTACHMENT B

 City of Kalamazoo Public Services Department Harrison Street Facility	SOP Number: PSD – WWD – WWO – BS – SOP 001	
	Computer Path:	
Title: Spill Response Procedure For Solids Haulers	Written By: Bob Cochran	Date: 3-7-06
	Reviewed By:	Date:
	Approved By:	Date:

SOP Revision History		
Revision	Date	Approval
01	4-1-07	Robert Cochran
02	11-30-07	Robert Cochran

I. PURPOSE AND SCOPE:

When a solids hauler has a spill of any kind, on the Kalamazoo Water Reclamation Plant site or in route to a landfill or land application site, the following procedures will be implemented to mitigate the spill and any potential environmental impacts. If solids or biosolids were spilled onto a pavement surface, it could create a traffic hazard and if not properly cleaned up, the residuals from the spill may be washed into storm drains or waterways causing an impact on the environment.

II. PRECAUTIONS:

Raw solids can be hazardous and toxic if improperly processed and handled. Proper procedures must be followed at all times in order to reduce possible hazards and environmental impacts.

Biosolids are generated by treating primary and/or secondary sludge to reduce pathogens. Nonetheless, there is the potential for exposure to pathogenic microorganisms in the final product. Major routes of infection are ingestion, inhalation, and direct contact. Good common sense, personal hygiene, and work habits provide adequate protection for workers handling biosolids. Recommendations include:

- Always wash hands after contact with biosolids.
- Avoid touching face, mouth, eyes, nose, or genitalia before washing hands.
- Eat in designated areas away from biosolids handling activities.
- Do not smoke or chew tobacco or gum while working in direct contact with biosolids.
- Use gloves when possible.
- Keep wounds covered with clean, dry bandages.
- Change into clean work clothing on a daily basis.
- If contact occurs, wash contact areas thoroughly with soap and water. Use antiseptic solutions on wounds and bandage with a clean, dry dressing. For contact with eyes, flush thoroughly but gently with water.

Solids are not combustible under normal circumstances. Certain gases may be associated with solids that have been stored for extended periods of time. These gases include hydrogen sulfide and methane. Normally, these gases will not present a problem with the Kalamazoo Water Reclamation Plant's solids because of our limited on-site storage space. When producing "Class A Biosolids", lime is added to increase the pH of the cake. This causes ammonia gas to be released from the biosolids when the cake is moved. The use of proper gas detection equipment is required when the potential for exposure to harmful levels of any gas exists.

III. DEFINITIONS:

- A. Class A Biosolids: biosolids that have been treated with heat and lime to destroy pathogenic organisms and reduce vector attraction. This type of biosolids is suitable for agricultural land application at normal agronomic rates.
- B. Raw solids: solids that have not been treated to reduce pathogenic organism levels and are not suitable for land application.

IV. RESPONSIBILITIES:

- A. The hauler (driver) is required to immediately report all spills to the Kalamazoo Water Reclamation Plant (KWRP) and the hauler's spill response representative upon discovery of a spill. He is required to follow the KWRP's spill response procedure, as well as any hauling company procedures that are deemed necessary to mitigate the spill. The hauler is responsible for all mitigation costs.
- B. The KWRP is required to send a representative to the spill site to document the incident and verify that proper clean up procedures have been implemented to mitigate the spill. The KWRP will notify the MDEQ, County Health Dept. and prepare a media release when necessary.

V. PROCEDURE:

- A. Kalamazoo Water Reclamation Plant (KWRP) on-site spill:
 - 1. Park your vehicle on the side of the road and remain at the spill site or with your vehicle unless it is necessary to leave in order to contact on-site response personnel. Contact the Treatment Control Analyst (TCA) (269-337-8681) to report any spills.
 - 2. Assist on site personnel with cleaning up the spill, if it's a small one (shovels and brooms) before leaving the plant site. If the spill is large and will require extra equipment (front end loader and another truck), then contact your company and set up proper clean up procedures for the spill site.
- B. Off-site spill:
 - 1. Drivers must notify their company spill response representatives and the KWRP TCA (269-337-8681). If the spill has occurred on a public right of way then the driver must contact the local law enforcement agency to assist in traffic control.

2. The spilled solids are to be loaded back into the original vehicle if possible. If the vehicle is disabled, the spill shall be loaded into an alternate vehicle for transport to an appropriate disposal site or back to the KWRP. Spilled solids must be prevented from migrating off the incident site, into storm drains or surface waters. This is especially important if an incident occurs during a rain event.

3. After the spill has been loaded, the incident site must be cleaned. Spills may be cleaned by sweeping the site free of remaining debris. Do not wash off tools or equipment at the spill site. When possible a street sweeper should be used to clean the road surface and that material collected must be disposed of properly. Proper disposal should be at the original destination or a landfill permitted to receive solids. The cleaned up material may also be accepted at the KWRP site.

4. Any information or reports about the spill will be shared by the City of Kalamazoo and the hauler.

VI. REFERENCES:

VII. LEGAL AND / OR REGULATORY REQUIREMENTS:

Any legal and/or regulatory reporting requirements will be the joint responsibility of the City of Kalamazoo and the hauler.

Contact numbers for all interested parties will be supplied.

A biosolids fact sheet will be supplied. (For landfill solids or Class A Biosolids).