

Patricia A. Peshka

Purchasing Agent



Joseph J. Solomon

Mayor

City of Warwick
Purchasing Division
3275 Post Road
Warwick, Rhode Island 02886
Tel (401) 738-2013
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The following notice is to appear on the City of Warwick's website Friday, May 10, 2019. The website address is <http://www.warwickri.gov/bids>.

**CITY OF WARWICK
BIDS REQUESTED FOR**

Bid2020-048 Analytical Laboratory Services

Specifications are available in the Purchasing Division, Warwick City Hall, Monday through Friday, 8:30 AM until 4:30 PM on or after Friday, May 10, 2019.

Sealed bids will be received by the Purchasing Division, Warwick City Hall, 3275 Post Road, Warwick, Rhode Island 02886 up until 11:00 AM, Wednesday, May 29, 2019. The bids will be opened publicly commencing at 11:00 AM on the same day in the Lower Level Conference Room, Warwick City Hall.

Awards will be made on the basis of the lowest evaluated or responsive bid price. Please note that no bids can be accepted via email or fax.

The City of Warwick, in addition to soliciting bids in response to this bid, may consult, consider, and make an award for any and all open bid offers for a comparable unit as sought herein at the following websites:

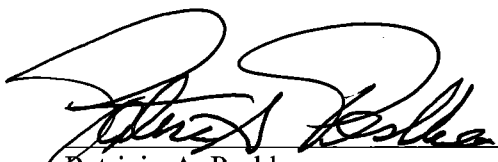
RI State MPA: <http://www.purchasing.ri.gov/MPA/MPASearch.aspx>

NASPO: <https://www.naspo.org/>

NJPA (National Joint Powers Alliance): <https://www.njpacoop.org/cooperative-purchasing>

MHEC (Massachusetts Higher Education Consortium): <https://www.mhec.net/>

Individuals requesting interpreter services for the hearing impaired must notify the Purchasing Division at 401-738-2013 at least 48 hours in advance of the bid opening date.


Patricia A. Peshka
Purchasing Agent

PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR BID

Acknowledgement of Addendum (if applicable)

Addendum Number	Signature of Bidder
_____	_____
_____	_____

COMPANY NAME: _____

COMPANY ADDRESS: _____

COMPANY ADDRESS: _____

BIDDER'S SIGNATURE: _____

BIDDER'S NAME (PRINT): _____

TITLE: _____ TEL. NO.: _____

EMAIL ADDRESS: _____ *

*Please include your email address. Future bids will be emailed, unless otherwise noted.

II. AWARD AND CONTRACT:

The CITY OF WARWICK, acting as duly authorized through its Purchasing Agent/Finance Director/Mayor, accepts the above bid and hereby enters into a contract with the above party to pay the bid price upon completion of the project or receipt of the goods unless another payment schedule is contained in the specifications. All terms of the specifications, both substantive and procedural, are made terms of this contract.

DATE: _____
Bid2020-048 Purchasing Agent

PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR BID

CERTIFICATION & WARRANT FORM*

**This form must be completed and submitted with sealed bid.
Failure to do so will result in automatic rejection.**

Any and all bids shall contain a certification and warrant that they comply with all relevant and pertinent statutes, laws, ordinances and regulations, in particular, but not limited to Chapter 16- Conflicts of Interest, of the Code of Ordinances of the City of Warwick. Any proven violation of this warranty and representation by a bidder at the time of the bid or during the course of the contract, included, but not limited to negligent acts, either directly or indirectly through agents and/or sub-contractors, shall render the bidder's contract terminated and the bidder shall be required to reimburse the City for any and all costs incurred by the City, including reasonable attorney fees, to prosecute and/or enforce this provision.

Signature

Date

Company Name

Address

Address

***This form cannot be altered in any way**

**CITY OF WARWICK
NOTICE TO BIDDERS**

Bid2020-048 Analytical Laboratory Services

If you received this document from our homepage or from a source other than the City of Warwick Purchasing Division, please check with our office prior to submitting your bid to ensure that you have a complete package. The Purchasing Division cannot be responsible to provide addenda if we do not have you on record as a plan holder.

Bids received prior to the time of the opening will be securely kept, unopened. No responsibility will be attached to an officer or person for the premature opening of a bid not properly addressed and identified. No bids will be accepted via facsimile or email.

The opening of bids will be in the order established by the posted agenda and the agenda will continue uninterrupted until completion.

Once an item has been reached and any bids on that item has been opened, no other bids on that item will be accepted and any such bid will be deemed late.

The contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap for any position for which the employee or applicant is qualified and that in the event of non-compliance the City may declare the contractor in breach and take any necessary legal recourse including termination or cancellation of the contract.

A bidder filing a bid thereby certifies that no officer, agent, or employee of the City has a pecuniary interest in the bid or has participated in contract negotiations on the part of the City, that the bid is made in good faith without fraud, collusion, or connection of any kind with any other bidder for the same call for bids, and that the bidder is competing solely in his own behalf without connection with, or obligation to, any undisclosed person or firm.

All bids should be submitted with one (1) original and two (2) copies in a sealed envelope, which should read: *YOUR COMPANY NAME* plainly marked on the exterior of the envelope as well as "Bid2020-048 Analytical Laboratory Services."

All proposals submitted become the property of the City and will not be returned. If the company intends to submit **confidential or proprietary information** as part of the proposal, **any limits on the use or distribution of that material should be clearly delineated in writing. This information should be submitted in a sealed envelope, clearly labeled confidential** and where it should be submitted in the response. Please be advised of the Freedom of Information Act as it may pertain to your submittal.

Should you have any questions, please contact Betty Anne Rogers, Sewer Authority, at 401-468-4726 and/or Eric Hindinger, Department of Public Works, at 401-921-9608.

All bids should be written in ink or typed. If there is a correction with whiteout, the bidder must initial the change.

Negligence on the part of the bidder in preparing the bid confers no rights for the withdrawal of the bid after it is open.

Any deviation from the specifications must be noted in writing and attached as part of the bid proposal. The bidder must indicate the item or part with the deviation and indicate how the bid will deviate from specifications.

The IRS Form W-9 available on www.warwickri.gov should be completed and submitted with the bid if the bidder falls under IRS requirements to file this form.

The successful bidder must provide the City of Warwick with an original **Certificate of Insurance** for General, Automobile and Professional Liability in a minimum amount of \$1 million. The certificate of insurance must name the **City of Warwick as the additional insured** and so stated on the certificate with the bid name and bid number. It is the vendor's responsibility to provide the City of Warwick with an updated certificate of insurance upon expiration of the original certificate.

For a bid to be awarded to a corporation, limited liability company or other legal entity, prior to commencing work under the awarded bid, that corporation, company or legal entity may be required to provide to the Purchasing Agent a **Certificate of Good Standing** from **The Rhode Island Secretary of State** dated no more than thirty (30) days prior to the date upon which the bid approval was made. **Please note that no other State's Certificate of Good Standing will be accepted.**

The successful bidder will provide said **Certificate of Insurance** and **State of Rhode Island's Certificate of Good Standing** (if required) within ten (10) calendar days after notification or the City reserves the right to rescind said award.

Prices to be held firm one (1) year from date of award. Term contracts may be extended for three (3) additional one (1) year terms upon mutual agreement unless otherwise stated.

The contractor must carry sufficient liability insurance and agree to indemnify the city against all claims of any nature, which might arise as a result of his operations or conduct of work.

The City is exempt from the payment of the Rhode Island Sales Tax under the 1956 General Laws of the State of Rhode Island, 44-18-30, Paragraph I, as amended.

The Purchasing Agent reserves the right to reject any and all bids, to waive any minor deviations or informalities in the bids received, and to accept the bid deemed most favorable to the interest of the City.

The successful bidder must comply with all Rhode Island Laws applicable the public works projects, including, but not limited to provisions of Chapter 13 of Title 37 of the

Rhode Island General Laws, pertaining to prevailing wage rates, and all other applicable local, state and federal laws.

The City reserves the right to terminate the contract or any part of the contract in the best interests of the City, upon 30-day notice to the contractor. The City will incur no liability for materials or services not yet ordered if it terminates in the best interests of the City. If the City terminates in the interests of the City after an order for materials or services have been placed, the contractor will be entitled to compensation upon submission of invoices and proper proof of claim, in that proportion which its services and products were satisfactorily rendered or provided, as well as expenses necessarily incurred in the performance of work up to time of termination.

No extra charges for delivery, handling or other services will be honored. All claims for damage in transit will be the responsibility of the successful bidder. Deliveries must be made during normal working hours unless otherwise agreed upon.

All costs directly or indirectly related to the preparation of a response to this solicitation, or any presentation or communication to supplement and/or clarify any response to this solicitation which may be required or requested by the City of Warwick will be the sole responsibility of and will be borne by the respondent.

If the respondent is awarded a contract in accordance with this solicitation and the respondents bid or response and if the respondent fails or refuses to satisfy fully all of the respondents obligations thereunder, the City of Warwick will be entitled to recover from the respondent any losses, damages or costs incurred by the City as a result of such failure or refusal.

The City reserves the right to award in part or full and to increase or decrease quantities in the best interest of the City.

Any quantity reference in the bid specifications are estimates only, and do not represent a commitment on the part of the City of Warwick to any level of billing activity. It is understood and agreed that the agreement will cover the actual quantities ordered during the contract period.

The City reserves the right to rescind award for non-compliance to bid specifications.

The successful bidder must adhere to all City, State and Federal Laws, where applicable.

STANDARD INSTRUCTIONS FOR BIDDERS

The City of Warwick/Warwick Sewer Authority & Department of Public Works is requesting proposals for **ANALYTICAL LABORATORY SERVICES (BID2020-048)** in support of testing required by Rhode Island Pollution Discharge Elimination System (RIPDES) Permit RI0100234 for the Warwick Sewer Authority's Advanced Wastewater Treatment Facility located at 125 Arthur W. Devine Boulevard, Suite B Warwick, Rhode Island 02886. A copy of RIPDES Permit RI0100234 has been provided as an attachment to this solicitation (**Attachment A-1**). Proposals will also include analytical services in support of testing required by the Department of Public Works' MS4 Consent Agreement with the Rhode Island Department of Environmental Management (**Attachment A-2**).

1. PREPARATION OF PROPOSAL:

- A. Each proposal must be submitted on the prescribed **BID FORM** and **SCHEDULE OF PRICES** contained herein.
- B. For the **SCHEDULE OF PRICES** all blank unit price and total cost (shaded) spaces provided must be completed. No bid will be accepted which does not contain a sum as indicated for each of the items enumerated in the **SCHEDULE OF PRICES** form.
 - 1. All entries must be provided in both numerical and word formats.
 - 2. Entries must be clear, legible and written in ink or typed.
 - 3. The **BIDDER** must initial any and all corrections made with whiteout.
 - 4. The all-inclusive, total cost shall be confirmed by writing the numerical value in **word format** in the blank, (shaded) space provided at the bottom of page 4 of the **SCHEDULE OF PRICES** form.
 - 5. In the event of a discrepancy, entries shown in **word format** shall govern.
 - 6. Bids must be made on each separate item of the **SCHEDULE OF PRICES** form with reasonable relation to the probable cost of performing the particular work. The City of Warwick/Warwick Sewer Authority & Department of Public Works reserves the right to reject wholly any bid in where an item or items thereof are obviously unbalanced or appear to be as unbalanced as to affect, or to be liable to affect, adversely any interests of the City of Warwick/Warwick Sewer Authority & Department of Public Works.
- C. The original and two (2) copies of the **BID FORM** and **SCHEDULE OF PRICES** as well as any other required information must be provided at bid submittal.
- D. All proposals must be signed and submitted in a sealed envelope bearing the name and address of the **BIDDER** and endorsed **ANALYTICAL LABORATORY SERVICES (BID2020-048)**. If mailed, the proposal shall be enclosed in a second envelope similarly marked and addressed to the Purchasing Division, Warwick City Hall, 3275 Post Road, Warwick, Rhode Island 02886.

- E. Bids received prior to the time of the opening will be securely kept unopened. No responsibility shall be attached to an officer or person for the premature opening of a bid not properly addressed and identified.
- F. No bids will be accepted via email or fax.
- G. Any deviation from the specifications of this solicitation must be noted in writing by the **BIDDER** and attached as part of the bid. The **BIDDER** must indicate in the attachment, the item or part of the solicitation affected, and the deviation from the specification.

2. **WITHDRAWAL OF BID:**

- A. Any bid may be withdrawn prior to the scheduled time for opening of the bids.
- B. Negligence on the part of the **BIDDER** in preparation of the bid documents confers no rights for withdrawal of the bid after it is opened.
- C. No **BIDDER** may withdraw a bid for a period of one hundred twenty (120) days after the date set for the opening of the bids.

3. **USE OF SUBCONTRACTORS:**

- A. The use of the name of a **SUBCONTRACTOR(S)** in the proposal shall be deemed to constitute the acceptance by the **BIDDER**, if awarded the Contract, of the bid of the said **SUBCONTRACTOR(S)**. Any change in the **SUBCONTRACTOR(S)** therein after the award of the Contract shall be made only with the approval of the City of Warwick/Warwick Sewer Authority & Department of Public Works.
- B. **SUBCONTRACTORS** must adhere to and comply with, all requirements as indicated herein.

4. **RESPONSIBILITY OF BIDDER:**

- A. The City of Warwick/Warwick Sewer Authority & Department of Public Works reserves the right to make any such investigation as is necessary to determine the ability of the **BIDDER** to perform the work. Every **BIDDER** is therefore required to furnish all information requested in this proposal. Failure of any **BIDDER** to furnish this information may be cause for the rejection of the bid.
- B. All costs directly and/or indirectly related to preparation of a response to this solicitation, or any presentation or communication to supplement and/or clarify any response to this solicitation as warranted by the City of Warwick/Warwick Sewer Authority & Department of Public Works shall be the sole responsibility of and shall be borne by the **BIDDER**.

5. **BASIS OF AWARD:**

- A. Bids will be analyzed in accordance with the technical specifications contained herein and evaluated on the basis of unit prices as indicated on the **SCHEDULE OF PRICES**.
- B. The competency and responsibility of the **BIDDER** will be considered in making the award. The City of Warwick/Warwick Sewer Authority & Department of Public Works reserves the right to reject any or all bids when such rejection is in the interest of the City of Warwick/Warwick Sewer Authority & Department of Public Works, and to reject the bid of a **BIDDER** who, in the judgment of the City of Warwick/Warwick Sewer Authority & Department of Public Works, is not in a position to perform the Contract. Each **BIDDER** shall be prepared, if so requested by the City of Warwick/Warwick Sewer Authority & Department of Public Works, to present evidence of their experience and qualifications. It is intended that the Contract will be awarded to the lowest responsible and eligible **BIDDER** possessing the skill, ability and integrity necessary to the faithful performance of the work.
- C. The City of Warwick/Warwick Sewer Authority & Department of Public Works reserves the right to reject any and all bids, to waive minor deviations or informalities in the bid(s) received, and to accept the bid deemed most favorable to the interest of the City of Warwick/Warwick Sewer Authority & Department of Public Works.

6. **NOTICE OF ACCEPTANCE:**

A. Within one hundred twenty (120) days after the opening of bids, notice of the acceptance of a proposal will be sent to the successful **BIDDER** by the City of Warwick/Warwick Sewer Authority & Department of Public Works by means of a registered letter sent to the **BIDDER'S** address as stated in said proposal. If, within ten (10) days immediately after receipt of said notice, the successful **BIDDER** fails to comply with the requirements of these documents, he shall forfeit the bid security (if required) and the proposal and acceptance, at the option of the City of Warwick/Warwick Sewer Authority & Department of Public Works, may become null and void. The City of Warwick/Warwick Sewer Authority & Department of Public Works may then proceed to accept another of the proposals.

7. **FAILURE OR OMISSION:**

A. The failure or omission of any **BIDDER** to receive or examine and become familiar with any form, instrument, or document shall in no way relieve the **BIDDER** of any obligation in respect to the proposal.

8. **INTERPRETATION:**

- A. No oral interpretation of the meaning of the Plans, Specification or other Contract documents will in general be given. Any such request must be made in writing to **BettyAnne Rogers, Warwick Sewer Authority, 125 Arthur W. Devine Bd, Warwick, RI, 02886**. To be given consideration, such request must be received at least five (5) business days prior to the date fixed for the opening of bids. Interpretations will be made in the form of written addenda. All such addenda shall become a part of the Contract. No later than three (3) days prior to the date fixed for the opening of bids, the addenda will be mailed to each prospective **BIDDER**. Failure of a **BIDDER** to receive any such addenda will not relieve the **BIDDER** from any obligation under the proposal as submitted.

9. **PREVAILING LAWS AND REGULATIONS:**

- A. Before submitting a proposal, the prospective **BIDDER** should examine the terms, covenants and conditions of all codes, permits, and laws which affect or govern the work.
- B. The successful **BIDDER**, when awarded the Contract (**i.e., CONTRACTOR**), must continue to be informed of and comply with all laws, ordinances and regulations of the Federal, State and/or Municipal Government which may apply during the life of the Contract, and, in any manner, affect employees, conduct of the work and/or the materials/methods used or employed in the work.

10. **GUARANTIES AND WARRANTIES:**

- A. All guaranties and warranties normally available to customers will be extended to the City of Warwick/Warwick Sewer Authority & Department of Public Works.

11. **PAYMENT FOR SERVICES:**

- A. The **CONTRACTOR** shall be paid in accordance with the **BID FORM**. The **CONTRACTOR** shall submit regular statements or invoices to the Warwick Sewer Authority. Said statements shall be payable within thirty (30) days of approval of said invoices.

12. **TAXES:**

- A. The **IRS Form W-9 (Attachment B)** must be completed and submitted with the bid if the **BIDDER** falls under IRS requirements to file this form.
- B. The City of Warwick/Warwick Sewer Authority & Department of Public Works is exempt from the payment of the Rhode Island Sales Tax under the 1956 General Laws of the State of Rhode Island, 44-18-30, Paragraph 1, as amended.

13. OMISSIONS, CHANGES AND ADDITIONS:

A. Should anything be omitted from these bid specifications necessary to the proper execution of the work described therein, it shall be the duty of the **CONTRACTOR** to notify the City of Warwick/Warwick Sewer Authority & Department of Public Works, in writing, before signing the Agreement. In the event the **CONTRACTOR** fails to give such notice, the **CONTRACTOR** shall make good any damage or defect in their work caused by their neglect to do so, without extra charge.

B. The City of Warwick/Warwick Sewer Authority & Department of Public Works shall have the right during the progress of work to make alterations, additions, and deletions. The same shall be carried into effect by the **CONTRACTOR** without violating or vitiating the contract, but if special changes are made, the value of the same must be agreed upon, in writing, by the City of Warwick/Warwick Sewer Authority & Department of Public Works and the **CONTRACTOR**.

C. No omission will be allowed, or extra work paid for unless ordered in writing by the City of Warwick/Warwick Sewer Authority & Department of Public Works.

14. DEFAULT:

A. In the event the **CONTRACTOR** is adjudged bankrupt, or should they make a general assignment for the benefit of their creditors, or should a receiver be appointed on account of their insolvency, or should they refuse or fail to perform the work described in the Specifications prior to the completion date, except where provision is made for extension of time, or should the **CONTRACTOR** fail to make prompt payment to **SUBCONTRACTOR(S)**, or pay for materials or labor or otherwise be guilty of substantial violations of any provision of the contract, the City of Warwick/Warwick Sewer Authority & Department of Public Works may, without prejudice or any other right or remedy, and after having given seven (7) days written notice, terminate the employment of the **CONTRACTOR** and take possession of the premises, materials, tools, and appliances thereof and finish the work by whatever method they deem necessary.

B. In the event of default, the **CONTRACTOR** shall not be entitled to receive future payment until the work is finished. Should the unpaid balance of the contract price exceed the expense of finishing the work, including compensation for additional administration services, such excess shall be paid to the **CONTRACTOR**. Should the expense exceed the unpaid balance, the **CONTRACTOR** shall pay the difference to the City of Warwick/Warwick Sewer Authority & Department of Public Works.

15. TERMINATION OF CONTRACT:

A. The City of Warwick/Warwick Sewer Authority & Department of Public Works reserves the right to terminate the Contract or any part of the Contract in the best interests of the City of Warwick/Warwick Sewer Authority & Department of Public Works upon 30-day notice to the **CONTRACTOR**. The City of Warwick/Warwick Sewer Authority & Department of Public Works shall incur no liability for materials or services not yet ordered if it terminates in the best interests of the City of Warwick/Warwick Sewer Authority & Department of Public Works. If the City of

Warwick/Warwick Sewer Authority & Department of Public Works terminates in the interests of the City of Warwick/Warwick Sewer Authority & Department of Public Works after an order for materials or services have been placed, the **CONTRACTOR** shall be entitled to compensation upon submission of invoices and proper proof of claim, in that proportion which its services and products were satisfactorily rendered or provided, as well as expenses necessarily incurred in the performance of work up to time of termination.

LABORATORY BID SPECIFICATIONS

1. GENERAL CONDITIONS

- A. The **CONTRACTOR**, otherwise called, **LABORATORY** shall have offices/laboratories within a **fifty (50) mile radius** of the Warwick Sewer Authority's Advanced Wastewater Treatment Facility located at 125 Arthur W. Devine Bd Warwick, RI 02886.
- B. Should anything be omitted from these contract documents necessary to the proper execution of the work described herein, it shall be the duty of the **LABORATORY** to so notify the City of Warwick/Warwick Sewer Authority & Department of Public Works, in writing, before signing the Agreement. In the event the **LABORATORY** fails to give such notice, the **LABORATORY** shall make good for any damage or defect in their work caused by their neglect to do so, without extra charge.
- C. The **LABORATORY** shall bear all loss or damage from accidents which may occur to any person or persons during the progress of the work, until completion of all work. The **LABORATORY** shall provide all legal and necessary guards, barriers, railings, warning signs, guards, flaggers, during the progress of work. The **LABORATORY** shall execute the work as per the specifications of the City of Warwick/Warwick Sewer Authority & Department of Public Works.
- D. The **LABORATORY** shall examine the existing sites. No allowance will be made for lack of full knowledge of all conditions.
- E. Unless otherwise stipulated, the **LABORATORY** shall provide and pay for all materials, supplies, labor, power, tools, equipment, transportation, and all other facilities necessary to the execution and completion of the work.
- F. The **LABORATORY** shall not employ any unfit person, nor anyone unskilled in the work assigned herein.
- G. The **LABORATORY** must carry sufficient liability insurance and agree to indemnify the City of Warwick/Warwick Sewer Authority & Department of Public Works against any and all claims of any nature which might arise as a result the **LABORATORY** conduct of work. The **LABORATORY** shall furnish the City of Warwick/Warwick Sewer Authority & Department of Public Works documentation of Certificates of Insurance for Professional Liability or Errors and Omissions Insurance coverage carried by your company/corporation and/or its professional staff for your Analytical Testing services at the time of the signing of the Agreement.

- H. The **LABORATORY** shall assume all risks and bear all losses occasioned by neglect or accident during the progress of the work. The **LABORATORY** shall provide insurance covering the entire work in accordance with any worker's compensation laws which may be in force at present, or put into effect before the completion of the Agreement. The **LABORATORY** shall obtain certificates of Comprehensive/General Liability Insurance minimum limits of \$1,000,000/\$2,000,000 naming the City of Warwick/Warwick Sewer Authority & Department of Public Works as insured parties. The **LABORATORY** shall furnish the City of Warwick/Warwick Sewer Authority & Department of Public Works with a proper Certificate of Insurance of the Compensation/Liability insurance policies herein specified, at the time of the signing of the Agreement.
1. Auto Liability: shall be in the amount of \$1,000,000 Combined Single Limit - Bodily Injury & Property Damage.
 2. Employer's Liability: shall be in the amount of \$500,000 Policy Limit. \$100,000 each by Accident and Disease.
- I. The **LABORATORY** shall not commence under this Agreement until they have obtained all the insurance required under this contract and such insurance has been approved by the City of Warwick/Warwick Sewer Authority & Department of Public Works.
- J. The City of Warwick/Warwick Sewer Authority & Department of Public Works shall have the right during the progress of work, to make any alterations, additions, omissions. The same shall be carried into effect by the **LABORATORY** without violating or vitiating the contract, but if special changes are made, the value of the same must be agreed upon, in writing, by the City of Warwick/Warwick Sewer Authority & Department of Public Works and the **LABORATORY**. No omission will be allowed, or extra work paid for unless ordered in writing by the City of Warwick/Warwick Sewer Authority & Department of Public Works.
- K. The City of Warwick/Warwick Sewer Authority & Department of Public Works reserves the right to increase or decrease the total quantities of required **LABORATORY** analyses estimated in this solicitation as a result of the changing needs of the wastewater treatment facility and/or storm water collection system. Any quantity referenced herein are estimates only, and do not represent a commitment on the part of the City of Warwick, to any level of billing activity. It is understood and agreed that the Contract awarded shall cover the actual quantities ordered during the Contract Period.
- L. The City of Warwick/Warwick Sewer Authority & Department of Public Works also reserves the right to negotiate the final contract to reflect the best overall **LABORATORY** analysis services for the best overall qualified price.
- M. The City of Warwick/Warwick Sewer Authority & Department of Public Works reserves the right to rescind award for non-compliance to Contract specifications.

2. **BID REQUIREMENTS**

- A. Along with the **BID FORM**, the **LABORATORY** shall provide proof of licensure with the State of Rhode Island Department of Health in all testing parameters as requested in the bid. Copy of said **LABORATORY** verification, license, appendix, and Quality Assurance/Quality Control (QA/QC) program shall be submitted as part of the bid supporting documents.
- B. Along with the **BID FORM**, the **LABORATORY** shall provide proof of licensure with the State of Rhode Island Department of Health for all **SUBCONTRACTORS** providing organic and/or inorganic analytical services to the **LABORATORY** in support of the bid. The **SUBCONTRACTOR** documents shall provide proof of licensure for all testing parameters subcontracted by the **LABORATORY** in support of the bid. Copy of said **SUBCONTRACTOR** verification, license, appendix, and Quality Assurance/Quality Control (QA/QC) program shall be submitted as part of the bid supporting documents.
- C. Along with the **BID FORM**, the **LABORATORY** shall provide the following with regard to their **WHOLE EFFLUENT TOXICITY (WET) LABORATORY** credentials.
 - 1. Most recent on-site evaluation report from an accrediting authority/regulatory agency (i.e., NELAP and/or EPA) and the lab's response to deficiencies (if any) as cited in the report.
 - 2. Copies of the results for the 2017 & 2018 US EPA Laboratory Performance Evaluation Studies for Bio-monitoring Laboratories and the lab's response to deficiencies (if any) as cited in the reports.
- D. The **LABORATORY** shall conduct Quality Assurance/Quality Control work, including, but not limited to DMR-QA annual testing as required by State and Federal agencies, i.e., Rhode Island Department of Environmental Management (RIDEM), Rhode Island Department of Health (RIDOH) and the Environmental Protection Agency (EPA) and provide the Warwick Sewer Authority with any/all supporting data to include as part of their RIPDES permit required annual report (QA/QC) submittals, if/when requested by the Warwick Sewer Authority.
- E. The **LABORATORY** shall provide for pickup of all samples as deemed necessary by this Contract. This cost must be reflected in the quoted price; no additional or add on charges will be allowed above and beyond the unit prices contained in **SCHEDULE OF PRICES** submitted by the **LABORATORY**.
- F. The **LABORATORY** shall provide for sample pick-up at the Warwick Sewer Authority daily, Monday through Friday, including any and all holidays, unless other arrangements are made in advance. The **LABORATORY** shall provide for sample pick-up at the Department of Public Works as needed.
- G. The **LABORATORY** shall provide for pick-up at the Warwick Sewer Authority & Department of Public Works on Saturday and/or Sunday as warranted by the Warwick Sewer Authority & Department of Public Works.

- H. The **LABORATORY** will be available seven (7) days per week, including after normal business hours, to respond to unforeseen occurrences in the wastewater collection system, treatment facility and/or storm water collection system which would require immediate pick-up of samples and/or delivery of samples to the lab for analysis.
- I. The **LABORATORY** must comply with the maximum holding time associated with each test parameter as specified in 40 CFR Part 136 and ensure that sample collection time, pick-up time, transport time and associated sample log in/prep time do not exceed the maximum hold time for each test parameter, *particularly bacteria, including fecal coliform and Enterococci samples*.
- J. The **LABORATORY** must comply with sample container, preservative and storage condition (temperature) requirements for all test parameters as specified in 40 CFR Part 136.
- K. The **LABORATORY** shall provide all sample bottles/preservatives required as part of this contract. This cost must be reflected in the quoted price; no additional or add on charges will be allowed above and beyond the unit prices contained in **SCHEDULE OF PRICES**.
- L. Sample results, must be reported or readily available to the Warwick Sewer Authority & Department of Public Works in **ALL** of the following manners:
1. **Verbal Communication**
 - a. **Weekdays** - Should sample results exceed the Warwick Sewer Authority's and/or Department of Public Works' limits as specified in their RIPDES Permit RI0100234 and MS4 Consent Agreement respectively, a representative of the **LABORATORY** must immediately contact key personnel of the Warwick Sewer Authority & Department of Public Works with the non-compliant data results.
 - b. **Weekends and Holidays** - Cell phone numbers for Warwick Sewer Authority & Department of Public Works key personnel will be provided to the **LABORATORY** in the event it is necessary to contact someone on a weekend or holiday regarding non-compliant sample results.
 2. **Electronic Reporting**
 - a. **Website** - The **LABORATORY** shall provide the Warwick Sewer Authority & Department of Public Works with discreet access to their sample test results via an on-line reporting system in order to check status at any time.
 - b. **Email** - The **LABORATORY** shall provide the Warwick Sewer Authority & Department of Public Works key personnel with electronic copies of all final, completed reports via email as soon as they are available.
 3. **Hard Copy Reports**
 - a. Original, hard copy reports must be forwarded to the Warwick Sewer Authority & Department of Public Works designees within **10 days or less** following release of data, except as agreed upon for subcontracted WET Testing.

- b. Certificates of Analysis shall be inclusive of, but not limited to, the following items/details:

Work Order/Tracking Number	Reporting Limit (with units)
Name and Address of Client	EPA Approved Test Method Used
Sample Number (as provided)	Date/Time Analyzed
Sample Type	Analyst Initials
Sample Description	Date Reported
Sample Date and Time	Signature of Data Reporting Official
Parameter Analyzed	State of RI Laboratory Certification ID
Sample Result (with units)	Chain of Custody Form for Sample(s)
- c. Certificates of Analysis must be provided as **original documents** and each page of the reporting document identified as such by means of the signature of the laboratory representative qualifying the report/results.
- d. All reports will be delivered as follows:

Warwick Sewer Authority
125 Arthur Devine Boulevard
Warwick, RI 02886
ATTN: Betty Anne Rogers, Laboratory Director

Department of Public Works
925 Sandy Lane
Warwick, RI 02886
ATTN: Eric Hindinger, City Engineer

- M. Should additional tests be necessary, above and beyond the number of units specified on the **SCHEDULE OF PRICES**, the City of Warwick/Warwick Sewer Authority & Department of Public Works shall be billed at the unit prices quoted in the **SCHEDULE OF PRICES** for the duration of the bid period.
- N. In the event that the City of Warwick/Warwick Sewer Authority & Department of Public Works should deem data reported by the **LABORATORY** as suspect, or should the **LABORATORY** obtain a result that exceeds the limits as specified in RIPDES Permit RI0100234, the **LABORATORY** must immediately initiate a comprehensive review of all records associated with the sample result including but not limited to bottle, preservative, storage conditions, hold times, test procedures, equipment calibrations, standards, reagents/media, bench sheets & results, calculations & dilutions, data entry & transcription, etc. Should no error be uncovered by the review, the City of Warwick/Warwick Sewer Authority & Department of Public Works may request that the **LABORATORY** repeat the sample analysis when adequate sample remains and hold times and storage conditions have been maintained as warranted by the test parameter and method. The review and repeat analysis will be performed by the **LABORATORY** at no additional expense to the City of Warwick/Warwick Sewer Authority & Department of Public Works.

- O. Occasionally, the City of Warwick/Warwick Sewer Authority & Department of Public Works may require a sample analysis to be conducted with rapid turn-around of results. The **LABORATORY** will provide for rapid turn-around with no additional or add on charges above and beyond the unit prices included in the **SCHEDULE OF PRICES**.
- P. All unit prices included in the **SCHEDULE OF PRICES** shall be **inclusive of any and all charges**, including but not limited to sample collection, sample bottle, sample bottle preservative, sample preparation (distillation, extraction, etc.), sample analysis, sample disposal, fuel/courier surcharges, repeat and/or rapid turn-around analyses, etc. No additional or add on charges will be allowed above and beyond the unit prices included in the **SCHEDULE OF PRICES**.

3. **REQUIRED ANALYSES**

- A. The **LABORATORY** must be able to achieve, at a minimum, the **Method Detection Limits (MDL) identified in Attachment A-1, RIPDES Permit RI0100234, pages 22-24**. Where more sensitive detection limits are available, and achievable, by the **LABORATORY**, the most sensitive method detection limit shall be employed for analysis of samples provided by the Warwick Sewer Authority & Department of Public Works. The **LABORATORY** must submit a completed **LABORATORY DETECTION LIMIT (DL) AND TEST METHOD SUMMARY FORM (Attachment C)**. Prices as quoted in the **SCHEDULE OF PRICES** must reflect the cost for the most sensitive detection limit achievable by the **LABORATORY**.

- B. **FECAL COLIFORM – MPN DIRECT TEST (A-1 MEDIUM)**

The Warwick Sewer Authority & Department of Public Works may request that the **LABORATORY** expand the number of dilutions as needed (i.e., SSO-Sanitary Sewer Overflow, heavy rainfall, wastewater treatment plant failure) so that a more accurate fecal count can be attained. Additional dilutions will be performed at no additional expense to the City of Warwick/Warwick Sewer Authority & Department of Public Works.

- C. **ENTEROCOCCI – IDEXX – ENTEROLERT® SYSTEM**

The Warwick Sewer Authority & Department of Public Works may request that the **LABORATORY** expand the number of dilutions as needed (i.e., SSO-Sanitary Sewer Overflow, heavy rainfall, wastewater treatment plant failure) so that a more accurate Enterococci count can be attained. Additional dilutions will be performed at no additional expense to the City of Warwick/Warwick Sewer Authority & Department of Public Works.

- D. **MALE-SPECIFIC COLIPHAGE**

The Warwick Sewer Authority & Department of Public Works may request that the **LABORATORY** expand the number of dilutions as needed (i.e., SSO-Sanitary Sewer Overflow, heavy rainfall, wastewater treatment plant failure) so that a more accurate Male-specific Coliphage count can be attained. Additional dilutions will be performed at no additional expense to the City of Warwick/Warwick Sewer Authority & Department of Public Works.

- E. **NUTRIENT ANALYSES**

Total Phosphorus*	Ammonia	Nitrate
Orthophosphorus	Total Kjeldhal Nitrogen	Nitrite

*Important to note: The Warwick Sewer Authority's seasonal Total Phosphorus RIPDES Permit Limit during the period of April 1 through October 31 is 0.1 mg/L. The **LABORATORY** must provide the most sensitive detection limit achievable, preferably < 0.05 mg/L.

F. CBOD₅ - CARBONACEOUS BIOCHEMICAL OXYGEN DEMAND

G. TSS - TOTAL SUSPENDED SOLIDS

H. CN - TOTAL AND AMENABLE CYANIDE

I. TOTAL METALS

RIPDES METALS (WEEKLY & SEASONAL)

Lead	Aluminum*
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RIPDES METALS - QUARTERLY (7)

Cadmium	Lead	Zinc	Hexavalent Chromium
Copper	Nickel	Aluminum*	

RIPDES METALS - LOCAL LIMITS TESTING (15)

Antimony	Chromium	Nickel	Zinc
Arsenic	Copper	Selenium	Hexavalent Chromium
Beryllium	Lead	Silver	Aluminum*
Cadmium	Mercury	Thallium	

*Important to note: The Warwick Sewer Authority presently uses an Aluminum based coagulant in the removal of phosphorus. RIDEM may require the Warwick Sewer Authority to change the coagulant used in phosphorus removal to a ferric based coagulant. Therefore, pricing should reflect either Aluminum or Iron testing.

J. OIL & GREASE (GRAVIMETRIC)

K. OIL & GREASE (NON-POLAR)

L. SURFACTANTS (MBAS)

M. PPS - PRIORITY POLLUTANT SCAN AND OTHERS

This scan is inclusive of all pollutants identified in **Attachment D**. EPA Priority Pollutants including Total Toxic Organics, Total Phenols (as required by RIDEM) and the following additional metals, Aluminum* and Hexavalent Chromium, as they pertain to our RIPDES Permit, would be included in the price as quoted in the **SCHEDULE OF PRICES**.

*Important to note: The Warwick Sewer Authority presently uses an Aluminum based coagulant in the removal of phosphorus. RIDEM may require the Warwick Sewer Authority to change the coagulant used in phosphorus removal to a ferric based coagulant. Therefore, pricing should reflect either Aluminum or Iron testing.

N. TESTING REQUIREMENTS FOR SLUDGE DISPOSAL (Attachment E)

1. Toxicity Characteristics Leaching Procedure "TCLP" – 1st Quarter Only
2. Flash Point/Ignitibility – 1st Quarter Only
3. Reactivity: Cyanide – 1st Quarter Only
4. Reactivity: Sulfide – 1st Quarter Only
5. Percent Total Sulfur – 1st Quarter Only
6. Total Metals Analyses (dry weight, mg/kg) – All Quarters

Aluminum	Chromium	Nickel
Arsenic	Copper	Selenium
Beryllium	Lead	Zinc
Cadmium	Mercury	
7. Polychlorinated biphenyls-PCBs (dry weight, mg/kg) – All Quarters
8. Phosphorus – All Quarters
9. Corrosivity/pH – All Quarters
10. Percent Total Solids, Fixed Solids and Volatile Solids – All Quarters

O. BIOASSAY – ACUTE AND CHRONIC WHOLE EFFLUENT TOXICITY (WET) TESTING

1. The RIPDES bioassay test requirement for the Warwick Sewer Authority consists of four (4) sampling events, one (1) each calendar quarter. A sampling event is defined as three (3) 24-hr effluent composites collected during the seven (7) day exposure test period.
 - a. Effluent sample collections will be performed by the Warwick Sewer Authority.
 - b. Sample bottles, containers, coolers and courier service (pick-up and transport of the samples to the WET Laboratory), will be provided by the **LABORATORY** and the associated cost shall be included in the **bioassay bid price** entered on the **SCHEDULE OF PRICES**.
2. The initial effluent sample shall be split into two (2) subsamples after thorough mixing.
 - a. One subsample shall be used for the required chemical analyses as outlined in RIPDES Permit RI0100234 Section B. All costs associated with the required WET Testing chemical analyses shall be included in the **bioassay bid price** entered in the **SCHEDULE OF PRICES**.
 - b. The other subsample shall be used for Day 1 (test initiation) and Day 2 (renewal) of the Acute and Chronic Toxicity Tests.
3. The second effluent sample collection will be used for test solution renewals on Days 3 and 4, and the third effluent sample collection will be used for test solution renewals on Days 5, 6 and 7.

4. Remaining effluent sample from the second and third collections will be held until test completion. If either sample causes lethality to 50% or more of the test organisms, in any dilution, then chemical analyses shall be performed on the appropriate samples. All costs associated with the required additional WET Testing chemical analyses shall be included in the **bioassay bid price** entered on the **SCHEDULE OF PRICES**.

5. With each event, the **LABORATORY** shall coordinate and collect the required Pawtucket Reservoir dilution water used for the WET Testing. All costs associated with diluent sample collection, containment and delivery to the WET Testing Laboratory shall be included in the **bioassay bid price** entered in the **SCHEDULE OF PRICES**.
6. Each quarter, acute definitive toxicity testing will be performed on one (1) species, *Pimephales promelas*-Fathead Minnow Survival Acute Static LC₅₀, for a total of four (4) acute toxicity tests per year.
7. Seven day chronic toxicity test will be performed on one (1) species, *Ceriodaphnia sp.*-Daphnid-Reproduction/Survival Acute Static LC₅₀, for a total of four (4) chronic toxicity tests per year.
8. Chronic daphnid tests shall be used to calculate the acute LC₅₀ at the forty-eight (48) hour exposure interval.
9. Chronic and acute toxicity data shall be reported as outlined in RIPDES Permit RI0100234 Section B and associated protocols for the two species as listed in 40 CFR Part 136, incorporating any deviations from protocol listed within the permit, or additional methods if approved by the Director of RIDEM.
10. All costs associated with the quarterly Acute and Chronic Toxicity Tests shall be included in the **bioassay bid price** entered in the **SCHEDULE OF PRICES**.

4. MISCELLANEOUS TESTING – POLLUTANTS OF CONCERN

The Warwick Sewer Authority's Industrial Pretreatment Program (IPP) routinely monitors various wastestreams discharged to our collections system. These events may require the **LABORATORY** to perform sample analyses for pollutants of concern (POC) that are not included in the RIPDES Permit RI0100234 requirements. These pollutants may be part of a new EPA Categorical Standard or a revision to the RIPDES permit. Additionally, the Warwick Sewer Authority may require the **LABORATORY** to perform sample analyses that are normally conducted in-house by Warwick Sewer Authority personnel. Staffing resources, equipment issues and/or other extenuating circumstance may require that the **LABORATORY** performs these analyses to ensure timely sample processing, analysis and reporting to comply with the Warwick Sewer Authority's RIPDES Permit RI0100234. Miscellaneous testing/pollutants of concern are included on pages 19 and 20 of the schedule of prices.

PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR BID

LABORATORY BID FORM

The City of Warwick is requesting bids (**BID2020-048**) from laboratories certified by the State of Rhode Island to perform all necessary services in connection with collecting, analyzing and reporting on samples including, but not limited to, wastewater (influent, effluent, domestic, commercial, industrial), septage, sludges and storm water from the City of Warwick, Warwick Sewer Authority & Department of Public Works. In order to be considered, bids must be received at the Purchasing Division, Warwick City Hall, 3275 Post Road, Warwick, Rhode Island 02886 no later than Wednesday, May 29, 2019 at 11:00 AM.

The services of the **LABORATORY** shall be for a one (1) year period beginning on the date of the bid award, unless extended by mutual consent for a period not to exceed three (3) years.

The undersigned, having read the attached specifications, hereby stipulates that he/she fully represents a **LABORATORY** certified by the State of Rhode Island and that he/she fully understands the nature of the work described herein, and agrees to provide analytical **LABORATORY** services in accordance with the following unit prices, including all costs incurred in the course of performing such work.

Unless specified, please print or type information requested.

Date:

Laboratory:

Address:

Name and Title:

Signature:

Telephone Number:

Cell Phone Number:

Fax Number:

Email Address:

PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR BID

(PRICING SHEET MAY NOT BE CONFIDENTIAL)

SCHEDULE OF PRICES					
Name of Laboratory:					
Test Parameter	Total Units	Unit Price (numerical format)	Unit Price (word format)	Total Cost (numerical format)	Total Cost (word format)
Fecal Coliform (A-1)	210	\$		\$	
Enterococci (IDEXX Enterolert®)	210	\$		\$	
Male-specific Coliphage	50	\$		\$	
Surfactants (MBAS)	50	\$		\$	
Total Phosphorus	120	\$		\$	
Orthophosphorus	30	\$		\$	
Ammonia	138	\$		\$	
TKN	90	\$		\$	
Nitrate	90	\$		\$	
Nitrite	90	\$		\$	

CBOD₅	440	\$		\$	
Total Suspended Solids	20	\$		\$	

PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR BID

(PRICING SHEET MAY NOT BE CONFIDENTIAL)

SCHEDULE OF PRICES - <i>continued</i>					
Test Parameter	Units	Unit Price (numerical format)	Unit Price (word format)	Total Cost (numerical format)	Total Cost (word format)
Total and Available CN	4	\$		\$	
Oil & Grease (Gravimetric)	28	\$		\$	
Oil & Grease (Non-polar)	28	\$		\$	
Chloroform	8	\$		\$	
Weekly Metals: Lead, Total	116	\$		\$	
Seasonal Metals: Aluminum, Total	70	\$		\$	
RIPDES Quarterly Metals (7): Cd, Cu, Pb, Ni, Zn, Al and Cr (VI)	8	\$		\$	
RIPDES Local Limits Metals (15): Cd, Cr, Cu, Pb, Ni, Ag, Zn, Sb, As, Be, Hg, Se, Tl, Al and Cr(VI)	8	\$		\$	
Priority Pollutant Scan: see ATTACHMENT D	20	\$		\$	

Quarterly WET Testing	4	\$		\$	
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PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR BID

(PRICING SHEET MAY NOT BE CONFIDENTIAL)

SCHEDULE OF PRICES - <i>continued</i>					
Test Parameter	Units	Unit Price (numerical format)	Unit Price (word format)	Total Cost (numerical format)	Total Cost (word format)
Thickened Sludge TCLP	1	\$		\$	
Thickened Sludge Flash Point/Ignitibility	1	\$		\$	
Thickened Sludge Reactivity: Cyanide	1	\$		\$	
Thickened Sludge Reactivity: Sulfide	1	\$		\$	
Thickened Sludge Percent Total Sulfur	1	\$		\$	
Thickened Sludge Total Metals	4	\$		\$	
Thickened Sludge PCBs	4	\$		\$	
Thickened Sludge Phosphorus	4	\$		\$	
Thickened Sludge Corrosivity/pH	4	\$		\$	
Thickened Sludge Percent Total Solids	4	\$		\$	
Thickened Sludge Percent Fixed Solids	4	\$		\$	

Thickened Sludge Percent Volatile Solids	4	\$		\$	
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***See Attachment E for Thickened Sludge Requirements**

PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR BID

(PRICING SHEET MAY NOT BE CONFIDENTIAL)

SCHEDULE OF PRICES - <i>continued</i>					
Test Parameter	Units	Unit Price (numerical format)	Unit Price (word format)	Total Cost (numerical format)	Total Cost (word format)
pH	0	\$		\$0.00	Zero dollars & zero cents
Alkalinity	0	\$		\$0.00	Zero dollars & zero cents
Total Hardness	0	\$		\$0.00	Zero dollars & zero cents
Total Dissolved Organic Carbon (DOC)	0	\$		\$0.00	Zero dollars & zero cents
Total Organic Carbon (TOC)	0	\$		\$0.00	Zero dollars & zero cents
Volatile Suspended Solids (VSS)	0	\$		\$0.00	Zero dollars & zero cents
Hydrogen sulfide	0	\$		\$0.00	Zero dollars & zero cents
COD - High Range	0	\$		\$0.00	Zero dollars & zero cents
COD - Low Range	0	\$		\$0.00	Zero dollars & zero cents
Total Residual Chlorine High Range	0	\$		\$0.00	Zero dollars & zero cents
Total Residual Chlorine Low Range	0	\$		\$0.00	Zero dollars & zero cents

Settleable Solids	0	\$		\$0.00	Zero dollars & zero cents
Iron, Total	0	\$		\$0.00	Zero dollars & zero cents

PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR BID

(PRICING SHEET MAY NOT BE CONFIDENTIAL)

SCHEDULE OF PRICES - <i>continued</i>					
Test Parameter	Units	Unit Price (numerical format)	Unit Price (word format)	Total Cost (numerical format)	Total Cost (word format)
Cadmium, Total	0	\$		\$0.00	Zero dollars & zero cents
Chromium, Total	0	\$		\$0.00	Zero dollars & zero cents
Copper, Total	0	\$		\$0.00	Zero dollars & zero cents
Nickel, Total	0	\$		\$0.00	Zero dollars & zero cents
Silver, Total	0	\$		\$0.00	Zero dollars & zero cents
Zinc, Total	0	\$		\$0.00	Zero dollars & zero cents
Hexavalent Chromium	0	\$		\$0.00	Zero dollars & zero cents
Total Toxic Organics (EPA 624.1/625.1)	0	\$		\$0.00	Zero dollars & zero cents
ALL INCLUSIVE TOTAL COST (numerical format):					
Please confirm the ALL INCLUSIVE, TOTAL COST by writing the value in word format below:					

CITY OF WARWICK
BID AND CONTRACT FORM

TITLE OF SPECIFICATION: Bid2020-048 Analytical Laboratory Services

I. BID:

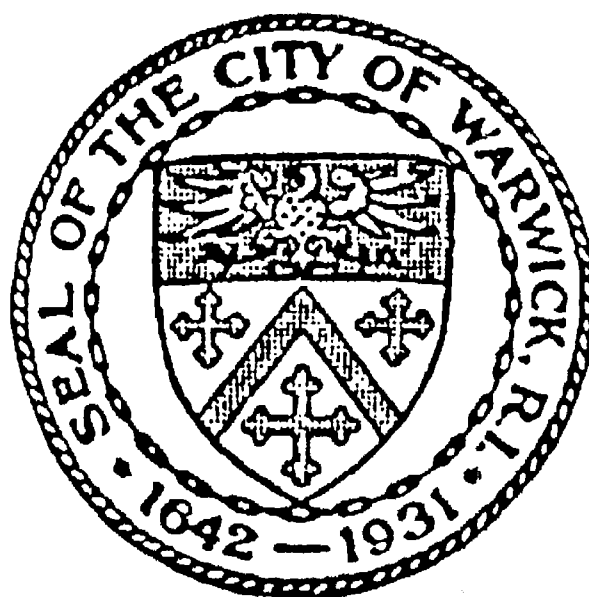
WHEREAS, the CITY OF WARWICK has duly asked for bids for performance of services and/or supply of goods in accordance with the above-indicated specifications.

The person or entity does irrevocably offer to perform the services and/or furnish the goods in accordance with the specifications, which are hereby incorporated by reference in exchange for the bid price below;

This offer will remain open and irrevocable until the CITY OF WARWICK has accepted this bid or another bid on the specifications or abandoned the project.

The bidder agrees that acceptance by the CITY OF WARWICK will transform the bid into a contract. This bid and contract will be secured by Bonds, if required by the specifications.

Pricing as Submitted



ATTACHMENT A-1

AUTHORIZATION TO DISCHARGE UNDER THE
RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of Chapter 46-12 of the Rhode Island General Laws, as amended,

The City of Warwick

is authorized to discharge from a facility located at

Warwick Wastewater Treatment Facility
125 Arthur W. Devine Blvd
Warwick, Rhode Island

to receiving waters named

Pawtuxet River

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on _____.

This permit and the authorization to discharge expire at midnight, five (5) years from the effective date.

This permit supersedes the permit issued on September 30, 2008.

This permit consists of 25 pages in Part I including effluent limitations, monitoring requirements, etc. and 10 pages in Part II including General Conditions.

Signed this day of , 2018.

DRAFT

Angelo S. Liberty, P.E., Chief of Surface Water Protection
Office of Water Resources
Rhode Island Department of Environmental Management
Providence, Rhode Island

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from outfall serial number(s) 001A.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations			Concentration - specify units		Monitoring Requirement	
	Quantity - lbs./day	Average Monthly	Maximum Daily	Average Monthly	Average Weekly	Measurement Frequency	Sample Type
Flow	7.7 MGD	7.7 MGD	---	---	---	Continuous	Recorder
CBODs	(Nov 1-May 31)	1,605 lb/day	2,890 lb/day	25 mg/l	40 mg/l	1/Day	24-Hr. Comp.
	(June 1-June 30 & Oct. 1-Oct. 31)	963 lb/day	1,284 lb/day	15 mg/l	15 mg/l	1/Day	24-Hr. Comp.
	(July 1 - Sept. 30)	642 lb/day	963 lb/day	10 mg/l	10 mg/l	1/Day	24-Hr. Comp.
CBODs - % Removal				85%		1/Month	Calculated
TSS	(Nov 1-May 31)	1,927 lb/day	3,211 lb/day	30 mg/l	45 mg/l	1/Day	24-Hr. Comp.
	(June 1-June 30 & Oct. 1-Oct. 31)	1,605 lb/day	1,927 lb/day	25 mg/l	25 mg/l	1/Day	24-Hr. Comp.
	(July 1 - Sept. 30)	1,284 lb/day	1,927 lb/day	20 mg/l	20 mg/l	1/Day	24-Hr. Comp.
TSS - % Removal				85%		1/Month	Calculated
Settleable Solids					---	1/Day	Grab

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

Influent sampling for TSS and CBODs shall be conducted three (3) times/week and coordinated with effluent sampling to provide appropriate allowances for hydraulic detention (flow-through) time.

Sampling for TSS and CBODs shall be performed five (5) times/week, Sunday - Saturday. One (1) of the TSS samples shall be collected on either Saturday or Sunday. Sampling for Flow and Settleable Solids shall be performed Sunday-Saturday.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: Outfall 001A.

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from outfall serial number(s) 001A. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Concentration - specify units		Monitoring Requirement	
	Average Monthly	Maximum Daily	Average Monthly *(Minimum)	Average Weekly *(Average)	Measurement Frequency	Sample Type
Enterococci			54 cfu ¹ 100 ml		3/Week	Grab
Fecal Coliform			--- MPN ¹ 100 ml	--- MPN ¹ 100 ml	3/Week	Grab
Total Residual Chlorine (TRC)			20 ug/l	34 ug/l	3/Day ²	Grab ²
pH			(6.0 SU)	(9.0 SU)	2/Day	Grab
Dissolved Oxygen (June 1 - Oct. 31)			(6.0 mg/l)		Continuous	Recorder

¹Two (2) of the three (3) Enterococci and Fecal coliform samples are to be taken Tuesday and Thursday. The Fecal Coliform samples shall be taken at the same time as the Enterococci samples. The Geometric Mean shall be used to obtain the "weekly average" and "monthly average." The facility shall report any fecal coliform sample result that exceeds 400 MPN/100 mL to the RI DEM in accordance with the 24-hour reporting requirements under Part II(1)(5) of the permit.

²The use of a continuous TRC recorder after chlorination and prior to dechlorination is required to provide a record that proper disinfection was achieved at all times. Compliance with these limitations shall be determined by taking a minimum of three (3) grab samples over an eight (8) hour shift, with the first sample taken between 8:00 A.M. and 10:00 A.M., Monday - Friday (except holidays), and all subsequent samples equally spaced over the remainder of the shift. On Saturdays, Sundays, and Holidays at least two (2) grab samples are to be taken with a minimum of two (2) hours between grabs. The maximum daily and average monthly values are to be computed from the averaged grab sample results for each day. The following methods may be used to analyze the grab samples: (1) Low Level Amperometric Titration, Standard Methods (18th Edition) No. 4500-Cl E; (2) DPD Spectrophotometric, EPA No. 330.5 or Standard Methods (18th Edition) No. 4500-Cl G.

³Values in parentheses () are to be reported as Minimum/Maximum for the reporting period rather than Average Monthly/Maximum Daily.

Sampling for Fecal Coliform shall be conducted three (3) times/week, Sunday - Saturday. Sampling for pH shall be performed Sunday-Saturday.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: Outfall 001A.

PART I

Permit No. R0100234
Page 4 of 25

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

3. During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from outfall serial number(s) 001A. Such discharges shall be monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>			<u>Concentration - specify units</u>		<u>Monitoring Requirement</u>	
	<u>Quantity - lbs. per day</u>	<u>Average Monthly</u>	<u>Maximum Daily</u>	<u>Average Monthly</u>	<u>Average Weekly</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Phosphorus, Total (Nov. 1 - March 31) (April 1 - Oct 31)		1.0 mg/l 0.1 mg/l				1/Week 1/Week	24-Hr. Comp. 24-Hr. Comp.
Orthophosphorus (Nov. 1 - March 31)		-- mg/l				1/Week	24-Hr. Comp.
Ammonia, Total (as N) (Nov. 1 - April 30) (May 1 - May 31) (June 1 - Oct 31)		13.5 mg/l 5.2 mg/l 2.0 mg/l			-- mg/l -- mg/l 2.0 mg/l	1/Week 1/Week 1/Week	24-Hr. Comp. 24-Hr. Comp. 24-Hr. Comp.
Nitrogen, Total (TKN + Nitrate + Nitrite, as N) (Nov. 1 - April 30) ¹ (May 1 - Oct. 31)		-- mg/l 8.0 mg/l				2/Month 1/Week	Calculated Calculated

-- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

¹The permittee shall operate the treatment facility to reduce the discharge of total nitrogen, during the months of November through April, to the maximum extent possible using all available treatment equipment in place at the facility, except methanol addition.

Samples taken in compliance with the monitoring requirements specified above shall be taken Monday through Friday at the following location: Outfall 001A.

PART I

Permit No. RI0100234
Page 5 of 25

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from outfall serial number(s) 001A. Such discharges shall be monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Concentration - specify units		Monitoring Requirement	
	Quantity - lbs. per day	Average	Average	Maximum	Measurement	Sample
	Average	Monthly	Monthly	Daily	Frequency	Type
	Monthly					
TKN (Nov. 1 - April 30) (May 1 - Oct. 31)		— mg/l — mg/l		— mg/l — mg/l	2/Month 1/Week	24-Hr. Comp. 24-Hr. Comp.
Nitrate, Total (as N) (Nov. 1 - April 30) (May 1 - Oct. 31)		— mg/l — mg/l		— mg/l — mg/l	2/Month 1/Week	24-Hr. Comp. 24-Hr. Comp.
Nitrite, Total (as N) (Nov. 1 - April 30) (May 1 - Oct. 31)		— mg/l — mg/l		— mg/l — mg/l	2/Month 1/Week	24-Hr. Comp. 24-Hr. Comp.

— Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

Samples taken in compliance with the monitoring requirements specified above shall be taken Monday through Friday at the following location: Outfall 001A.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

5. During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from outfall serial number(s) 001A. Such discharges shall be monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Concentration - specify units</u>		<u>Monitoring Requirement</u>	
	<u>Quantity - lbs. per day</u>	<u>Average Monthly</u>	<u>Average Monthly</u>	<u>Maximum Daily</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Lead, Total			0.34 µg/l ¹	8.7 µg/l	1/Week	24-Hr. Comp.
Chloroform			46 ug/l	2081 ug/l	1/Quarter	Grab
Cyanide			7.5 µg/l ¹	32 µg/l	1/Quarter	Composite ²
Aluminum, Total			125 µg/l	1080 µg/l	See Footnote 3	24-Hr. Comp.
Iron, Total			1520 µg/l	---	See Footnote 3	24-Hr. Comp.
Cadmium, Total			--- µg/l	---	1/ Quarter	24-Hr. Comp.
Copper, Total			--- µg/l	---	1/ Quarter	24-Hr. Comp.
Hexavalent Chromium			--- µg/l	---	1/ Quarter	24-Hr. Comp.
Nickel, Total			--- µg/l	---	1/ Quarter	24-Hr. Comp.
Zinc, Total			--- µg/l	---	1/ Quarter	24-Hr. Comp.

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

¹ The limit at which compliance/noncompliance determinations will be based is the quantitation limit which is defined as 10.0 µg/l for Available Cyanide and 3.0 µg/l for Lead. These values may be reduced by permit modification as EPA and the State approve more sensitive methods.

² Compliance with these limitations shall be determined by taking three grab samples per day, equally spaced over one (1) day with a minimum of three hours between grabs, and preserved immediately upon collection. All three (3) samples shall be composited, then analyzed for available cyanide.

³ Weekly sampling for Total Iron and/or Total Aluminum is only in effect during months in which Iron based and/or Aluminum based chemicals are used in the treatment process. For all other periods sampling is only required for Total Aluminum on a quarterly basis in accordance with Part I.B of this permit.

Samples taken in compliance with the monitoring requirements specified above shall be taken Monday through Friday at the following location: Outfall 001A.

PART I

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A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

6. During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from outfall serial number(s) 001A. Such discharges shall be monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>			<u>Concentration - specify units</u>		<u>Monitoring Requirement</u>	
	<u>Quantity - lbs. per day</u>		<u>Average Monthly</u>	<u>Average Monthly</u>	<u>Maximum Daily</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
	<u>Average Monthly</u>	<u>Maximum Daily</u>					
<u>Ceriodaphnia sp.</u> LC50 ¹					100% or Greater ²	1/Quarter	24-Hr. Comp.
C-NOEC ³					50% or Greater ⁴	1/Quarter	24-Hr. Comp.
<u>Pimephales promelas</u> LC50 ¹					100% or Greater ²	1/Quarter	24-Hr. Comp.

¹LC50 is defined as the concentration of wastewater that causes mortality to 50% of the test organisms.

²The limit of 100% or greater is defined as a sample which is composed of 100% effluent.

³Chronic -- No Observed Effects Concentration (C-NOEC) is the concentration of toxicant or effluent to which organisms are exposed in a life-cycle or partial life-cycle which causes no adverse effect on growth, survival or reproduction (see Section I.B.).

⁴The limit of 50% or greater is defined as a sample which is composed of 50% effluent.

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: at Outfall 001A (final treated discharge after disinfection) in accordance with Part I.B. of the permit.

7.
 - a. The pH of the effluent shall not be less than 6.0 nor greater than 9.0 standard units at any time, unless these values are exceeded due to natural causes or as a result of the approved treatment processes.
 - b. The discharge shall not cause visible discoloration of the receiving waters.
 - c. The effluent shall contain neither a visible oil sheen, foam, nor floating solids at any time.
 - d. The permittee's treatment facility shall maintain a minimum of 85 percent removal of both total suspended solids and carbonaceous BOD. The percent removal shall be based on monthly average values.
 - e. When the effluent discharged for a period of 90 consecutive days exceeds 80 percent of the designed flow, the permittee shall submit to the permitting authorities a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.
 - f. The permittee shall analyze its effluent once annually for the EPA Priority Pollutants as listed in 40 CFR 122, Appendix D, Tables II and III. Such analysis shall be conducted during the third calendar quarter bioassay sampling event. The effluent sample shall be collected during the same twenty-four (24) hour period as the bioassay sample. The results of these analyses shall be submitted to the Department of Environmental Management by October 15th of each year. All sampling and analysis shall be done in accordance with EPA Regulations, including 40 CFR, Part 136; grab and composite samples shall be taken as appropriate.
 - g. This permit serves as the State's Water Quality Certificate for the discharges described herein.

B. BIOMONITORING REQUIREMENTS AND INTERPRETATION OF RESULTS

1. General

Beginning on the effective date of the permit, the permittee shall perform eight (8) toxicity tests per year on samples collected from discharge Outfall 001A. The permittee shall conduct the tests during dry weather periods (no rain within forty-eight (48) hours prior to or during sampling unless approved by DEM) according to the following test frequency and protocols. Chronic and acute toxicity data shall be reported as outlined in Section B.9. The acute fish and chronic daphnid tests shall be used to calculate the acute LC₅₀ at the forty-eight (48) hour exposure interval. Test results will be interpreted by the State. The State may require additional screening, range finding, definitive acute or chronic bioassays as deemed necessary based on the results of the initial bioassays required herein. Indications of toxicity could result in requiring a Toxicity Reduction Evaluation (TRE) to investigate the causes and to identify corrective actions necessary to eliminate or reduce toxicity to an acceptable level.

2. Test Frequency

For four (4) sampling events, (one each calendar quarter) the permittee will conduct a forty-eight (48) hour acute definitive toxicity test on one (1) species and a seven day chronic toxicity tests on one (1) species listed below, for a total of four (4) acute and four (4) chronic toxicity tests per year. This requirement entails performing two-species testing as follows:

<u>Species</u>	<u>Test Type</u>	<u>Frequency</u>
	Two Species Test (Four Times Annually)	
Daphnid (<i>Ceriodaphnia</i> sp.)	Reproduction/Survival Acute Static (LC ₅₀)	Quarterly
Fathead Minnow (<i>Pimephales promelas</i>)	Survival Acute Static (LC ₅₀)	Quarterly

A sampling event is defined as three (3) 24-hour composites collected over the seven-day test period (see Section B.4).

3. Testing Methods

Toxicity testing shall be conducted in accordance with protocols listed in 40 CFR Part 136.

4. Sample Collection

For each sampling event a twenty-four (24) hour flow proportioned composite effluent sample shall be collected at a location just after dechlorination during a dry weather period (no rain 48 hours prior to or during sampling unless approved by DEM). For each sampling event, the effluent samples shall be collected on days 0, 3, and 5 of the 7-day exposure period. The first sample is used for test initiation, Day 1, and for test solution renewal on Day 2. The second sample would be used for test solution renewal on Days 3 and 4. The third sample would be used for test solution renewal on Days 5, 6, and 7.

To eliminate the problem of potential rainfall interference during the five-day sampling period for the chronic tests, DEM suggests collecting enough sample on Day 0 to properly store and use one-third on both Days 3 and 5 if rain has occurred since Day 0. In addition, if no rainfall has occurred since Day 3, enough sample should also be collected on Day 3 to use for Day 5 if necessary.

In the laboratory, the initial sample (Day 0) will be split into two (2) subsamples, after thorough mixing, for the following:

- A: Chemical Analysis
- B: Chronic Toxicity Testing

Day 3 and 5 samples will be held until test completion. If either the Day 3 or 5 renewal sample is of sufficient potency to cause lethality to 50% or more test organisms in any of the dilutions for either species, then a chemical analysis shall be performed on the appropriate samples as well.

All samples held overnight shall be refrigerated at 4°C.

5. Dilution Water

Dilution water used for freshwater acute and chronic toxicity analyses should be of sufficient quality to meet minimum acceptability of test results (see Sections B.6 and B.7). The Warwick WWTF is authorized to use laboratory water of known quality with a hardness and pH similar to that of the receiving water as an alternate dilution water source for the Fathead Minnow test. The DEM reserves the right to revoke this authorization at any time and may immediately require the permittee to use Pawtucket Reservoir water as a diluent as DEM deems necessary. If such a determination is made it will be provided in writing to the permittee. For the Daphnid, natural freshwater shall be used as the dilution water. This water shall be collected from Pawtucket Reservoir. If this natural freshwater diluent is found to be, or suspected to be toxic or unreliable, an alternate or laboratory source of water of known quality with a hardness and pH similar to that of the receiving water may be substituted AFTER RECEIVING WRITTEN APPROVAL FROM DEM.

6. Effluent Toxicity Test Conditions for the Daphnid (Ceriodaphnia dubia sp.) Survival and Reproduction Test

a.	Test Type	Static Renewal
b.	Temperature (C)	25° ± 1° C (temperature must not deviate by more than 3° C during test)
c.	Light Quality	Ambient laboratory illumination
d.	Photoperiod	16 hours light, 8 hours dark
e.	Test Chamber Size	30 ml
f.	Test Solution Volume	15 ml
g.	Renewal of Test Solutions	Daily, using most recently collected sample
h.	Age of Test Organisms	Less than twenty-four (24) hours and all released within an eight (8) hour period of each other
i.	Number of Neonates Per Test Chamber	1
j.	Number of Replicate Test Chambers Per Treatment	10
k.	Number of Neonates Per Test Concentration	10
l.	Feeding Regime	Feed 0.1 ml each of YTC and algal suspension per exposure chamber daily
m.	Aeration	None
n.	Dilution Water	Pawtucket Reservoir, see Section B.5

- o. Effluent Concentrations Five (5) dilutions plus a control:

100%, 50%, 25%, 12.5%, 6.25%
and 0% effluent.
- p. Test Duration Until 60% of control females have
three (3) broods (may require seven
(7) days; max 8 days)
- q. End Points Survival and reproduction
- r. Test Acceptability 80% or greater survival of control
organisms and an average of fifteen
(15) or more neonates per female in the
control solutions. At least 60% of
surviving females in control should have
produced three broods
- s. Sampling Requirements For off-site tests, a minimum of three
(3) samples are collected (i.e., Days 0,
3 & 5) and used for renewal (see Sec-
tion B.4). Off-site test samples must be
first used within thirty-six (36) hrs after
the last sample of composite is collected
- t. Sample Volume Required Minimum 2 liters/day

7. Test Conditions for the Fathead Minnow (Pimephales promelas) Mortality Test

- a. Test Type 48-hour Static Acute Definitive
- b. Temperature $25^{\circ} \pm 1^{\circ} \text{C}$ (temperature must not deviate
by more than 3°C during test)
- c. Light Quality Ambient laboratory illumination
- d. Photoperiod 16 hours light, 8 hours dark
- e. Test Chamber Size 250-1000 ml
- f. Test Solution Volume Minimum 200 ml/replicate
- g. Renewal of Test Concentrations Daily, using most recently collected
sample.
- h. Age of Test Organisms 1 - 14 Days; less than 24h range in age
- i. No. Organisms Per Test Chamber 10
- j. No. of Replicate Chambers Per
Concentration 2

k.	Total No. of Organisms Per Test Concentration	20
l.	Feeding Regime	Feed Artemia nauplii prior to the test; add 0.2 mL Artemia nauplii concentrate 2h prior to test solution renewal at 48h
m.	Aeration	None, unless DO concentration falls below 4.0 mg/L at which aeration rate should not exceed 100 bubbles/min
n.	Dilution Water	laboratory water of known quality with a hardness and pH similar to that of the receiving water. see Section B.5.
o.	Effluent Concentrations	Five (5) effluent concentrations and a control: 100%, 50%, 25%, 12.5%, 6.25% and 0% effluent.
p.	Effect Measured and Test Duration	Mortality - no movement, 48-hour LC ₅₀ and NOAEL
q.	Test Acceptability	90% or greater survival of test organisms in control solution
r.	Sampling Requirements	Samples are collected and used within 36 hours after the last sample of the composite is collected
s.	Sample Volume Required	Minimum 2 liters

8. Chemical Analysis

The following chemical analysis shall be performed for every two-specie sampling event.

<u>Parameter</u>	<u>Effluent</u>	<u>Diluent</u>	<u>Detection Limit (mg/l)</u>
Hardness	X	X	0.5
Alkalinity	X	X	2.0
pH	X	X	---
Specific Conductance	X	X	---
Total Solids and Suspended Solids	X	X	---
Total Ammonia	X	X	0.1
Total Organic Carbon	X		0.5
Cyanide	X		0.010

During each calendar quarter bioassay sampling event the following chemical analyses shall be performed:

<u>Total Metals</u>	<u>Effluent</u>	<u>Diluent</u>	<u>Minimum Detection Limit (ug/l)</u>
Total Aluminum	X	X	5.0
Total Cadmium	X	X	0.1
Total Copper	X	X	1.0
Hexavalent Chromium	X	X	20.0
Total Lead	X	X	1.0
Total Nickel	X	X	1.0
Total Zinc	X	X	5.0

The above metal analyses may be used to fulfill, in part or in whole, monthly monitoring requirements in the permit for these specific metals.

During the third calendar quarter bioassay sampling event, the final effluent sample collected during the same twenty-four (24) hour period as the bioassay sample, shall be analyzed for priority pollutants (as listed in Tables II and III of Appendix D of 40 CFR 122). The bioassay priority pollutant scan shall be a full scan and may be coordinated with the other permit conditions to fulfill any priority pollutant scan requirements.

In addition, the following chemical analyses shall be performed as part of each daily renewal procedures on each dilution and the controls.

<u>Parameter</u>	<u>Beginning of 24-Hour Exposure Period</u>	<u>End of 24-Hour Exposure Period</u>
Dissolved Oxygen	X	X
Temperature	X	
pH	X	
Specific Conductance	X	
Alkalinity	X ¹	
Hardness	X ¹	

¹These are performed on the 100% effluent and control samples only.

9. Toxicity Test Report Elements

A report of results will include the following:

- Description of sample collection procedures and site description.
- Names of individuals collecting and transporting samples, times, and dates of sample collection and analysis.
- General description of tests: age of test organisms, origin, dates and results of standard toxicant tests (quality assurance); light and temperature regime; dilution water description; other information on test conditions if different than procedures recommended.
- Raw data and laboratory sheets.
- Any other observations or test conditions affecting test outcome.
- Results of required chemical and physical analyses.

Toxicity test data shall include the following:

Chronic

- Daily survival of test organisms in the controls and all replicates in each dilution. Survival data should be analyzed by Fisher's Exact Test prior to analysis of reproduction data.
- Young per female for all replicates in each dilution for Ceriodaphnia and weight for minnow larvae.
- Dissolved oxygen, pH, specific conductance and temperature for each dilution.

- Results of Dunnett's Procedure and/or other EPA recommended or approved methods for analyzing the data.
- C-NOEC = Chronic No Observed Effect Concentration
- LOEC = Lowest Observed Effect Concentration
- MATC = Maximum Allowable Toxicant Concentration

Acute - (These data points are to be obtained 48 hours into the chronic test).

- Survival for each concentration and replication at time 24 and 48 hours.
- Dissolved oxygen, pH and specific conductance for each concentration.
- LC₅₀ and 95% confidence limits using one of the following methods in order of preference: Probit, Trimmed Spearman Karber, Moving Average Angle, or the graphical method; printout or copy of these calculations. The Probit, Trimmed Spearman Karber and Moving Average Angle methods of analyses can only be used when mortality of some of the test organisms are observed in at least two (2) of the (% effluent) concentrations tested (i.e., partial mortality). If a test results in a 100% survival and 100% mortality in adjacent treatments ("all or nothing" effect), a LC₅₀ may be estimated using the graphical method.

10. Reporting of Bioassay Testing

Bioassay Testing shall be conducted as follows:

<u>Quarter Testing to be Performed</u>	<u>Results Submitted on DMR for</u>
January 1 - March 31	March
April 1 - June 30	June
July 1 - September 30	September
October 1 - December 31	December

Reports shall be maintained by the permittee and shall be made available upon request by DEM.

C. INDUSTRIAL PRETREATMENT PROGRAM

1. Definitions

For the purpose of this permit, the following definitions apply.

- a. 40 CFR 403 and sections thereof refer to the General Pretreatment regulations, 40 CFR Part 403 as revised.
- b. Categorical Pretreatment Standards mean any regulation containing pollutant discharge limits promulgated by the USEPA in accordance with section 307(b) and (c) of the Clean Water Act(33 USC 1251), as amended, which apply to a specific category of industrial users and which appears in 40 CFR Chapter 1, subchapter N.
- c. Pretreatment Standards include all specific prohibitions and prohibitive discharge limits established pursuant to 40 CFR 403.5, including but not limited to, local limits, and the Categorical Pretreatment Standards.
- d. Regulated Pollutants shall include those pollutants contained in applicable categorical standards and any other pollutants listed in the Pretreatment Standards which have reasonable potential to be present in an industrial user's effluent.

2. Implementation

The authority and procedures of the Industrial Pretreatment Program shall at all times be fully and effectively exercised and implemented, in compliance with the requirements of this permit and in accordance with the legal authorities, policies, procedures and financial provisions described in the permittee's approved Pretreatment Program and Sewer Use Ordinance, the Rhode Island Pretreatment Regulations and the General Pretreatment Regulations 40 CFR 403. The permittee shall maintain adequate resource levels to accomplish the objectives of the Pretreatment Program.

3. Local Limits

Pollutants introduced into POTWs by a non-domestic source (user) shall not: pass through the POTW, interfere with the operation or performance of the works, contaminate sludge as to adversely effect disposal options, or adversely effect worker safety and health.

- a. The permittee has an approved Local Limits Monitoring Plan (LLMP) that shall continue to be implemented at all times.
- b. At the time of renewal of this permit and in accordance with 40 CFR 122.44(j)(2), the permittee shall submit to the DEM with its permit renewal application a written technical evaluation of the need to revise local limits. The evaluation shall be based, at a minimum, on information obtained during the implementation of the permittee's local limits monitoring plan and procedures required by Part I.C.3.a of this permit and current RIPDES permit discharge limits, sludge disposal criteria, secondary treatment inhibition, and worker health and safety criteria.

4. Enforcement Response Plan (ERP)

The permittee has an approved ERP dated April 1, 2015 that meets the requirements of 40 CFR 403.8(f)(5). The permittee shall continue to implement its approved ERP at all times.

5. General

- a. The permittee shall carry out inspection, surveillance, and monitoring procedures which will determine, independent of information supplied by the industrial user, whether the industrial user is in compliance with Pretreatment Standards. At a minimum, all significant industrial users shall be inspected and monitored for all regulated pollutants at the frequency established in the approved Industrial Pretreatment Program but in no case less than once per year (one (1) year being determined as the reporting year established in Part I.C.7 of this permit). In addition, these inspections, monitoring and surveillance activities must be conducted in accordance with EPA's Industrial User Inspection and Sampling Manual for POTW's, April 1994. All inspections, monitoring, and surveillance activities shall be performed, and have records maintained, with sufficient care to produce evidence admissible in enforcement proceedings or judicial actions. The permittee shall evaluate, at least every two years unless specific superseding 40 CFR 403 streamlining provisions have been adopted, whether each SIU requires a Slug Control Plan. If a Slug Control Plan is required, it shall include the contents specified by 40 CFR 403.8(f)(2)(vi).
- b. The permittee shall reissue all necessary Industrial User (IU) control mechanisms within thirty (30) days of their expiration date. The permittee shall issue, within sixty (60) days after the determination that an IU is a Significant Industrial User (SIU), all SIU control mechanisms. All SIU control mechanisms must contain, at a minimum, those conditions stated in 40 CFR 403.8(f)(1)(iii)(B). All control mechanisms must be mailed via Certified Mail, Return Receipt Requested. A complete bound copy of the control mechanism with the appropriate receipt must be kept as part of the Industrial User's permanent file. In addition, the permittee must develop a fact sheet describing the basis for the SIU's permit and retain this fact sheet as part of the SIU's permanent file.
- c. The permittee must identify each instance of noncompliance with any pretreatment standard and/or requirement and take a formal documented action for each instance of noncompliance. Copies of all such documentation must be maintained in the Industrial User's permanent file.
- d. The permittee shall prohibit Industrial Users from the dilution of a discharge as a substitute for adequate treatment in accordance with 40 CFR 403.6(d).
- e. The permittee shall comply with the procedures of 40 CFR 403.18 for instituting any modifications of the permittee's approved Pretreatment Program. Significant changes in the operation of a POTW's approved Pretreatment Program must be submitted and approved following the procedures outlined in 40 CFR 403.18(b) and 403.9(b). However, the endorsement of local officials responsible for supervising and/or funding the pretreatment program required by 403.9(b)(2) will not be required until DEM completes a preliminary review of the submission. The DEM will evaluate and review the permittee's initial proposal for a modification and provide written notification either granting preliminary approval of the proposed modifications or stating the deficiencies contained therein. DEM's written notification will also include a determination whether the submission constitutes a substantial or non-substantial program modification as defined by 40 CFR 403.18. Should DEM determine that a deficiency exists in the proposed modification, the permittee shall submit to DEM, within thirty (30) days of the receipt of said notice, a revised submission consistent with DEM's notice of deficiency.

Pretreatment program modifications which the permittee considers Non-substantial, shall be deemed to be approved within forty-five (45) days after submission of the request for modification, unless DEM determines that the modification is in fact a substantial modification or notifies the permittee of deficiencies. Upon receipt of notification that DEM has determined the modification is substantial, the permittee shall initiate the procedures

and comply with the deadlines for substantial modifications, which are outlined below.

For substantial modifications, the permittee shall, within sixty (60) days (unless a longer time frame is granted) of the receipt of DEM's preliminary approval of the proposed modification, submit documentation (as required by 403.9(b)(2)) that any local public notification/participation procedures required by law have been completed, including any responses to public comments, and a statement that the local officials will endorse and/or approve the modification upon approval by DEM.

Within thirty (30) days of DEM's final approval of the proposed modification(s), the permittee shall implement the modification and submit proof that the local officials have endorsed and/or approved the modification(s) to the DEM. Upon final approval by the DEM and adoption by the permittee, this modification(s) shall become part of the approved pretreatment program and shall be incorporated into this permit in accordance with 40CFR 122.63(g).

- f. All sampling and analysis required of the permittee, or by the permittee of any Industrial User, must be performed in accordance with the techniques described in 40 CFR 136.
- g. For those Industrial Users with discharges that are not subject to Categorical Pretreatment Standards, the permittee shall require appropriate reporting in accordance with 40 CFR 403.12(h).
- h. The permittee shall, in accordance with 40 CFR 403.12(f), require all Industrial Users to immediately notify the permittee of all discharges by the Industrial User that could cause problems to the POTW, including slug loadings, as defined by 40 CFR 403.5.
- i. The permittee shall require all Industrial Users to notify the permittee of substantial changes in discharge as specified in 40 CFR 403.12(j) and the permittee shall also notify DEM of each such substantial change in discharge prior to acceptance.
- j. The permittee shall require New Sources to install and have in operation all pollution control equipment required to meet applicable Pretreatment Standards before beginning to discharge. In addition, the permittee shall require New Sources to meet all applicable Pretreatment Standards within the shortest feasible time which shall not exceed ninety (90) days in accordance with 40 CFR 403.6(b).
- k. The permittee shall require all Industrial Users who are required to sample their effluent and report the results of analysis to the POTW to comply with signatory requirements contained in 40 CFR 403.12(l) when submitting such reports.
- l. The permittee shall determine, based on the criteria set forth in 40 CFR 403.8(f)(2)(viii), using the EPA method of "rolling quarters", the compliance status of each Industrial User. Any Industrial User determined to meet Significant Non-Compliance (SNC) criteria shall be included in an annual public notification as specified in 40 CFR 403.8(f)(2)(viii).
- m. The permittee shall require Industrial Users to comply with the notification and certification requirements of 40 CFR 403.12(p)(1), (3) and (4) pertaining to the discharge of substances to the POTW, which if disposed of otherwise, would be a hazardous waste under 40 CFR Part 261.
- n. The permittee shall continue to designate, as SIUs, those Industrial Users (IUs) which meet the definition contained in 40 CFR 403.3 and the permittee's sewer use ordinance. The permittee shall notify each newly designated SIU of its classification as an SIU within

thirty (30) days of identification and shall inform the SIU of the requirements of an SIU contained in 40 CFR 403.12.

6. Categorical Industrial Users (CIUs)

- a. The permittee shall require Industrial Users to comply with applicable Categorical Pretreatment Standards in addition to all applicable Pretreatment Standards and Requirements. The permittee shall require of all Categorical Industrial Users (CIUs), all reports on compliance with applicable Categorical Pretreatment Standards and Categorical Pretreatment Standard deadlines as specified in and in accordance with Sections (b), (d), (e) and (g) of 40 CFR 403.12. In addition, the permittee shall require Categorical Industrial Users to comply with the report signatory requirements contained in 40 CFR 403.12(1) when submitting such reports.
- b. If the permittee applies the Combined Wastestream Formula (CWF) to develop fixed alternative discharge limits of Categorical Pretreatment Standards, the application of the CWF and the enforcement of the resulting limits must comply with 40 CFR 403.6(e). The permittee must document all calculations within the control mechanism fact sheet and the resulting limits within the CIU's control mechanism. The permittee must ensure that the most stringent limit is applied to the CIU's effluent at end-of-pipe based upon a comparison of the resulting CWF limits and the permittee's local limits.
- c. If the permittee has or obtains the authority to apply and enforce equivalent mass-per-day and/or concentration limitations of production-based Categorical Pretreatment Standards, then the permittee shall calculate and enforce the limits in accordance with 40 CFR 403.6(c). The permittee must document all calculations within the control mechanism fact sheet and the resulting limits within the CIU's control mechanism.

7. Annual Report

The annual report for the permittee's program shall contain information pertaining to the reporting year which shall extend from October 1st through September 30th and shall be submitted to the DEM by December 15th. Each item below must be addressed separately and any items which are not applicable must be so indicated. If any item is deemed not applicable a brief explanation must be provided. The annual report shall include the following information pertaining to the reporting year:

- a. A listing of Industrial Users which complies with requirements stated in 40 CFR 403.12(i)(1). The list shall identify all Categorical Industrial Users, Significant Industrial Users and any other categories of users established by the permittee;
- b. A summary, including dates, of any notifications received by the permittee of any substantial change in the volume or character of pollutants being introduced into the POTW by new or existing IUs. If applicable, an evaluation of the quality and quantity of influent introduced into the POTW and any anticipated impact due to the changed discharge on the quantity or quality of effluent to be discharged from the POTW shall be included;
- c. A summary of the Compliance status of each Industrial User (IU), as of the end of last quarter covered by the annual report. The list shall identify all IUs in non-compliance, the pretreatment program requirement which the IU failed to meet, and the type, and date of the enforcement action initiated by the permittee in response to the violation. If applicable, the list shall also contain the date which IUs in non-compliance returned to compliance, a description of corrective actions ordered, and the penalties levied.

- d. A list of industries which were determined, in accordance with Part I.C.5.(1) of this permit, to be in significant non-compliance required to be published in a local newspaper and a copy of an affidavit of publication, from the newspaper, averring that the names of these violators has been published;
- e. A summary of inspection and monitoring activity performed by the permittee, including;
 - significant industrial users inspected by the POTW (include inspection dates for each industrial user);
 - significant industrial user sampled by the POTW (include sampling dates and dates of analysis)
- f. A summary of permit issuance/reissuance activities including the name of the industrial user, expiration date of previous permit, issuance date of new permit, and a brief description of any changes to the permit;
- g. A list including the report/notification type, due date, and receipt date for each report/notification required by 40 CFR 403.12.
- h. A summary of public participation efforts including meetings and workshops held with the public and/or industry and notices/newsletters/bulletins published and/or distributed;
- i. A program evaluation in terms of program effectiveness, local limits application and resources which addresses but is not limited to:
 - A description of actions being taken to reduce the incidence of SNC by Industrial Users;
 - effectiveness of enforcement response program;
 - sufficiency of funding and staffing;
 - sufficiency of the SUO, Rules and Regulations, and/or statutory authority;
- j. An evaluation of recent/proposed program modifications, both substantial and non-substantial, in terms of the modification type, implementation and actual/ expected effect (note proposed modifications must be submitted under separate cover along with the information required by 40 CFR 403.18);
- k. A detailed description of all interference and pass-through that occurred during the past year and, if applicable;
 - A thorough description of all investigations into interference and pass-through during the past year;
 - A description of the monitoring, sewer inspections and evaluations which were done during the past year to detect interference and pass-through, specifying pollutants analyzed and frequencies;
- l. A summary of the average, maximum concentration, minimum concentration, and number of data points used for pollutant analytical results for influent, effluent, sludge and any toxicity or bioassay data from the wastewater treatment facility. The summary shall include a comparison of influent sampling results versus the maximum allowable headworks loadings contained in the approved local limits evaluation and effluent sampling results versus water quality standards. Such a comparison shall be based on the analytical results required in Parts I.A and I.C. of this permit and any additional sampling data available to the permittee; and
- m. A completed Annual Pretreatment Report Summary Sheet.

8. Interjurisdictional Agreement

The DEM has no interjurisdictional agreements on file regarding the contribution of industrial wastewater to the Warwick Sewer Authority. Any such interjurisdictional agreements which are necessary in the future must be submitted to the DEM in draft form for approval prior to execution.

9. Sewer Use Ordinance

The permittee has an approved Sewer Use Ordinance which shall continue to be implemented at all times.

D. **OPERATION AND MAINTENANCE OF THE SEWER SYSTEM**

Operation and maintenance of the sewer system shall be in compliance with the General Requirements of Part II and the following terms and conditions:

1. Maintenance Staff

The permittee shall provide an adequate staff to carry out the operation, maintenance, repair, and testing functions required to ensure compliance with the terms and conditions of this permit.

2. Infiltration/Inflow

The permittee shall minimize infiltration/inflow to the sewer system. A summary report of all actions taken to minimize infiltration/inflow during the previous two (2) years shall be submitted to DEM, Office of Water Resources, by the 15th day of January of every other year. The first report is due January 15, 2018.

3. Resiliency Planning

Within one year of the effective date of this permit, the permittee shall submit a Resiliency Plan and schedule of short and long term actions that will be taken to maintain operation and protect key collection and treatment system assets. The plan shall be consistent with the DEM's Guidance for the Consideration of Climate Change Impacts in the Planning and Design of Municipal Wastewater Collection and Treatment Infrastructure and include consideration of the findings of the 2017 DEM report Implications of Climate Change for Rhode Island Wastewater Collection and Treatment Infrastructure. The Resiliency Plan shall include, but not be limited to: (i) an assessment of current and projected impacts from natural hazards on critical components within the collection and treatment systems, as well as on the systems themselves; (ii) a plan to adapt and protect vulnerable components and systems; (iii) an analysis that provides justification for selected adaptation methods. The analysis must consider component and system design life and sea-level rise projections. For the purposes of this Resiliency Plan, critical components are considered those necessary to ensure the forward flow and treatment of wastewater in accordance with the limits set forth in this permit. The Resiliency Plan shall also consider impacts on the WWTF from neighboring facilities during high hazard events. This Plan shall be subject to DEM review and approval. If DEM determines that modifications need to be made to the Plan, DEM shall notify the permittee in writing which elements of the Plan need to be modified and the reason for the needed modification. This notification shall include a schedule for making the changes. After such notification from the DEM, the permittee shall make changes to the Plan and submit the revisions to the DEM for their approval.

E. SLUDGE

The permittee shall conform and adhere to all conditions, practices and regulations as contained in the State of Rhode Island, Rules and Regulations for Sewage Sludge Management. The permittee shall comply with its DEM Order of Approval for the disposal of sludge.

F. DETECTION LIMITS

The permittee shall assure that all wastewater testing required by this permit, is performed in conformance with the method detection limits listed below. In accordance with 40 CFR Part 136, EPA approved analysis techniques, quality assurance procedures and quality control procedures shall be followed for all reports required to be submitted under the RIPDES program. These procedures are described in "Methods for the Determination of Metals in Environmental Samples" (EPA/600/4-91/010) and "Methods for Chemical Analysis of Water and Wastes" (EPA/600/4-79/020).

The report entitled "Methods for the Determination of Metals in Environmental Samples" includes a test which must be performed in order to determine if matrix interferences are present, and a series of tests to enable reporting of sample results when interferences are identified. Each step of the series of tests becomes increasingly complex, concluding with the complete Method of Standard Additions analysis. The analysis need not continue once a result which meets the applicable quality control requirements has been obtained. Documentation of all steps conducted to identify and account for matrix interferences shall be documented and maintained onsite.

If, after conducting the complete Method of Standard Additions analysis, the laboratory is unable to determine a valid result, the laboratory shall report "could not be analyzed". Documentation supporting this claim shall be maintained onsite. If valid analytical results are repeatedly unobtainable, DEM may require that the permittee determine a method detection limit (MDL) for their effluent or sludge as outlined in 40 CFR Part 136, Appendix B.

When calculating sample averages for reporting on discharge monitoring reports (DMRs):

1. "could not be analyzed" data shall be excluded, and shall not be considered as failure to comply with the permit sampling requirements;
2. results reported as less than the MDL shall be reported as zero in accordance with the DEM's DMR Instructions, provided that all appropriate EPA approved methods were followed.

Therefore, all sample results shall be reported as: an actual value, "could not be analyzed", or zero. The effluent or sludge specific MDL must be calculated using the methods outlined in 40 CFR Part 136, Appendix B. Samples which have been diluted to ensure that the sample concentration will be within the linear dynamic range shall not be diluted to the extent that the analyte is not detected. If this should occur the analysis shall be repeated using a lower degree of dilution.

LIST OF TOXIC POLLUTANTS

The following list of toxic pollutants has been designated pursuant to Section 307(a)(1) of the Clean Water Act. The Method Detection Limits (MDLs) represent the required Rhode Island MDLs.

Volatiles - EPA Method 624			Pesticides - EPA Method 608		
		MDL ug/l (ppb)			MDL ug/l (ppb)
1V	acrolein	10.0	18P	PCB-1242	0.289
2V	acrylonitrile	5.0	19P	PCB-1254	0.298
3V	benzene	1.0	20P	PCB-1221	0.723
5V	bromoform	1.0	21P	PCB-1232	0.387
6V	carbon tetrachloride	1.0	22P	PCB-1248	0.283
7V	chlorobenzene	1.0	23P	PCB-1260	0.222
8V	chlorodibromomethane	1.0	24P	PCB-1018	0.494
9V	chloroethane	1.0	25P	toxaphene	1.670
10V	2-chloroethylvinyl ether	5.0			
11V	chloroform	1.0	Base/Neutral - EPA Method 625		
12V	dichlorobromomethane	1.0			MDL ug/l (ppb)
14V	1,1-dichloroethane	1.0	1B	acenaphthene *	1.0
15V	1,2-dichloroethane	1.0	2B	acenaphthylene *	1.0
16V	1,1-dichloroethylene	1.0	3B	anthracene *	1.0
17V	1,2-dichloropropane	1.0	4B	benzidine	4.0
18V	1,3-dichloropropylene	1.0	5B	benzo(a)anthracene *	2.0
19V	ethylbenzene	1.0	6B	benzo(a)pyrene *	2.0
20V	methyl bromide	1.0	7B	3,4-benzofluoranthene *	1.0
21V	methyl chloride	1.0	8B	benzo(ghi)perylene *	2.0
22V	methylene chloride	1.0	9B	benzo(k)fluoranthene *	2.0
23V	1,1,2,2-tetrachloroethane	1.0	10B	bis(2-chloroethoxy)methane	2.0
24V	tetrachloroethylene	1.0	11B	bis(2-chloroethyl)ether	1.0
25V	toluene	1.0	12B	bis(2-chloroisopropyl)ether	1.0
26V	1,2-trans-dichloroethylene	1.0	13B	bis(2-ethylhexyl)phthalate	1.0
27V	1,1,1-trichloroethane	1.0	14B	4-bromophenyl phenyl ether	1.0
28V	1,1,2-trichloroethane	1.0	15B	butylbenzyl phthalate	1.0
29V	trichloroethylene	1.0	16B	2-chloronaphthalene	1.0
31V	vinyl chloride	1.0	17B	4-chlorophenyl phenyl ether	1.0
Acid Compounds - EPA Method 625			18B	chrysene *	1.0
		MDL ug/l (ppb)	19B	dibenzo (a,h)anthracene *	2.0
1A	2-chlorophenol	1.0	20B	1,2-dichlorobenzene	1.0
2A	2,4-dichlorophenol	1.0	21B	1,3-dichlorobenzene	1.0
3A	2,4-dimethylphenol	1.0	22B	1,4-dichlorobenzene	1.0
4A	4,6-dinitro-o-cresol	1.0	23B	3,3' -dichlorobenzidine	2.0
5A	2,4-dinitrophenol	2.0	24B	diethyl phthalate	1.0
6A	2-nitrophenol	1.0	25B	dimethyl phthalate	1.0
7A	4-nitrophenol	1.0	26B	di-n-butyl phthalate	1.0
8A	p-chloro-m-cresol	2.0	27B	2,4-dinitrotoluene	2.0
9A	pentachlorophenol	1.0	28B	2,6-dinitrotoluene	2.0
10A	phenol	1.0	29B	di-n-octyl phthalate	1.0
11A	2,4,6-trichlorophenol	1.0	30B	1,2-diphenylhydrazine (as azobenzene)	1.0
Pesticides - EPA Method 608			31B	fluoranthene *	1.0
		MDL ug/l (ppb)	32B	fluorene *	1.0
1P	aldrin	0.059	33B	hexachlorobenzene	1.0
2P	alpha-BHC	0.058	34B	hexachlorobutadiene	1.0
3P	beta-BHC	0.043	35B	hexachlorocyclopentadiene	2.0
4P	gamma-BHC	0.048	36B	hexachloroethane	1.0
5P	delta-BHC	0.034	37B	indeno(1,2,3-cd)pyrene *	2.0
6P	chlordane	0.211	38B	isophorone	1.0
7P	4,4' -DDT	0.251	39B	naphthalene *	1.0
8P	4,4' -DDE	0.049	40B	nitrobenzene	1.0
9P	4,4' -DDD	0.139	41B	N-nitrosodimethylamine	1.0
10P	dieldrin	0.082	42B	N-nitrosodi-n-propylamine	1.0
11P	alpha-endosulfan	0.031	43B	N-nitrosodiphenylamine	1.0
12P	beta-endosulfan	0.036	44B	phenanthrene *	1.0
13P	endosulfan sulfate	0.109	45B	pyrene *	1.0
14P	endrin	0.050	46B	1,2,4-trichlorobenzene	1.0
15P	endrin aldehyde	0.062			
16P	heptachlor	0.029			
17P	heptachlor epoxide	0.040			

OTHER TOXIC POLLUTANTS

	MDL ug/l (ppb)
Antimony, Total	3.0
Arsenic, Total	1.0
Beryllium, Total	0.2
Cadmium, Total	0.1
Chromium, Total	1.0
Chromium, Hexavalent	20.0
Copper, Total	1.0
Lead, Total	1.0
Mercury, Total	0.001
Nickel, Total	1.0
Selenium, Total	2.0
Silver, Total	0.5
Thallium, Total	1.0
Zinc, Total	5.0
Asbestos	**
Cyanide, Available	10.0
Phenols, Total	50.0
Aluminum, Total	5.0
TCDD	**
MTBE (Methyl Tert Butyl Ether)	1.0

** No Rhode Island Department of Environmental Management (DEM) MDL

NOTE:

The MDL for a given analyte may vary with the type of sample. MDLs which are determined in reagent water may be lower than those determined in wastewater due to fewer matrix interferences. Wastewater is variable in composition and may therefore contain substances (interferents) that could affect MDLs for some analytes of interest. Variability in instrument performance can also lead to inconsistencies in determinations of MDLs.

To help verify the absence of matrix or chemical interference the analyst is required to complete specific quality control procedures. For the metals analyses listed above the analyst must withdraw from the sample two equal aliquots; to one aliquot add a known amount of analyte, and then dilute both to the same volume and analyze. The unspiked aliquot multiplied by the dilution factor should be compared to the original. Agreement of the results within 10% indicates the absence of interference. Comparison of the actual signal from the spiked aliquot to the expected response from the analyte in an aqueous standard should help confirm the finding from the dilution analysis. (Methods for Chemical Analysis of Water and Wastes EPA-600/4-79/020).

For Methods 624 and 625 the laboratory must on an ongoing basis spike at least 5% of the samples from each sample site being monitored. For laboratories analyzing 1 to 20 samples per month, at least one spiked sample per month is required. The spike should be at the discharge permit limit or 1 to 5 times higher than the background concentration determined in Section 8.3.2, whichever concentration would be larger. (40 CFR Part 136 Appendix B Method 624 and 625 subparts 8.3.1 and 8.3.11).

G. MONITORING AND REPORTING

1. Monitoring

All monitoring required by this permit shall be done in accordance with sampling and analytical testing procedures specified in Federal Regulations (40 CFR Part 136).

2. Submittal of DMRs Using NetDMR

- a. The Permittee shall continue to submit its monthly monitoring data via Discharge Monitoring Reports (DMRs) to DEM no later than the 15th day of the month electronically using NetDMR. When the permittee submits DMRs using NetDMR, it is not required to submit hard copies of DMRs to DEM.

b. Submittal of Reports as NetDMR Attachments

Unless otherwise specified in this permit, the permittee must submit electronic copies of documents in NetDMR that are directly related to the DMR. These include the following:

- DMR Cover Letters
- Below Detection Limit summary tables
- Monthly Operating Reports

c. Submittal of Reports in Hard Copy Form

The following notifications and reports shall be submitted as hard copy with a cover letter describing the submission. These reports shall be signed and dated originals submitted to DEM.

- Written notifications required under Part II
- Notice of unauthorized discharges, including Sanitary Sewer Overflow (SSO) reporting
- Priority Pollutant Scan results for Outfall 001A
- Infiltration/Inflow Reports
- Pretreatment Reports

This information shall be submitted to DEM at the following address:

Rhodes Island Department of Environmental Management
RIPDES Program
235 Promenade Street
Providence, Rhode Island 02908

d. Verbal Reports and Verbal Notifications

Any verbal reports or verbal notifications, if required in Parts I and/or II of this permit, shall be made to the DEM. This includes verbal reports and notifications which require reporting within 24 hours. (See Part II(1)(5) General Requirements for 24-hour reporting) verbal reports and verbal notifications shall be made to DEM at (401) 222-4700 or (401) 222-3070 at night.



ATTACHMENT A-2

MS4 Consent Agreement
Microbes and Pollutants of Concern

Fecal coliform: in excess of 400 CFU/100 mL, Most Probable Number ("MPN/100 ml");

Male-specific Coliphage: equal to or greater than 50 plaque forming units per 100 milliliters ("pfu/100 ml");

Class AA, A, B, B1, B(a), or B1(a) waters- Enterococcus: greater than 61 colony forming units per 100 milliliters ("cfu/100 ml");

Class SA, SA(b), SB, SB1, SB(a), or SB1(a) waters- Enterococcus: greater than 104 cfu/100 ml;

Surfactants: equal to or greater than 0.25 milligrams per liter ("mg/l") via field kits, or 0.1 mg/l via laboratory analysis;

Ammonia: equal to or greater than 0.5 mg/l;

Total Phosphorus detection limit of 0.01 mg/L;

Total nitrogen detection limit of 0.01 mg/L.



ATTACHMENT B

Request for Taxpayer Identification Number and Certification

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

Print or type
See Specific Instructions on page 2.

Name (as shown on your income tax return)

Business name/disregarded entity name, if different from above

Check appropriate box for federal tax classification:

☐ Individual/sole proprietor ☐ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶

☐ Exempt payee

☐ Other (see instructions) ▶

Address (number, street, and apt. or suite no.)

Requester's name and address (optional)

City, state, and ZIP code

List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on the "Name" line to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Social security number

			-			-			
--	--	--	---	--	--	---	--	--	--

Employer identification number

		-							
--	--	---	--	--	--	--	--	--	--

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Here

Signature of
U.S. person ▶

Date ▶

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

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

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

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

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

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,
- The U.S. grantor or other owner of a grantor trust and not the trust, and
- The U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person, do not use Form W-9. Instead, use the appropriate Form W-8 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

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

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

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

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

If you are a nonresident alien or a foreign entity not subject to backup withholding, give the requester the appropriate completed Form W-8.

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

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

Payments you receive will be subject to backup withholding if:

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

Certain payees and payments are exempt from backup withholding. See the instructions below and the separate Instructions for the Requester of Form W-9.

Also see *Special rules for partnerships* on page 1.

Updating Your Information

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

Penalties

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

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

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

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

Specific Instructions

Name

If you are an individual, you must generally enter the name shown on your income tax return. However, if you have changed your last name, for instance, due to marriage without informing the Social Security Administration of the name change, enter your first name, the last name shown on your social security card, and your new last name.

If the account is in joint names, list first, and then circle, the name of the person or entity whose number you entered in Part I of the form.

Sole proprietor. Enter your individual name as shown on your income tax return on the "Name" line. You may enter your business, trade, or "doing business as (DBA)" name on the "Business name/disregarded entity name" line.

Partnership, C Corporation, or S Corporation. Enter the entity's name on the "Name" line and any business, trade, or "doing business as (DBA)" name on the "Business name/disregarded entity name" line.

Disregarded entity. Enter the owner's name on the "Name" line. The name of the entity entered on the "Name" line should never be a disregarded entity. The name on the "Name" line must be the name shown on the income tax return on which the income will be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a domestic owner, the domestic owner's name is required to be provided on the "Name" line. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on the "Business name/disregarded entity name" line. If the owner of the disregarded entity is a foreign person, you must complete an appropriate Form W-8.

Note. Check the appropriate box for the federal tax classification of the person whose name is entered on the "Name" line (Individual/sole proprietor, Partnership, C Corporation, S Corporation, Trust/estate).

Limited Liability Company (LLC). If the person identified on the "Name" line is an LLC, check the "Limited liability company" box only and enter the appropriate code for the tax classification in the space provided. If you are an LLC that is treated as a partnership for federal tax purposes, enter "P" for partnership. If you are an LLC that has filed a Form 8832 or a Form 2553 to be taxed as a corporation, enter "C" for C corporation or "S" for S corporation. If you are an LLC that is disregarded as an entity separate from its owner under Regulation section 301.7701-3 (except for employment and excise tax), do not check the LLC box unless the owner of the LLC (required to be identified on the "Name" line) is another LLC that is not disregarded for federal tax purposes. If the LLC is disregarded as an entity separate from its owner, enter the appropriate tax classification of the owner identified on the "Name" line.

Other entities. Enter your business name as shown on required federal tax documents on the "Name" line. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on the "Business name/disregarded entity name" line.

Exempt Payee

If you are exempt from backup withholding, enter your name as described above and check the appropriate box for your status, then check the "Exempt payee" box in the line following the "Business name/disregarded entity name," sign and date the form.

Generally, individuals (including sole proprietors) are not exempt from backup withholding. Corporations are exempt from backup withholding for certain payments, such as interest and dividends.

Note. If you are exempt from backup withholding, you should still complete this form to avoid possible erroneous backup withholding.

The following payees are exempt from backup withholding:

1. An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2),
2. The United States or any of its agencies or instrumentalities,
3. A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities,
4. A foreign government or any of its political subdivisions, agencies, or instrumentalities, or
5. An international organization or any of its agencies or instrumentalities.

Other payees that may be exempt from backup withholding include:

6. A corporation,
7. A foreign central bank of issue,
8. A dealer in securities or commodities required to register in the United States, the District of Columbia, or a possession of the United States,
9. A futures commission merchant registered with the Commodity Futures Trading Commission,
10. A real estate investment trust,
11. An entity registered at all times during the tax year under the Investment Company Act of 1940,
12. A common trust fund operated by a bank under section 584(a),
13. A financial institution,
14. A middleman known in the investment community as a nominee or custodian, or
15. A trust exempt from tax under section 664 or described in section 4947.

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 15.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 9
Broker transactions	Exempt payees 1 through 5 and 7 through 13. Also, C corporations.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 5
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 7 ²

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney, and payments for services paid by a federal executive agency.

Part I. Taxpayer Identification Number (TIN)

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

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited Liability Company (LLC)* on page 2), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note. See the chart on page 4 for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local Social Security Administration office or get this form online at www.ssa.gov. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at www.irs.gov/businesses and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting IRS.gov or by calling 1-800-TAX-FORM (1-800-829-3676).

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

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

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

Part II. Certification

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

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on the "Name" line must sign. Exempt payees, see *Exempt Payee* on page 3.

Signature requirements. Complete the certification as indicated in items 1 through 3, below, and items 4 and 5 on page 4.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account ¹
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor ²
4. a. The usual revocable savings trust (grantor is also trustee) b. So-called trust account that is not a legal or valid trust under state law	The grantor-trustee ³ The actual owner ¹
5. Sole proprietorship or disregarded entity owned by an individual	The owner ²
6. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulation section 1.671-4(b)(2)(i)(A))	The grantor ⁴
For this type of account:	Give name and EIN of:
7. Disregarded entity not owned by an individual	The owner
8. A valid trust, estate, or pension trust	Legal entity ⁴
9. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
10. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
11. Partnership or multi-member LLC	The partnership
12. A broker or registered nominee	The broker or nominee
13. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
14. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulation section 1.671-4(b)(2)(i)(B))	The trust

¹ List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name and you may also enter your business or "DBA" name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 1.

*Note. Grantor also must provide a Form W-9 to trustee of trust.

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

Secure Your Tax Records from Identity Theft

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

To reduce your risk:

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

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

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

For more information, see Publication 4535, Identity Theft Prevention and Victim Assistance.

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

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

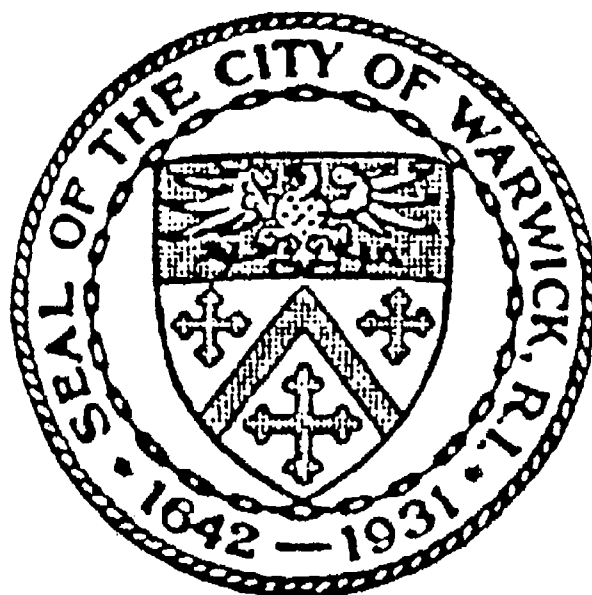
The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to phishing@irs.gov. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: spam@uce.gov or contact them at www.ftc.gov/idtheft or 1-877-IDTHEFT (1-877-438-4338).

Visit IRS.gov to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

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



ATTACHMENT C

LABORATORY DETECTION LIMIT (DL) AND TEST METHOD SUMMARY FORM							
EPA Priority Pollutant #	RIDEM/ RIPDES #	DESCRIPTION	RIDEM/ RIPDES SPECIFIED METHOD	Chemical Name (EPA)	RIDEM/RIPDES OR WSA SPECIFIED METHOD DETECTION LIMIT (ug/L)	LABORATORY DETECTION LIMIT ^c (ug/L)	LABORATORY TEST METHOD
2	1V	VOLATILES	624.1	Acrolein	10.0		
3	2V	VOLATILES	624.1	Acrylonitrile	5.0		
4	3V	VOLATILES	624.1	Benzene	1.0		
47	5V	VOLATILES	624.1	Bromoform	1.0		
6	6V	VOLATILES	624.1	Carbon Tetrachloride	1.0		
7	7V	VOLATILES	624.1	Chlorobenzene	1.0		
51	8V	VOLATILES	624.1	Chlorodibromomethane	1.0		
16	9V	VOLATILES	624.1	Chloroethane	1.0		
19	10V	VOLATILES	624.1	2-Chloroethyl Vinyl Ethers	5.0		
23	11V	VOLATILES	624.1	Chloroform	1.0		
48	12V	VOLATILES	624.1	Dichlorobromomethane	1.0		
13	14V	VOLATILES	624.1	1,1-Dichloroethane	1.0		
10	15V	VOLATILES	624.1	1,2-Dichloroethane	1.0		
29	16V	VOLATILES	624.1	1,1-Dichloroethylene	1.0		
32	17V	VOLATILES	624.1	1,2-Dichloropropane	1.0		
33	18V	VOLATILES	624.1	1,3-Dichloropropylene (cis & trans)	1.0		
38	19V	VOLATILES	624.1	Ethylbenzene	1.0		
46	20V	VOLATILES	624.1	Methyl bromide	1.0		
45	21V	VOLATILES	624.1	Methyl chloride	1.0		
44	22V	VOLATILES	624.1	Methylene Chloride	1.0		
15	23V	VOLATILES	624.1	1,1,2,2-Tetrachloroethane	1.0		
85	24V	VOLATILES	624.1	Tetrachloroethylene	1.0		
86	25V	VOLATILES	624.1	Toluene	1.0		
30	26V	VOLATILES	624.1	1,2-trans-Dichloroethylene	1.0		
11	27V	VOLATILES	624.1	1,1,1-Trichloroethane	1.0		
14	28V	VOLATILES	624.1	1,1,2-Trichloroethane	1.0		
87	29V	VOLATILES	624.1	Trichloroethylene	1.0		
88	31V	VOLATILES	624.1	Vinyl Chloride	1.0		
24	1A	ACID COMPOUNDS	625.1	2-Chlorophenol	1.0		
31	2A	ACID COMPOUNDS	625.1	2,4-Dichlorophenol	1.0		

^aNot Applicable and/or Not Assigned

^bNo RIDEM/RIPDES MDL assigned. Laboratory's most sensitive test method MDL would apply.

^cLaboratory DL - the most sensitive detection limit achievable by the laboratory for WSA testing purposes.

LABORATORY DETECTION LIMIT (DL) AND TEST METHOD SUMMARY FORM							
EPA Priority Pollutant #	RIDEM/ RIPDES #	DESCRIPTION	RIDEM/ RIPDES SPECIFIED METHOD	Chemical Name (EPA)	RIDEM/RIPDES OR WSA SPECIFIED METHOD DETECTION LIMIT (ug/L)	LABORATORY DETECTION LIMIT ^c (ug/L)	LABORATORY TEST METHOD
34	3A	ACID COMPOUNDS	625.1	2,4-Dimethylphenol	1.0		
60	4A	ACID COMPOUNDS	625.1	4,6 Dinitro-o-cresol (2-Methyl-4,6-Dinitrophenol)	1.0		
59	5A	ACID COMPOUNDS	625.1	2,4-Dinitrophenol	2.0		
57	6A	ACID COMPOUNDS	625.1	2-Nitrophenol	1.0		
58	7A	ACID COMPOUNDS	625.1	4-Nitrophenol	1.0		
22	8A	ACID COMPOUNDS	625.1	Parachlorometa cresol (p-chloro-m-cresol)	2.0		
64	9A	ACID COMPOUNDS	625.1	Pentachlorophenol	1.0		
65	10A	ACID COMPOUNDS	625.1	Phenol	1.0		
21	11A	ACID COMPOUNDS	625.1	2,4,6-Trichlorophenol	1.0		
89	1P	PESTICIDES	608.3	Aldrin	0.059		
102	2P	PESTICIDES	608.3	alpha-BHC	0.058		
103	3P	PESTICIDES	608.3	beta-BHC	0.043		
104	4P	PESTICIDES	608.3	gamma-BHC	0.048		
105	5P	PESTICIDES	608.3	delta-BHC	0.034		
91	6P	PESTICIDES	608.3	Chlordane	0.211		
92	7P	PESTICIDES	608.3	4,4'-DDT	0.251		
93	8P	PESTICIDES	608.3	4,4'-DDE	0.049		
94	9P	PESTICIDES	608.3	4,4'-DDD	0.139		
90	10P	PESTICIDES	608.3	Dieldrin	0.082		
95	11P	PESTICIDES	608.3	alpha-endosulfan (Endosulfan I)	0.031		
96	12P	PESTICIDES	608.3	beta-endosulfan (Endosulfan II)	0.036		
97	13P	PESTICIDES	608.3	Endosulfan sulfate	0.109		
98	14P	PESTICIDES	608.3	Endrin	0.050		
99	15P	PESTICIDES	608.3	Endrin aldehyde	0.062		
100	16P	PESTICIDES	608.3	Heptachlor	0.029		
101	17P	PESTICIDES	608.3	Heptachlor epoxide	0.040		
106	18P	PESTICIDES	608.3	PCB-1242	0.289		
107	19P	PESTICIDES	608.3	PCB-1254	0.298		
108	20P	PESTICIDES	608.3	PCB-1221	0.723		
109	21P	PESTICIDES	608.3	PCB-1232	0.387		

^aNot Applicable and/or Not Assigned

^bNo RIDEM/RIPDES MDL assigned. Laboratory's most sensitive test method MDL would apply.

^cLaboratory DL - the most sensitive detection limit achievable by the laboratory for WSA testing purposes.

LABORATORY DETECTION LIMIT (DL) AND TEST METHOD SUMMARY FORM							
EPA Priority Pollutant #	RIDEM/ RIPDES #	DESCRIPTION	RIDEM/ RIPDES SPECIFIED METHOD	Chemical Name (EPA)	RIDEM/RIPDES OR WSA SPECIFIED METHOD DETECTION LIMIT (ug/L)	LABORATORY DETECTION LIMIT ^c (ug/L)	LABORATORY TEST METHOD
110	22P	PESTICIDES	608.3	PCB-1248	0.283		
111	23P	PESTICIDES	608.3	PCB-1260	0.222		
112	24P	PESTICIDES	608.3	PCB-1016	0.494		
113	25P	PESTICIDES	608.3	Toxaphene	1.670		
1	1B	BASE/NEUTRAL	625.1	Acenaphthene	1.0		
77	2B	BASE/NEUTRAL	625.1	Acenaphthylene	1.0		
78	3B	BASE/NEUTRAL	625.1	Anthracene	1.0		
5	4B	BASE/NEUTRAL	625.1	Benzidine	4.0		
72	5B	BASE/NEUTRAL	625.1	Benzo(a)anthracene	2.0		
73	6B	BASE/NEUTRAL	625.1	Benzo(a)pyrene	2.0		
74	7B	BASE/NEUTRAL	625.1	Benzo(b)fluoranthene	1.0		
79	8B	BASE/NEUTRAL	625.1	Benzo(g,h,i)perylene	2.0		
75	9B	BASE/NEUTRAL	625.1	Benzo(k)fluoranthene	2.0		
43	10B	BASE/NEUTRAL	625.1	Bis(2-Chloroethoxy)methane	2.0		
18	11B	BASE/NEUTRAL	625.1	bis(2-Chloroethyl)Ether	1.0		
42	12B	BASE/NEUTRAL	625.1	Bis(2-chloroisopropyl)ether	1.0		
66	13B	BASE/NEUTRAL	625.1	Bis(2-ethylhexyl)phthalate	1.0		
41	14B	BASE/NEUTRAL	625.1	4-Bromophenyl phenyl ether	1.0		
67	15B	BASE/NEUTRAL	625.1	Buty benzyl phthalate	1.0		
20	16B	BASE/NEUTRAL	625.1	2-Chloronapthalene	1.0		
40	17B	BASE/NEUTRAL	625.1	4-Chlorophenyl phenyl ether	1.0		
76	18B	BASE/NEUTRAL	625.1	Chrysene	1.0		
82	19B	BASE/NEUTRAL	625.1	Dibenzo(a,h)anthracene	2.0		
25	20B	BASE/NEUTRAL	625.1	1,2-Dichlorobenzene	1.0		
26	21B	BASE/NEUTRAL	625.1	1,3-Dichlorobenzene	1.0		
27	22B	BASE/NEUTRAL	625.1	1,4-Dichlorobenzene	1.0		
28	23B	BASE/NEUTRAL	625.1	3,3'-Dichlorobenzidine	2.0		
70	24B	BASE/NEUTRAL	625.1	Diethyl phthalate	1.0		
71	25B	BASE/NEUTRAL	625.1	Dimethyl phthalate	1.0		
68	26B	BASE/NEUTRAL	625.1	Di-n-butyl phthalate	1.0		

^aNot Applicable and/or Not Assigned

^bNo RIDEM/RIPDES MDL assigned. Laboratory's most sensitive test method MDL would apply.

^cLaboratory DL - the most sensitive detection limit achievable by the laboratory for WSA testing purposes.

LABORATORY DETECTION LIMIT (DL) AND TEST METHOD SUMMARY FORM							
EPA Priority Pollutant #	RIDEM/ RIPDES #	DESCRIPTION	RIDEM/ RIPDES SPECIFIED METHOD	Chemical Name (EPA)	RIDEM/RIPDES OR WSA SPECIFIED METHOD DETECTION LIMIT (ug/L)	LABORATORY DETECTION LIMIT ^c (ug/L)	LABORATORY TEST METHOD
35	27B	BASE/NEUTRAL	625.1	2,4-Dinitrotoluene	2.0		
36	28B	BASE/NEUTRAL	625.1	2,6-Dinitrotoluene	2.0		
69	29B	BASE/NEUTRAL	625.1	Di-n-octyl phthalate	1.0		
37	30B	BASE/NEUTRAL	625.1	1,2-Diphenylhydrazine	1.0		
39	31B	BASE/NEUTRAL	625.1	Fluoranthene	1.0		
80	32B	BASE/NEUTRAL	625.1	Fluorene	1.0		
9	33B	BASE/NEUTRAL	625.1	Hexachlorobenzene	1.0		
52	34B	BASE/NEUTRAL	625.1	Hexachlorobutadiene	1.0		
53	35B	BASE/NEUTRAL	625.1	Hexachlorocyclopentadiene	2.0		
12	36B	BASE/NEUTRAL	625.1	Hexachloroethane	1.0		
83	37B	BASE/NEUTRAL	625.1	Indeno(1,2,3-cd)pyrene	2.0		
54	38B	BASE/NEUTRAL	625.1	Isophorone	1.0		
55	39B	BASE/NEUTRAL	625.1	Naphthalene	1.0		
56	40B	BASE/NEUTRAL	625.1	Nitrobenzene	1.0		
61	41B	BASE/NEUTRAL	625.1	N-nitrosodimethylamine	1.0		
63	42B	BASE/NEUTRAL	625.1	N-nitrosodi-n-propylamine	1.0		
62	43B	BASE/NEUTRAL	625.1	N-nitrosodiphenylamine	1.0		
81	44B	BASE/NEUTRAL	625.1	Phenanthrene	1.0		
84	45B	BASE/NEUTRAL	625.1	Pyrene	1.0		
8	46B	BASE/NEUTRAL	625.1	1,2,4-Trichlorobenzene	1.0		
114	^a	METAL	^a	Antimony, Total	3.0		
115	^a	METAL	^a	Arsenic, Total	1.0		
117	^a	METAL	^a	Beryllium, Total	0.2		
118	^a	METAL	^a	Cadmium, Total	0.1		
119	^a	METAL	^a	Chromium, Total	1.0		
^a	^a	METAL	^a	Hexavalent Chromium	20.0		
120	^a	METAL	^a	Copper, Total	1.0		
122	^a	METAL	^a	Lead, Total	1.0		
123	^a	METAL	^a	Mercury, Total	0.001		
124	^a	METAL	^a	Nickel, Total	1.0		

^aNot Applicable and/or Not Assigned

^bNo RIDEM/RIPDES MDL assigned. Laboratory's most sensitive test method MDL would apply.

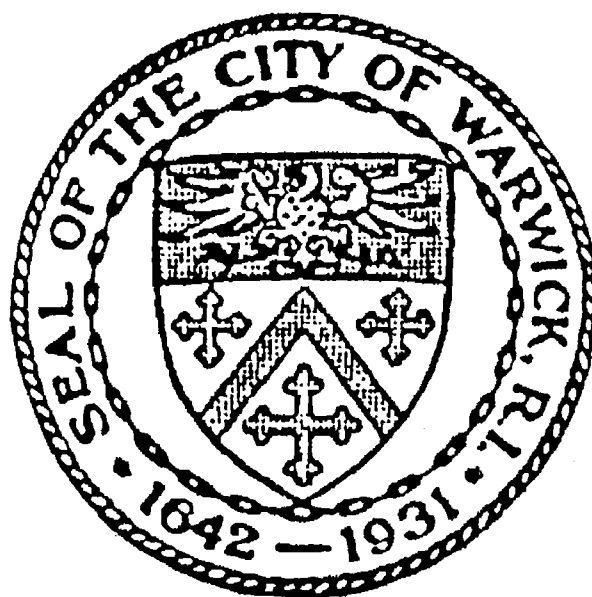
^cLaboratory DL - the most sensitive detection limit achievable by the laboratory for WSA testing purposes.

LABORATORY DETECTION LIMIT (DL) AND TEST METHOD SUMMARY FORM							
EPA Priority Pollutant #	RIDEM/ RIPDES #	DESCRIPTION	RIDEM/ RIPDES SPECIFIED METHOD	Chemical Name (EPA)	RIDEM/RIPDES OR WSA SPECIFIED METHOD DETECTION LIMIT (ug/L)	LABORATORY DETECTION LIMIT ^c (ug/L)	LABORATORY TEST METHOD
125	a	METAL	a	Selenium, Total	2.0		
126	a	METAL	a	Silver, Total	0.5		
127	a	METAL	a	Thallium, Total	1.0		
128	a	METAL	a	Zinc, Total	5.0		
121	a	Other Toxic Pollutants	a	Cyanide, Total & Available	10.0		
a	a	Other Toxic Pollutants	a	Phenols, Total	50.0		
a	a	METAL	a	Aluminum, Total	5.0		
a	a	METAL	a	Iron, Total	5.0		
a	a	Other Toxic Pollutants	a	MTBE	1.0		
a	a	Non-Priority/ Non-Toxic Pollutants	a	Carbonaceous Biochemical Oxygen Demand (CBOD)	b		
a	a	Non-Priority/ Non-Toxic Pollutants	a	Total Suspended Solids	b		
a	a	Non-Priority/ Non-Toxic Pollutants	a	Total Ammonia (as N)	0.1 mg/L		
a	a	Non-Priority/ Non-Toxic Pollutants	a	Total Nitrate (as N)	b		
a	a	Non-Priority/ Non-Toxic Pollutants	a	Total Nitrite (as N)	b		
a	a	Non-Priority/ Non-Toxic Pollutants	a	TKN	b		
a	a	Non-Priority/ Non-Toxic Pollutants	a	Total Phosphorus	≤ 0.02 mg/L		
a	a	Non-Priority/ Non-Toxic Pollutants	a	Orthophosphorus	b		
a	a	Non-Priority/ Non-Toxic Pollutants	a	Chloride	b		
a	a	Non-Priority/ Non-Toxic Pollutants	a	Chlorine	b		
a	a	Non-Priority/ Non-Toxic Pollutants	a	Hardness	0.5 mg/L		
a	a	Non-Priority/ Non-Toxic Pollutants	a	Alkalinity	2.0 mg/L		
a	a	Non-Priority/ Non-Toxic Pollutants	a	Total Organic Carbon (TOC)	0.5 mg/L		
a	a	Non-Priority/ Non-Toxic Pollutants	a	Dissolved Organic Carbon (DOC)	b		
a	a	MICRO	A-1	Fecal Coliform	1 MPN/100 ml		
a	a	MICRO	IDEXX	Enterococci	1 MPN/100 ml		

^aNot Applicable and/or Not Assigned

^bNo RIDEM/RIPDES MDL assigned. Laboratory's most sensitive test method MDL would apply.

^cLaboratory DL - the most sensitive detection limit achievable by the laboratory for WSA testing purposes.



ATTACHMENT D

EPA PRIORITY POLLUTANTS INCLUDING TOTAL TOXIC ORGANICS

EPA Priority Pollutants	Chemical Name (EPA)	EPA Priority Pollutants	Chemical Name (EPA)
1	Acenaphthene	44	Methylene Chloride
2	Acrolein	45	Methyl chloride
3	Acrylonitrile	46	Methyl bromide
4	Benzene	47	Bromoform
5	Benzidine	48	Dichlorobromomethane
6	Carbon Tetrachloride	49	REMOVED
7	Chlorobenzene	50	REMOVED
8	1,2,4-Trichlorobenzene	51	Chlorodibromomethane
9	Hexachlorobenzene	52	Hexachlorobutadiene
10	1,2-Dichloroethane	53	Hexachlorocyclopentadiene
11	1,1,1-Trichloroethane	54	Isophorone
12	Hexachloroethane	55	Naphthalene
13	1,1-Dichloroethane	56	Nitrobenzene
14	1,1,2-Trichloroethane	57	2-Nitrophenol
15	1,1,2,2-Tetrachloroethane	58	4-Nitrophenol
16	Chloroethane	59	2,4-Dinitrophenol
17	REMOVED	60	2-Methyl-4,6-Dinitrophenol
18	bis(2-Chloroethyl)Ether	61	N-nitrosodimethylamine
19	2-Chloroethyl vinyl ethers	62	N-nitrosodiphenylamine
20	2-Chloronaphthalene	63	N-nitrosodi-n-propylamine
21	2,4,6-Trichlorophenol	64	Pentachlorophenol
22	Parachlorometa cresol	65	Phenol
23	Chloroform	66	Bis(2-ethylhexyl)phthalate
24	2-Chlorophenol	67	Buty benzyl phthalate
25	1,2-Dichlorobenzene	68	Di-n-butyl phthalate
26	1,3-Dichlorobenzene	69	Di-n-octyl phthalate
27	1,4-Dichlorobenzene	70	Diethyl phthalate
28	3,3'-Dichlorobenzidine	71	Dimethyl phthalate
29	1,1-Dichloroethylene	72	Benzo(a)anthracene
30	1,2-trans-Dichloroethylene	73	Benzo(a)pyrene
31	2,4-Dichlorophenol	74	Benzo(b)fluoranthene
32	1,2-Dichloropropane	75	Benzo(k)fluoranthene
33	1,3-Dichloropropylene (cis & trans)	76	Chrysene
34	2,4-Dimethylphenol	77	Acenaphthylene
35	2,4-Dinitrotoluene	78	Anthracene
36	2,6-Dinitrotoluene	79	Benzo(g,h,i)perylene
37	1,2-Diphenylhydrazine	80	Fluorene
38	Ethylbenzene	81	Phenanthrene
39	Fluoranthene	82	Dibenzo(a,h)anthracene
40	4-Chlorophenyl phenyl ether	83	Indeno(1,2,3-cd)pyrene
41	4-Bromophenyl phenyl ether	84	Pyrene
42	Bis(2-chloroisopropyl)ether	85	Tetrachloroethylene
43	Bis(2-Chloroethoxy)methane	86	Toluene

EPA PRIORITY POLLUTANTS INCLUDING TOTAL TOXIC ORGANICS -continued

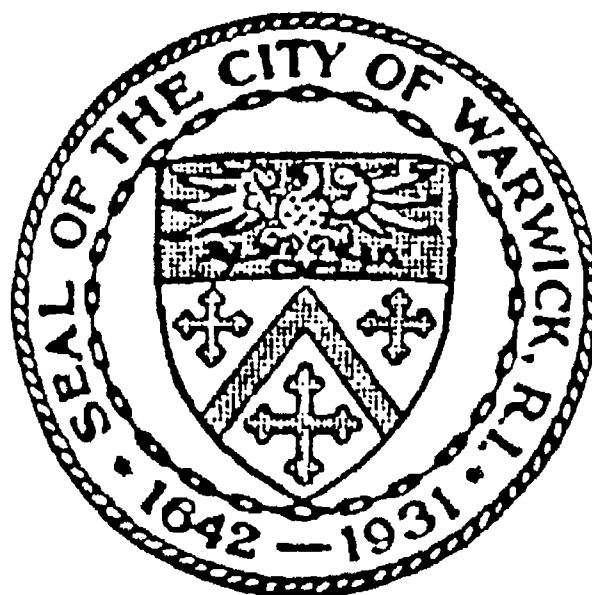
EPA Priority Pollutants	Chemical Name (EPA)	EPA Priority Pollutants	Chemical Name (EPA)
87	Trichloroethylene	109	PCB-1232
88	Vinyl Chloride	110	PCB-1248
89	Aldrin	111	PCB-1260
90	Dieldrin	112	PCB-1016
91	Chlordane	113	Toxaphene
92	4,4'-DDT	114	Antimony, Total
93	4,4'-DDE	115	Arsenic, Total
94	4,4'-DDD	116	Asbestos-Not Required as per RIDEM
95	alpha-endosulfan (Endosulfan I)	117	Beryllium, Total
96	beta-endosulfan (Endosulfan II)	118	Cadmium, Total
97	Endosulfan sulfate	119	Chromium, Total
98	Endrin	120	Copper, Total
99	Endrin aldehyde	121	Cyanide, Total & Available
100	Heptachlor	122	Lead, Total
101	Heptachlor epoxide	123	Mercury, Total
102	alpha-BHC	124	Nickel, Total
103	beta-BHC	125	Selenium, Total
104	gamma-BHC	126	Silver, Total
105	delta-BHC	127	Thallium, Total
106	PCB-1242	128	Zinc, Total
107	PCB-1254	129	TCDD-Not Required as per RIDEM
108	PCB-1221	NA	Phenols, Total - Required as per RIDEM

OTHER POLLUTANTS OF CONCERN (POC) TO BE INCLUDED IN PPS

Hexavalent Chromium

Aluminum, Total

Iron, Total



ATTACHMENT E

ANNUAL TOXICITY CHARACTERISTIC LEACHATE PROCEDURE (TCLP)*

EPA Hazardous Waste Number	Contaminant	Regulated Level (mg/L)
D004	Arsenic (As)	5.0
D005	Barium (Ba)	100.0
D018	Benzene	0.5
D006	Cadmium (Cd)	1.0
D019	Carbon Tetrachloride	0.5
D020	Chlordane	0.03
D021	Chlorobenzene	100.0
D022	Chloroform	6.0
D007	Chromium (Cr)	5.0
D023	o-Cresol ^a	200.0
D024	m Cresol ^a	200.0
D025	p-Cresol ^a	200.0
D026	(Total) Cresol ^a	200.0
D016	2,4-D	10.0
D027	1,4-Dichlorobenzene	7.5
D028	1,2-Dichloroethane	0.5
D029	1,1-Dichloroethylene	0.7
D030	2,4-Dinitrotoluene ^b	0.1
D012	Endrin	0.0
D031	Heptachlor (and its epoxide)	0.0
D032	Hexachlorobenzene ^b	0.1
D033	Hexachlorobutadiene	0.5
D034	Hexachloroethane	3.0
D008	Lead (Pb)	5.0
D013	Lindane	0.4
D009	Mercury (Hg)	0.2
D014	Methoxychlor	10.0
D035	Methyl ethyl ketone	200.0
D036	Nitrobenzene	2.0
D037	Pentachlorophenol	100.0
D038	Pyridine ^b	5.0
D010	Selenium (Se)	1.0
D011	Silver (Ag)	5.0
D039	Tetrachloroethylene	0.7
D015	Toxaphene	0.5
D040	Trichloroethylene	0.5
D041	2,4,5-Trichlorophenol	400.0
D042	2,4,6-Trichlorophenol	2.0
D017	2,4,5-TP (Silvex)	1.0
D043	Vinyl Chloride	0.2

^a Quantitation limit is greater than the calculated regulatory level therefore the quantitation limit becomes the regulatory level.

^b If o-, m- and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/L.

**ADDITIONAL ANNUAL AND QUARTERLY
THICKENED SLUDGE TESTING REQUIREMENTS**

Annual - Miscellaneous Testing
First Quarter Only
Flash Point/Ignitibility
Reactivity: Cyanide
Reactivity: Sulfide
Percent Total Sulfur
Quarterly Total Metals Analysis (dry weight, mg/kg)
Aluminum
Arsenic
Beryllium
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Selenium
Zinc
Quarterly - PCB (8082) Analysis (dry weight, mg/kg)
PCB - Aroclor-1016
PCB - Aroclor-1221
PCB - Aroclor-1232
PCB - Aroclor-1242
PCB - Aroclor-1248
PCB - Aroclor-1254
PCB - Aroclor-1260
Quarterly - Miscellaneous Testing
Corrosivity/pH
Percent Total Solids
Percent Fixed Solids
Percent Volatile Solids
Phosphorus