

# **ADVERTISEMENT**

#### Bid Solicitation – NEWARK EFFLUENT SPRAY IRRIGATION SITE MAINTENANCE

Worcester County is seeking Bids from qualified Vendors to contract for general services, planting, cutting, raking, baling, and hauling of vegetation at the Newark Effluent Spray Irrigation Site in the Newark Service Area in conformity with the requirements contained herein Bid Documents.

Bid Documents for the above referenced project may be obtained from the Worcester County Commissioner's Office by either e-mailing the Procurement Officer, Nicholas Rice, at <a href="mailto:nrice@co.worcester.md.us">nrice@co.worcester.md.us</a> or by calling 410-632-1194 during normal business hours, or via the County's Bids page on the County's <a href="website">website</a>. Vendors are responsible for checking this website for addenda prior to submitting their bids. Worcester County is not responsible for the content of any Bid Document received through any third party bid service. It is the sole responsibility of the vendor to ensure the completeness and accuracy of their Completed Bid Documents.

A pre-bid meeting will be held on Wednesday, March 27, 2024 at 1:30pm at the Public Works Administration building, located at 6113 Timmons Road, Snow Hill, MD 21863. The last day for questions will be noon on Tuesday, April 9, 2024. Sealed Bid Documents are due no later than 3:00pm on Wednesday, April 17, 2024 and will be opened and read aloud in the Office of the County Commissioners, Worcester County Government Center – Room 1103, One West Market Street, Snow Hill, Maryland 21863.

Late Bid Documents will not be accepted.

Minority vendors are encouraged to compete for award of the solicitation.

Nicholas W. Rice, CPPO, CPPB, NIGP-CPP Procurement Officer Worcester County, Maryland

# Worcester County Administration 1 West Market Street, Room 1103 Snow Hill, Maryland 21863



# **INVITATION FOR BID**

PROJECT:	Newark Effluent Spray Irrigation Site Maintenance	
DEPARTMENT:		
	VENDOR:	
NAME:		
ADDRESS:		
-		
	<b>BID OPENING:</b>	
DATE:	Wednesday, April 17, 2024	
TIME:	3:00 PM	_

# TABLE OF CONTENTS

SECTIO	ON I: INTRODUCTION	
A.	PURPOSE	
B.	CLARIFICATION OF TERMS	
C.	QUESTIONS AND INQUIRES	
D.	FILLING OUT BID DOCUMENTS	
E.	SUBMISSION OF BID DOCUMENTS	
F.	OPENING OF BIDS	
G.	ACCEPTANCE OR REJECTION OF BIDS	
Н.	QUALIFICATIONS	
I.	DESCRIPTIVE LITERATURE	
J.	NOTICE TO VENDORS	
K.	PIGGYBACKING	
	ON II: GENERAL INFORMATION	
Α.	ECONOMY OF BID.	
B.	PUBLIC INFORMATION ACT (PIA)	
C.	CONTRACT AWARD	
D.	AUDIT	
E.	NONPERFORMANCE	
F.	MODIFICATION OR WITHDRAWL OF BID	
G.	DEFAULT	
H.	COLLUSION/FINANCIAL BENEFIT	
I.	TAX EXEMPTION	
J.		
K.	ADDENDUM	
L.	APPROVED EQUALS.	
M. N.	DELIVERY	
	INSURANCE	
O. P.	BID EVALUATION	
	ON III: GENERAL CONDITIONS	
A.	DRAWINGS AND SPECIFICATIONS	
B.	MATERIALS, SERVICES AND FACILITIES	
C.	INSPECTION AND TESTING	
D.	APPROVAL OF SUBSTITUTION OF MATERIALS	
E.	PROTECTION OF WORK, PROPERTY AND PERSONS.	
F.	BARRICADES, DANGER, WARNING AND DETOUR SIGNS	
G.	LICENSES AND PERMITS	
Н.	SUPERVISION	
Ι.	CLEAN UP	
J.	CHANGES IN WORK	
K.	TIME FOR COMPLETION	
L.	LIQUIDATED DAMAGES	
M.	CORRECTION OF WORK	
N.	CONSTRUCTION SAFETY AND HEALTH STANDARDS.	
Ο.	BID BOND	
P.	PERFORMANCE AND PAYMENT BONDS	
0.	GUARANTEE	
-	ON IV: BID SPECIFICATIONS.	
Α.	SCOPE	
В.	CONTRACT PRICING	
C.	CONTRACT PERIOD RENEWAL OPTION	
D.	SUMMARY	
E.	GENERAL REQUIREMENTS	17
F.	ATTACHMENTS	
G.	PRE-BID CONFERENCE	17
H.	PAYMENT	
I.	QUESTIONS	
J.	AWARD	
	OF BID	
	ENCES	
EXCEP	TIONS	20
	DUAL PRINCIPAL	
VENDO	PR'S AFFIDAVIT OF QUALIFICATION TO BID	22
NON-C	OLLUSIVE AFFIDAVIT	23
EVHIRI	TT A	2/

# SECTION I: INTRODUCTION

#### A. **PURPOSE**

1. The purpose of this Invitation for Bid Document is for Worcester County ("County") to contract for general services, planting, cutting, raking, baling, and hauling of vegetation at the Newark Effluent Spray Irrigation Site in the Newark Service Area in conformity with the requirements contained herein ("Bid Document(s)").

### **B. CLARIFICATION OF TERMS**

1. Firms or individuals that submit a bid for award of a contract ("Contract") are referred to as vendors ("Vendors") in this document. The Vendor that is awarded the Contract is herein referred to as the ("Successful Vendor").

# C. QUESTIONS AND INQUIRES

- 1. Questions must be addressed in writing to the Worcester County Procurement Officer at <a href="mailto:nrice@co.worcester.md.us">nrice@co.worcester.md.us</a>.
- 2. The last date to submit questions for clarification will be noon on Tuesday, April 9, 2024.
- 3. Addenda are posted on the County website at <a href="https://www.co.worcester.md.us/">https://www.co.worcester.md.us/</a> under County Info: Bid Board: at <a href="https://www.co.worcester.md.us/commissioners/bids">https://www.co.worcester.md.us/commissioners/bids</a> at least five calendar days before bid opening.
- 4. It is the Vendors responsibly to make sure all addenda are acknowledged in their bid. Failure to do so could result in the bid being disqualified.

### D. FILLING OUT BID DOCUMENTS

- 1. Use only forms supplied by the County.
- 2. One unbound original and two bound copies of the bid form and any required attachments must be submitted in the solicitation and can be submitted in the same envelope unless otherwise instructed.
- 3. Bid Documents should be complied as follows: (1) Cover letter, (2) Form of Bid, (3) References, (4) Exceptions Document and Signed addenda, if necessary (5) Individual Principal Document, (6) Vendor's Affidavit of Qualification to Bid, and (7) Non-Collusive Affidavit
- 4. Where so indicated by the make-up of the Bid Documents, sums will be expressed in both words and figures, and in the case of a discrepancy between the two, the amount written in words will govern. In the event there is a discrepancy between the unit price and the extended totals, the unit prices will govern.
- 5. Any interlineation, alteration, or erasure will be initialed by the signer of the Bid Documents.
- 6. Each copy of the Bid Documents will be signed by the person(s) legally authorized to bind the Vendor to a contract, using the legal name of the signer. Bid Documents submitted by an agent will have a current Power of Attorney attached certifying the agent's authority to bind the Vendor.
- 7. Vendor will supply all information and submittals required by the Bid Documents to constitute a proper and responsible completed Bid Document package.
- 8. Any ambiguity in the Bid Documents as a result of omission, error, lack of clarity or non-compliance by the Vendor with specifications, instructions, and/or all conditions of bidding will be construed in the light most favorable to the County.

#### E. SUBMISSION OF BID DOCUMENTS

- 1. All copies of the Bid Documents and any other documents required to be submitted with the Bid Documents will be enclosed in a sealed envelope. The envelope will be addressed to the Worcester County Commissioners and will be identified with the project name: NEWARK EFFLUENT SPRAY IRRIGATION SITE MAINTENANCE and the Vendor's name and address. If the Bid Documents are sent by mail, the sealed envelope will be enclosed in a separate mailing envelope with the notation "SEALED BID DOCUMENTS ENCLOSED" on the face thereof.
- 2. Bids must be mailed or hand carried to the Worcester County Administration Office, 1 West Market Street, Room 1103, Snow Hill, MD 21863, in order to be received prior to the announced bid deadline. Bids received after said time or delivered to the wrong location will be returned to the Vendor unopened.
- 3. Bids are due and will be opened at the time listed on the front of this Bid Document.
- 4. If you are delivering a bid in person please keep in mind to allow time to get through security and into the Administration Office. It is fully the responsibility of the Vendor to ensure that the bid is received on time.
- 5. The County will not speculate as to reasonableness of the postmark, nor comment on the apparent failure of a public carrier to have made prompt delivery of the bid.
- 6. Vendors, or their authorized agents, are expected to fully inform themselves as to the conditions, requirements, and specifications before submitting Bid Documents; failure to do so will be at the Vendor's own risk.
- 7. A fully executed Affidavit of Qualification to Bid will be attached to each Bid Document.
- 8. Minority vendors are encouraged to participate.
- 9. All Vendor submitted Bid Documents will be valid for a minimum of sixty days from the date of Bid Document opening.
- 10. Electronically mailed bids are **not** considered sealed bids and will **not** be accepted.

## F. OPENING OF BIDS

- 1. Bid Documents received on time will be opened publicly and Vendor's names and total costs will be read aloud for the record.
- 2. The Contract will be awarded or all Bid Documents will be rejected within sixty days from the date of the Bid Document opening.

#### G. ACCEPTANCE OR REJECTION OF BIDS

- 1. Unless otherwise specified, the Contract will be awarded to the most responsible and responsive Vendor complying with the provisions of the Bid Documents, provided the bid does not exceed the funds available, and it is in the best interest of the County to accept it. The County reserves the right to reject the Bid Documents of any Vendor who has previously failed to perform properly in any way or complete on time contracts of a similar nature; or a Bid Document from a Vendor who, investigation shows, is not in a position to perform the Contract; or Bid Documents from any person, firm, or corporation which is in arrears or in default to the County for any debt or contract.
- 2. Completed Bid Documents from Vendors debarred from doing business with the State of Maryland or the Federal Government will not be accepted.
- 3. In determining a Vendor's responsibility, the County may consider the following qualifications, in addition to price:

- a. Ability, capacity, and skill to provide the commodities or services required within the specified time, including future maintenance and service, and including current financial statement or other evidence of pecuniary resources and necessary facilities.
- b. Character, integrity, reputation, experience and efficiency.
- c. Quality of past performance on previous or existing contracts, including a list of current and past contracts and other evidence of performance ability.
- d. Previous and existing compliance with laws and ordinances relating to contracts with the County and to the Vendor's employment practices.
- e. Evidence of adequate insurance to comply with Contract terms and conditions.
- f. Statement of current work load and capacity to perform/provide the Goods and/or Services.
- g. Explanation of methods to be used in fulfilling the Contract.
- h. The Vendor, if requested, will be prepared to supply evidence of its qualifications, listed above, and its capacity to provide/perform the Goods and/or Services; such evidence to be supplied within a specified time and to the satisfaction of the County.
- 4. In determining a Vendor's responsiveness, the County will consider whether the Bid Document conforms in all material respects to the Bid Documents. The County reserves the right to waive any irregularities that may be in its best interest to do so.
- 5. The County will have the right to reject any and all Bid Documents, where applicable to accept in whole or in part, to add or delete quantities, to waive any informalities or irregularities in the Bid Document received, to reject a Bid Document not accompanied by required Bid security or other data required by the Bid Documents, and to accept or reject any Bid Document which deviates from specifications when in the best interest of the County. Irrespective of any of the foregoing, the County will have the right to award the Contract in its own best interests.

# H. QUALIFICATIONS

- 1. The Vendor must be in compliance with the laws regarding conducting business in the State of Maryland.
  - All Vendors shall provide a copy Certificate of Status from the Maryland Department of Assessments and Taxation, evidencing the Vendor is in good standing with the State of Maryland. See <a href="https://sdatcert1.resiusa.org/certificate\_net/">https://sdatcert1.resiusa.org/certificate\_net/</a> for information on obtaining the Certificate of Status. Certificates of status are not available for trade names, name reservations, government agencies, sole proprietorships, and some other accounts as these are not legal entities and thus are not required for these categories of Vendors. For more information on the Certificate of Status please see <a href="http://www.dat.state.md.us/sdatweb/COSinfo.html">http://www.dat.state.md.us/sdatweb/COSinfo.html</a>.
- 2. Worcester County reserves the right, at its sole discretion, to extend the date this documentation must be provided. The Vendor's inability to provide this documentation could result in the bid being rejected.

### I. DESCRIPTIVE LITERATURE

- 1. The proposed descriptive literature fully describing the product bid is what is intended to be included as the price. Failure to do so may be cause for rejection of the bid.
- 2. Any items, systems or devices supplied in this bid that are proprietary in nature relative to maintenance, repair, servicing or updating must be disclosed on the bid form.

#### J. NOTICE TO VENDORS

1. Before a Vendor submits the Bid Documents it will need to become fully informed as to the extent and character of the Goods and/or Services required and are expected to completely familiarize themselves with the requirements of this Bid Document's specifications. Failure to do so will not relieve the Vendor of the responsibility to fully perform in accordance therewith. No consideration will be granted for any alleged misunderstanding of the material to be furnished or the Services to be performed, it being understood that the submission of a Bid Document is an agreement with all of the items and conditions referred to herein.

#### K. PIGGYBACKING

- Worcester County may authorize, upon request, any governmental entity (hereafter Authorized User) within the County to purchase items under the contract awarded pursuant to this bid solicitation.
- 2. All purchase orders issued against the contract by an authorized User shall be honored by the Successful Vendor in accordance with all terms and conditions of this contract.
- 3. The issuance of a purchase order by an Authorized User pursuant to this provision shall constitute an express assumption of all contractual obligations, covenants, conditions and terms of the contract. A breach of the contract by any particular Authorized User shall neither constitute nor be deemed a breach of the contract as a whole which shall remain in full force and effect, and shall not affect the validity of the contract nor the obligations of the Successful Vendor thereunder respecting the County.
- 4. The County specifically and expressly disclaims any and all liability for any breach by an Authorized User other than the County and each such Authorized User and Successful Vendor guarantee to save the County, its officers, agents and employees harmless from any liability that may be or is imposed by the Authorized User's failure to perform in accordance with its obligations under the contract.

**END OF SECTION** 

# SECTION II: GENERAL INFORMATION

#### A. ECONOMY OF BID

Bid Documents will be prepared simply and economically, providing straightforward and concise
description of the Vendor's capabilities to satisfy the requirements of the Bid Documents.
Emphasis should be on completeness and clarity of content. Elaborate brochures and other
representations beyond that sufficient to present a complete and effective Bid Document are
neither required nor desired.

## B. PUBLIC INFORMATION ACT (PIA)

- 1. Worcester County is subject to the Maryland Public Information Act and may be required to release bid submissions in accordance with the Act.
- 2. Any materials the Vendor deems to be proprietary or copyrighted must be marked as such; however, the material may still be subject to analysis under the Maryland Public Information Act.
  - a. The Vendor may invoke proprietary information or trade secret protection for submission of any data/material by (1) identifying the data/material in a written description, (2) clearly marking the data/material as proprietary, and (3) providing a written statement detailing the reasons why protection is necessary. The County reserves the right to ask for additional clarification prior to establishing protection.

### C. CONTRACT AWARD

- A written award by the County to the Successful Vendor in the form of a Purchase Order or other
  contract document will result in a binding Contract without further action by either party. If the
  Successful Vendor fails or refuses to sign and deliver the Contract and the required insurance
  documentation, the County will have the right to award to the next responsible and responsive
  Vendor. Contract will be executed by the Successful Vendor within fourteen calendar days of
  receipt of the Contract.
- 2. Bid Documents and Contracts issued by the County will bind the Vendor to applicable conditions and requirements herein set forth, unless otherwise specified in the Bid Documents, and are subject to all federal, state, and municipal laws, rules, regulations, and limitations.
- 3. County personal property taxes ("Taxes") must be on a current basis; if any such Taxes are delinquent, they must be paid before award of Contract. Failure to pay will result in the award of Contract to another Vendor.
- 4. The County reserves the right to engage in individual discussions and interviews with those Vendors deemed fully qualified, responsible, suitable and professionally competent to provide the required Goods and/or Services should the project size warrant it. Vendors will be encouraged to elaborate on their qualifications, performance data, and staff expertise.

# D. AUDIT

1. The Successful Vendor agrees to retain all books, records, and other documents relative to the awarded Contract for five years after final payment, or until audited. The County, its authorized agents, and/or State auditors will have full access to and the right to examine any of said materials during said period.

# E. NONPERFORMANCE

1. The County reserves the right to inspect all operations and to withhold payment for any goods not performed or not performed in accordance with the specifications in this Bid Document. Errors, omissions or mistakes in performance will be corrected at no cost to the County. Failure to do so

will be cause for withholding of payment for that Goods and/or Services. In addition, if deficiencies are not corrected in a timely manner, the County may characterize the Successful Vendor as uncooperative, which may jeopardize future project order solicitations.

#### F. MODIFICATION OR WITHDRAWL OF BID

1. A Bid Document may not be modified, withdrawn, or cancelled by the Vendor during the stipulated time period following the time and date designated for the receipt of Bid Documents, and each Vendor so agrees in submitting Bid Documents.

#### G. DEFAULT

- 1. The Contract may be cancelled or annulled by the County in whole or in part by written notice of default to the Successful Vendor upon non-performance, violation of Contract terms, delivery failure, bankruptcy or insolvency, any violation of state or local laws, or the making of an assignment for the benefit of creditors. An award may then be made to the next most highly rated Vendor, or when time is of the essence, similar commodities and/or service may be purchased on the open market. In either event, the defaulting Vendor (or his surety) will be liable to the County for cost to the County in excess of the defaulted Contract price.
- 2. If a representative or warranty of either Party to the Contract is false or misleading in any material respect, or if either Party breaches a material provision of the Contract ("Cause"), the non-breaching Party will give the other Party written notice of such cause. If such Cause is not remedied within fifteen calendar days ("Cure Period") after receipt of such notice, (unless, with respect to those Causes which cannot be reasonably corrected or remedied within the Cure Period, the breaching Party will have commenced to correct or remedy the same within such Cure Period and thereafter will proceed with all due diligence to correct or remedy the same), the Party giving notice will have the right to terminate this Contract upon the expiration of the Cure Period.

### H. COLLUSION/FINANCIAL BENEFIT

- 1. The Vendor certifies that his/her Bid is made without any previous understanding, agreement, or connection with any person, firm, or corporation making a Bid Document for the same project; without prior knowledge of competitive prices; and is in all respects fair, without outside control, collusion, fraud, or otherwise illegal action.
- 2. Upon signing the Bid Document, Vendor certifies that no member of the governing body of the County, or members of his/her immediate family, including spouse, parents or children, or any other officer or employee of the County, or any member or employee of a Commission, Board, or Corporation controlled or appointed by the County Commissioners has received or has been promised, directly or indirectly, any financial benefit, related to this Bid Document and subsequent Contract.

#### I. TAX EXEMPTION

- 1. In buying products directly from a Vendor, Worcester County is exempt from being *directly* charged Federal excise and Maryland sales tax. A copy of an exemption certificate shall be furnished upon request.
- 2. According to the Office of the Comptroller of Maryland, a *Contractor is responsible for paying sales tax* on his/her purchases relating to any projects or services and should incorporate it into their bid.
- 3. Successful Vendors **cannot** use the County tax exemption to buy materials or products used on County projects.

#### J. CONTRACT CHANGES

- 1. No claims may be made by anyone that the scope of the project or that the Vendor's Goods and/or Services have been changed (requiring changes to the amount of compensation to the Vendor or other adjustments to the Contract) unless such changes or adjustments have been made by an approved written amendment (Change Order) to the Contract signed by the Chief Administrative Officer (and the County Commissioners, if required), prior to additional Goods and/or Services being initiated. Extra Goods and/or Services performed without prior, approved, written authority will be considered as unauthorized and at the expense of the Vendor. Payment will not be made by the County.
- 2. No oral conversations, agreements, discussions, or suggestions, which involve changes to the scope of the Contract, made by anyone including any County employee, will be honored or valid. No written agreements or changes to the scope of the Contract made by anyone other than the Procurement Officer (with the Chief Administrative Officer and/or County Commissioners approval, if required) will be honored or valid.
- If any Change Order in the Goods and/or Services results in a reduction in the Goods and/or Services, the Vendor will neither have, nor assert any claim for, nor be entitled to any additional compensation for damages or for loss of anticipated profits on Goods and/or Services that are eliminated.

#### K. ADDENDUM

- No oral statements of any person will modify or otherwise affect or interpret the meaning of the Contract specifications, or the terms, conditions, or other portions of the Contract. All modifications and every request for any interpretation must be addressed to Worcester County's Procurement Officer and to be given consideration, must be received no later than the last day for questions listed in Section I, Subsection C.2.
- 2. Any and all interpretations, corrections, revisions, and amendments will be issued by the Procurement Officer to all holders of Bid Documents in the form of written addenda. Vendors are cautioned that any oral statements made by any County employee that materially change any portion of the Bid Documents cannot be relied upon unless subsequently ratified by a formal written amendment to the Bid Document.
- 3. All addenda will be issued so as to be received at least five days prior to the time set for receipt of Bid Documents, and will become part of the Contract and will be acknowledged in the Bid Document form. Failure of any Vendor to receive any such addenda will not relieve said Vendor from any obligation under the Bid Document as submitted.
- 4. Vendors are cautioned to refrain from including in their Bid Document any substitutions which are not confirmed by written addenda. To find out whether the County intends to issue an amendment reflecting an oral statement made by any employee, contact Worcester County's Procurement Officer during normal business hours.
- 5. The Worcester County Procurement Officer reserves the right to postpone the Bid Document opening for any major changes occurring in the five-day interim which would otherwise necessitate an Addendum.

#### L. EXCEPTIONS/SUBSTITUTIONS

1. Any exceptions or substitutions to the specifications requested should be marked on the bid form and listed on a separate sheet of paper attached to the bid.

- 2. An exception to the specifications may disqualify the bid. The County will determine if the exception is an essential deviation or a minor item.
- 3. In the case of a minor deviation, the County maintains the option to award to that Vendor if it determines the performance is not adversely affected by the exception.

### M. APPROVED EQUALS

- 1. In all specifications where a material or article is defined by describing a proprietary product or by using the name of a Vendor or manufacturer, it can be assumed that an approved equal can be substituted.
- 2. The use of a named product is an attempt to set a particular standard of quality and type that is familiar to the County. Such references are not intended to be restrictive.
- 3. However, the County shall decide if a product does in fact meet or exceed the quality of the specifications listed in the solicitation. It shall be the responsibility of the Vendor that claims his product is an equal to provide documentation to support such a claim.

#### N. DELIVERY

1. All items shall be delivered F.O.B. destination and delivery costs and charges included in the bid unless otherwise stated in the specifications or bid form.

#### O. INSURANCE

- If required by the General Conditions or Terms and Conditions, the Successful Vendor shall
  provide the County with Certificates of Insurance within ten calendar days of bid award
  notification evidencing the required coverage.
- 2. Successful Vendor must provide Certificates of Insurance before commencing work in connection with the Contract.

#### P. BID EVALUATION

Bid tabulations will be posted on the County website at
 https://www.co.worcester.md.us/commissioners/bids.
 Click on the Expired Bids & Results tab
 and find the bid tabulation for the bid you are interested in. Bid tabulations will be posted as soon as reasonably possible after the Bid opening.

### END OF SECTION

# **SECTION III: GENERAL CONDITIONS**

#### A. DRAWINGS AND SPECIFICATIONS

- 1. Should any detail be omitted from the drawings or specifications, or should any errors appear in either, it shall be the duty of the Successful Vendor to notify the County's designated construction inspector.
- 2. In no case shall the Successful Vendor proceed with the work without notifying and receiving definite instructions from the County. Work wrongly constructed without such notification shall be corrected by the Successful Vendor at his own cost.

### B. MATERIALS, SERVICES AND FACILITIES

- It is understood that, except as otherwise specifically stated in the Bid Documents, the Successful Vendor will provide and pay for all materials, labor, tools, equipment, water, light, power and transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the Work within the specified time.
- 2. Materials and equipment will be so stored as to insure the preservation of their quality and fitness for the Work. Stored materials and equipment to be incorporated in the Work will be located so as to facilitate prompt inspection.
- 3. Manufactured articles, materials, and equipment will be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.
- 4. Materials, supplies and equipment will be in accordance with samples submitted by the Successful Vendor and approved by the County.

# C. INSPECTION AND TESTING

- 1. All materials and equipment used in the construction of the Work will be subject to adequate inspection and testing in accordance with generally accepted standards, as required and defined in the Bid Documents.
- The County or its representatives may, at any time, enter upon the work and the premises used by the Successful Vendor, and the Successful Vendor shall provide proper and safe facilities to secure convenient access to all parts of the work, and all other facilities necessary for inspection, as may be required.
- 3. The County will appoint such persons as deemed necessary to properly inspect the materials furnished or to be furnished, and the work done under the contract and to see that the same strictly corresponds with the drawings and specifications. All such materials and workmanship shall be subject to approval of the County. Approval or acceptance of payment shall not be misconstrued as approval of items or work not in conformance with specifications and drawings nor shall it prevent the rejection of said work or materials at any time thereafter during the existence of the contract, should said work or materials be found to be defective, or not in accordance with the requirements of the contract.
- 4. Work and material will be inspected promptly, but if for any reason should a delay occur, the Successful Vendor shall have no claim for damages or extra compensation.
- 5. The Successful Vendor shall pay for all inspection costs necessary to complete the work which may be incurred to comply with the requirements of any agency other than the County, such as a railroad, public service utility company, or any other governmental agency or any other agency whose jurisdiction affects the work in any manner unless otherwise specified herein.

#### D. APPROVAL OF SUBSTITUTION OF MATERIALS

- 1. Samples of materials shall be submitted by the Successful Vendor for approval before such materials are ordered from the manufacturers or distributors and shall be approved by the County before actual work is begun.
- 2. It is the intention of these specifications to permit all vendors bidding on this work to secure the fullest amount of competition on the various materials and specialties names herein. Wherever a material or article is defined by describing a proprietary product or by using the name of a vendor or manufacturer, the term or approved equal shall be presumed to be implied unless otherwise stated.

# E. PROTECTION OF WORK, PROPERTY AND PERSONS

- 1. Successful Vendor will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Successful Vendor will take all necessary precautions and programs in connection with the Work. Successful Vendor will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to, all employees on the Work and other persons who may be affected thereby, all the Work and all materials or equipment to be incorporated therein, whether in storage on off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- 2. Successful Vendor will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction. Successful Vendor will erect and maintain, as required by the conditions and progress of the Work, all necessary safeguards for safety and protection. Successful Vendor will notify owners of adjacent utilities when progress of the Work may affect them. The Successful Vendor will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by Successful Vendor, any Subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them be liable.
- 3. In emergencies affecting the safety of persons or the Work or property at the site or adjacent thereto, the Successful Vendor, without special instruction or authorization from the County, will act to prevent threatened damage, injury or loss. Successful Vendor will give the County prompt Written Notice of any significant changes in the Work or deviations from the Bid Documents caused thereby, and a Change Order will thereupon be issued covering the changes and deviations involved.

### F. BARRICADES, DANGER, WARNING AND DETOUR SIGNS

1. The Successful Vendor shall provide, erect and maintain all necessary barricades, sufficient red lights, flares, danger signals and signs, provide a sufficient number of watchmen and take all necessary precautions for the protection of the work and safety of the public.

#### G. LICENSES AND PERMITS

- 1. The Successful Vendor shall have all necessary licenses required to do the work and give all notices and obtain and pay all necessary permits required by local laws and regulations for building.
- 2. State and Federal permits (if applicable) to undertake work have been obtained by the County and accompany these specifications.

#### H. SUPERVISION

- 1. The Successful Vendor shall maintain, at all times during the progress of work, a competent and experienced supervisor who shall represent the Successful Vendor, and all directions given to him shall be binding. Important decisions regarding directions, if requested by the supervisor, shall be confirmed in writing.
- Supervision by the County or its representative does not relieve the Successful Vendor of
  responsibility for defective work executed under the direct control of the Successful Vendor.
  Responsibility for defective work rests upon the Successful Vendor, whether discovered by the
  County prior to final payment or subsequent thereto.

#### I. CLEAN UP

- 1. Upon completion of the items within a given location as specified and before monthly estimates will be paid, the construction area and all other areas occupied by the Successful Vendor during the construction of said Contract shall be cleaned of all surplus and discarded materials, bracing, forms, rubbish and temporary structures that were placed there by the Successful Vendor.
- 2. Disposal of the aforementioned shall be the responsibility of the Successful Vendor.

### J. CHANGES IN WORK

- 1. The County, without invalidating the contract, may order extra work or make changes by altering, adding or deducting from the work with the contract sum being adjusted accordingly.
- 2. All such work shall be executed under the conditions of the original contract, except that any claim for the extension of time caused thereby shall be adjusted at the time of ordering such change.
- 3. The value of any such extra work or change shall be determined in one or more of the following ways:
  - a. By estimate and acceptance of lump sum.
  - b. By unit prices named in the contract or subsequently agreed upon.

# K. TIME FOR COMPLETION

- 1. The Work contemplated under this Contract shall be considered as continuous and be completed within the timeframe(s) stated in Section IV of this Bid Document.
- 2. The Successful Vendor will be allowed to work eight hours per day, Monday through Friday, except for holidays, fifty-two weeks per year.
- 3. The Successful Vendor will not be permitted to work on holidays observed by Worcester County or the State of Maryland or on Sundays unless otherwise authorized in writing.
- 4. In case of an emergency which may require that work be done on Saturdays, Sundays, and Holidays, the Successful Vendor shall request permission of the County to do so. If, in the opinion of the County, the emergency is bonafide, permission may be granted to the Successful Vendor to work such hours as may be determined are necessary by the County. Also, if in the opinion of the County a bonafide emergency exists, the Successful Vendor may be directed to work such hours as may be necessary whether or not the Successful Vendor requests permission to do so.
- 5. The Successful Vendor shall pay the County for all costs incurred for inspection services required for work permitted during holidays, weekends or in excess of eight hours per day.

#### L. LIQUIDATED DAMAGES

1. If the Successful Vendor shall fail to start and complete the project within the time frame stated above, the County shall assess liquidated damages in the amounts listed below per calendar day for each and every day the Successful Vendor fails to complete the contract.

Amount of Contract	<u>Liquidated Damages per Day</u>
Less than \$10,000	\$100.00
\$10,000 or less than \$100,000	\$250.00
\$100,000 or less than \$500,000	\$750.00
\$500,000 or more	\$1,000.00
Or will be based on actual cost to the County, w	hichever is greater.

2. The designated County project manager reserves the option to extend the scheduled completion date or waive the liquidated damages clause in its entirety if he is of the opinion that extenuating circumstances deemed such action appropriate.

#### M. CORRECTION OF WORK

- 1. The Successful Vendor will promptly remove from the premises all Work rejected by the County for failure to comply with the Bid Documents, whether incorporated in the construction or not, and the Successful Vendor will promptly replace and re-execute the Work in accordance with the Bid Documents and without expense to the County and will bear the expense of making good all Work of other Vendors destroyed or damaged by such removal or replacement.
- All removal and replacement Work will be done at the Successful Vendor's expense. If the
  Successful Vendor does not act to remove such rejected Work within ten days after receipt of
  Written Notice, the County may remove such Work and store the materials at the expense of the
  Successful Vendor.

#### N. CONSTRUCTION SAFETY AND HEALTH STANDARDS

- 1. It is a condition of this contract, and shall be made a condition of each sub-contract entered into pursuant to this contract, that the Successful Vendor and any sub-contractor shall not require any laborer or mechanic employed in performance of the contract to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health or safety, as determined under construction safety and health standards (Title 29, Code of Federal Regulations, Part 1926, formerly Part 1518, as revised from time to time, promulgated by the United States Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standard Act.) (83 Stat. 96).
- 2. Failure of Worcester County to inform the Successful Vendor of safety violations will not release the Successful Vendor of his responsibilities.

# O. BID BOND

1. Bid Documents must be accompanied by a Bid Bond if the Vendor's total Bid amount exceeds \$100,000, payable to the County for five percent of the total amount of the bid. After the analysis of the Bid Documents the County will return Bid Bonds to all Vendors except the three lowest Responsive and Responsible Vendors. After execution of the Contract, and receipt, execution, and approval of the Successful Vendor's Payment and Performance bond, the Bid Bonds will be returned. A certified check may be used in lieu of a Bid Bond.

2. The County, at its discretion, may consider a Vendor in default if the Vendor fails to execute the Contract, in which the County will retain said Bid Bond.

#### P. PERFORMANCE AND PAYMENT BONDS

- 1. The Successful Vendor will be required to provide the County with a Performance Bond and Payment Bond if the total Contract amount exceeds \$100,000, each in the amount of one hundred percent of the Contract Price, with a corporate surety approved by the County for the faithful performance of the Contract.
- 2. The Successful Vendor will within fourteen calendar days after the receipt of the Contract furnish the County with a Performance Bond and Payment Bond in penal sums equal to the amount of the Contract Price, conditioned upon the performance by the Successful Vendor of all undertakings, covenants, terms, conditions and agreements of the Bid Documents, and upon the prompt payment by the Successful Vendor to all persons supplying labor and materials in the prosecution of the Work provided by the Bid Document. Such Bonds will be executed by the Successful Vendor and corporate bonding company licensed to transact such business in the state in which the Work is to be performed and named on the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Circular Number 570. The expense of these Bonds will be borne by the Successful Vendor. If at any time a surety on any such Bond is declared bankrupt or loses its right to do business in the State of Maryland or is removed from the list of surety companies accepted on federal bonds, Successful Vendor will within ten calendar days after notice from the County to do so, substitute an acceptable Bond(s) in such form and sum and signed by such other surety or sureties as may be satisfactory to the County.

#### Q. GUARANTEE

- The Successful Vendor shall furnish the County with a one-year guarantee of workmanship and materials, dating from time of acceptance of the project and shall make good any defects which may occur during that period.
- 2. If any special guarantees in excess of the one-year period are specified by the manufacturer, these guarantees shall take precedence over the one-year period guarantee.
- 3. Upon completion of work, and before final payment or release of retainage, the Successful Vendor shall submit, and obtain from each subcontractor, material supplier and equipment manufacture general warranties and a notarized asbestos free guarantee.

#### END OF SECTION

# **SECTION IV: BID SPECIFICATIONS**

#### A. SCOPE

1. The County is seeking bids from qualified Vendors to provide general services, planting, cutting, raking, baling, and hauling of vegetation at the Newark Effluent Spray Irrigation Site in the Newark Service Area in accordance with the terms and conditions and specifications set forth in this solicitation.

#### **B. CONTRACT PRICING**

- 1. Contract pricing will be valid for the term of two (2) years from the Notice to Proceed date, ("Contract Period").
- 2. Pricing must include all labor, materials, tools, and equipment to perform Work.
- 3. Pricing will not change during the Contract Period.

### C. CONTRACT PERIOD RENEWAL OPTION

1. The County reserves the right to extend the Contract Period for two (2) additional one-year terms, provided the Successful Vendor agrees there will be no increase in price for the additional Contract Period(s). The Successful Vendor will notify the County in writing no later than sixty (60) calendar days prior to the end of the Contract Period regarding the Successful Vendor's decision to hold prices firm for an additional year. The County will then have the option to either extend the Contract Period or re-bid.

#### D. SUMMARY

- The Successful Vendor shall provide all labor, equipment, and materials necessary to have vegetation at the Newark Spray Irrigation Site ("Site") planted, cut, raked, baled, and hauled to the Central Site Lane Landfill located at 7091 Central Site Lane, Newark, MD 21841.
- 2. The Site property is shown as a total 42.9-acre field, with 19.8 acres of treated wastewater effluent spray site, applied by a pivot irrigation system and is surrounded by buffer area of approximately 20 acres.
- 3. The buffer area is considered an area that can be used for regular crop rotation and does not receive treated effluent wastewater, nor is it irrigated. It is a Maryland Department of the Environment (MDE) Wastewater Discharge Permit requirement for the County that all planted vegetation that is harvested from the effluent spray portion of the field is to be removed from the site and cannot be stored on-site.
- 4. The Successful Vendor shall be responsible for acquiring and following their own Maryland Department of Agriculture (MDA) approved nutrient management plan for any vegetation planted in the buffer area if required by MDA regulations.
- 5. The Successful Vendor may keep any proceeds from the sale of the vegetation harvested from the buffer area but is also responsible for costs associated with planting, maintaining, and harvesting vegetation from the buffer area.
- 6. The Successful Vendor shall be responsible for complying with MDE and MDA requirements as set for in the Newark Wastewater Discharge Permit (attached).
- 7. Spraying of effluent wastewater is the primary activity on the field and shall be given priority over all other considerations. The County reserves the right to end services at any time. At the request of the Successful Vendor, we can provide contact information for the certified nutrient management planner the County has used in the past.
- 8. For use in developing proposals:
  - a. The County cannot spray treated effluent was tewater on the site between December  $15^{\rm th}$  – March  $1^{\rm st}$ .

- b. The maximum height of the vegetation in the effluent spray area is 30 inches.
- c. The Successful Vendor must complete harvesting of the vegetation within three (3) weeks of being notified by the County.
- d. There are no day/hour limitations for planting and harvesting as long as the County has been notified 72 hours in advance of activities beginning. Hauling days/times to the landfill are limited to Monday Friday, 7:30am 4pm, excluding Worcester County Government Holidays.
- e. Plantings in the effluent spray area must be a pasture mix of grasses. The Successful Vendor shall inform the County of the specific mixed used so it can be included in our nutrient management plan report.
- f. The buffer area may be planted with any vegetation except trees, invasive species, or any other vegetation that would interfere with County operations at the site.
- g. The Successful Vendor shall notify the County of what they intend to plant in the buffer. Any vegetation in the buffer may be harvested and sold for profit by the Successful Vendor.

# E. GENERAL REQUIREMENTS

1. The Successful Vendor must be licensed to perform Work in the state of Maryland.

#### F. ATTACHMENTS

- 1. Newark Wastewater Discharge Permit
- 2. Nutrient Management Plan for Newark spray site

#### G. PRE-BID CONFERENCE

1. A pre-bid meeting will be held on Wednesday, March 27, 2024 at 1:30pm at the Public Works Administration building, located at 6113 Timmons Road, Snow Hill, MD 21863.

#### H. PAYMENT

1. The County will make payment(s) to the Successful Vendor within thirty (30) calendar days from the receipt of a proper invoice for approved and accepted work performed.

#### I. QUESTIONS

1. The last day for questions is listed under Section I, Subsection C.2.

#### J. AWARD

1. The County intends to award to the lowest Responsive and Responsible Vendor meeting the specifications.

#### **END OF SECTION**

THIS AND PREVIOUS SECTIONS, OTHER THAN THE COVER PAGE, DO NOT NEED TO BE RETURNED WITH SUBMITTAL

# **FORM OF BID**

To whom it may concern:

We hereby submit our Bid Documents for "NEWARK EFFLUENT SPRAY IRRIGATION SITE MAINTENANCE" as indicated in the Bid Documents. Having carefully examined the Bid Documents and having received clarification on all items of conflict or upon which any doubt arose, the undersigned hereby requests consideration of our Vendor for award of the referenced Bid.

ITEM	DESCRIPTION	UNIT OF MEASURE	EXTENDED PRICE
1	General Site Planting – Effluent Wastewater Spray Area	Lump Sum	
2	Cutting, raking, harvesting	Per Harvest	
3	Hay Bailing:  • 4' X 5' round bales  • 3' X 4' X 8' rectangle bales  • 4' X 4' X 8' rectangle bales	Each	
4	Hauling (County Landfill, 7091 Central Site Lane Newark, MD 21841)	Per Harvest	

Subsection H.1 for more information.) (Yes)	(No) Check One.
s your company currently involved in any activ	e litigation? (Yes) (No) Check One.
s your company currently involved in any merg One.	gers or acquisitions? (Yes) (No) Check
The Vendor agrees that their bid will be good fo specifications.	r at least sixty days unless otherwise indicated in the bid
Note: This bid form must be signed by an office on considered valid by the county.	r of your company or an authorized agent for this bid to
Sign for Identification	Printed Name
Title	Email

# **REFERENCES**

List three references for which the Vendor has provided Goods/Services similar to those requested in the Bid Document within the last 12-36 months. Include contact name, address, telephone number, email address and services provided.

Company Name:		Company Name:	
Type of Project:		Type of Project:	
Address:		Address:	
Town, State,		Town, State, Zip	
Zip Code:		Code:	
Contact Person:		Contact Person:	
Telephone		Telephone	
Number:		Number:	
Email:		Email:	
Date of Service:		Date of Service:	
Company			
Name:			
Type of Project:			
Address:			
Town, State,			
Zip Code:			
Contact Person:			
Telephone			
Number:			
Email:			
Date of Service:			
Sig	n for Identification	Printed	d Name

# **EXCEPTIONS**

The undersigned hereby certifies that, except as listed below, or on separate sheets attached hereto, the enclosed Completed Bid Document covers all items as specified.

EXCEPTIONS:		
If none, write none)		
ow did you hear about this s	olicitation?	
☐ Worcester County's W	ebsite	
☐ eMaryland Marketplace	e Advantage (eMMA)	
☐ Newspaper Advertisem	ent	
☐ Direct email		
Other		
<u>Number</u>	<u>Date</u>	<u>Initials</u>

# INDIVIDUAL PRINCIPAL

Vendor Name:				
Signed By:	In the presence of:			
Address of Vendor:		Town, State, Zi	p	
Telephone No.:	Fax:	Email:		
******		**********	**********	
	<u>CO-PART</u>	NERSHIP PRINCIPAL		
Name of Co-Partners	hip:			
Address:		Town, State, Zip		
_		Fax:		
Signed By:		In the presence of:		
C' ID	Partner	T .1	Witness	
Signed By:	Partner	In the presence of:	Witness	
Signed By:		In the presence of:		
~1g	Partner		Witness	
******		******	********	
	CORPC	ORATE PRINCIPAL		
Name of Corporation	:			
Address:		Town, State, Zip		
Telephone No.:		Fax:		
Signed By:		In the presence of:		
	President		Witness	
Cor	porate Secretary			

Affix Corporate Seal

# **VENDOR'S AFFIDAVIT OF QUALIFICATION TO BID**

I HEREBY AFFIRM THAT:	
	am the
(Printed Name)	(title)
and the duly authorized representa	
	whose address is
(name of corporation)	
and that I possess the legal authority to for which I am acting.	o make this affidavit on behalf of myself and the Vendor
knowledge and of its officers, director obtaining contracts with the State or a subdivision of the State have been con or have during the course of an official under oath acts or omissions which counder the provisions of Article 27 of the state or federal government (conduct put (State "none" or, as appropriate, list and	low, neither I nor the above Vendor, nor to the best of my is or partners, or any of its employees directly involved in my county, bi-county or multi-county agency, or nevicted of, or have pleaded nolo-contendere to a charge of, all investigation or other proceeding admitted in writing or institute, bribery, attempted bribery, or conspiracy to bribe the Annotated Code of Maryland or under the laws of any prior to July 1, 1977 is not required to be reported).  In conviction, plea or admission described in paragraph 2 administrative body, the individuals involved and their tence or disposition, if any.)
representations set forth in this affiday Contract awarded and take any other a executing this affidavit in compliance Maryland, which provides that certain bribery, attempted bribery or conspira or after a hearing, from entering into c subdivisions.	be furnished to the County, I acknowledge that, if the vit are not true and correct, the County may terminate any appropriate action. I further acknowledge that I am with section 16D of Article 78A of the Annotated Code of persons who have been convicted of or have admitted to cy to bribe may be disqualified, either by operation of law contracts with the State or any of its agencies or
	Drinted Names
Sign for Identification	Printed Name

# NON-COLLUSIVE AFFIDAVIT

		being first duly sworn,
depose	es and says that:	
1.	Representative or Agent) of	, (Owner, Partner, Officer,, the
2.		ached Bid Documents; see preparation and contents of the attached Bid cumstances respecting such Bid Documents;
3.	Such Bid Document is genuine and is	not a collusive or sham Bid Document;
<ol> <li>4.</li> <li>5.</li> </ol>	employees or parties in interest, i conspired, connived or agreed, di person to submit a collusive or sh which the attached Bid Documen connection with such Work; or ha agreement or collusion, or comm person to fix the price or prices ir Vendor, or to fix any overhead, p or the Bid Document price of any conspiracy, connivance, or unlaw (Recipient), or any person interest. The price or prices quoted in the attactainted by any collusion, conspirated.	ched Bid Document are fair and proper and are not cy, connivance, or unlawful agreement on the part agents, representatives, owners, employees or
Signed	l, sealed and delivered in the presence of	f:
		By:
	Witness	Signature
	Witness	Printed Name
		Title

## **EXHIBIT A**

# WORCESTER COUNTY MARYLAND STANDARD TERMS AND CONDITIONS

The provisions below are applicable to all Worcester County ("County") contracts. These provisions are not a complete agreement. These provisions must be attached to an executed document that identifies the work to be performed, compensation, term, incorporated attachments, and any special conditions ("Contract"). If the Standard Terms and any other part of the Contract conflict, then the Standard Terms will prevail.

- 1. **Amendment**. Amendments to the Contract must be in writing and signed by the parties.
- 2. **Bankruptcy**. If a bankruptcy proceeding by or against the Contractor is filed, then:
  - a. The Contractor must notify the County immediately; and
  - b. The County may cancel the Contract or affirm the Contract and hold the Contractor responsible for damages.
- 3. **Compliance with Law.** Contractor must comply with all applicable federal, state, and local law. Contractor is qualified to do business in the State of Maryland. Contractor must obtain, at its expense, all licenses, permits, insurance, and governmental approvals needed to perform its obligations under the Contract.
- 4. **Contingent Fee Prohibition**. The Contractor has not directed anyone, other than its employee or agent, to solicit the Contract and it has not promised to pay anyone a commission, percentage, brokerage fee, contingent fee, or other consideration contingent on the making of the Contract.
- 5. Counterparts and Signature. The Contract may be executed in several counterparts, each of which may be an original and all of which will be the same instrument. The Contract may be signed in writing or by electronic signature, including by email. An electronic signature, a facsimile copy, or computer image of the Contract will have the same effect as an original signed copy.
- 6. **Exclusive Jurisdiction.** All legal proceedings related to this Contract must be exclusively filed, tried, and maintained in either the District Court of Maryland for Worcester County, Maryland or the Circuit Court of Worcester County, Maryland. The parties expressly waive any right to remove the matter to any other state or federal venue and waive any right to a jury trial.
- 7. **Force Majeure**. The parties are not responsible for delay or default caused by fire, riot, acts of God, County-declaration-of-emergency, or war beyond their reasonable control. The parties must make all reasonable efforts to eliminate a cause of delay or default and must, upon cessation, diligently pursue their obligations under the Contract.
- 8. **Governing Law**. The Contract is governed by the laws of Maryland and the County.
- 9. **Indemnification**. The Contractor must indemnify the County and its agents from all liability, penalties, costs, damages, or claims (including attorney's fees) resulting from personal injury, death, or damage to property that arises from or is connected to the performance of the work or failure to perform its obligations under the Contract. All indemnification provisions will survive the expiration or termination of the Contract.

#### 10. **Independent Contractor**.

- a. Contractor is an "Independent Contractor", not an employee. Although the County may determine the delivery schedule for the work and evaluate the quality of the work, the County will not control the means or manner of the Contractor's performance.
- b. Contractor is responsible for all applicable taxes on any compensation paid under the Contract. Contractor is not eligible for any federal Social Security, unemployment insurance, or workers' compensation benefits under the Contract.
- c. Contractor must immediately provide the County notice of any claim made against Contractor by any third party.

# 11. Insurance Requirements.

- a. Contractor must have Commercial General Liability Insurance in the amounts listed below. The insurance must include coverage for personal injury, discrimination, and civil rights violation claims. All insurance must name County, its employees, and agents as "ADDITIONAL INSURED". A copy of the certificate of insurance must be filed with the County before the Contract is executed, providing coverage in the amount of \$1,000,000 per occurrence, \$2,000,000 general aggregate, and \$500,000 for property damage.
- b. Contractor must have automobile insurance on all vehicles used in the Contract to protect Contractor against claims for damages resulting from bodily injury, including wrongful death, and property damage that may arise from the operations in connection with the Contract. All insurance must name County, its employees, and agents as "ADDITIONAL INSURED".
- c. Contractor must provide the County with a certification of Workers' Compensation Insurance, with employer's liability in the minimum amount required by Maryland law in effect for each year of the Contract.
- d. All insurance policies must have a minimum 30 days' notice of cancellation. The County must be notified immediately upon cancellation.
- e. When insurance coverage is renewed, Contractor must provide new certificates of insurance prior to expiration of current policies.
- 12. **Nondiscrimination**. Contractor must not discriminate against any worker, employee, or applicant because of religion, race, sex, age, sexual orientation, physical or mental disability, or perceived disability. This provision must be incorporated in all subcontracts related to the Contract.

# 13. Ownership of Documents; Intellectual Property.

- a. All documents prepared under the Contract must be available to the County upon request and will become the exclusive property of the County upon termination or completion of the services. The County may use the documents without restriction or without additional compensation to the Contractor. The County will be the owner of the documents for the purposes of copyright, patent, or trademark registration.
- b. If the Contractor obtains, uses, or subcontracts for any intellectual property, then it must provide an assignment to the County of ownership or use of the property.
- c. The Contractor must indemnify the County from all claims of infringement related to

the use of any patented design, device, materials, or process, or any trademark or copyright, and must indemnify the County, its officers, agents, and employees with respect to any claim, action, costs, or infringement, for royalties or user fees, arising out of purchase or use of materials, construction, supplies, equipment, or services covered by the Contract.

- 14. **Payments**. Payments to the Contractor under the Contract will be within 30 days of the County's receipt of a proper invoice from the Contractor. If an invoice remains unpaid 45 days after the invoice was received, interest will accrue at 6% per year.
- 15. **Records**. Contractor must maintain fiscal records relating to the Contract in accordance with generally accepted accounting principles. All other relevant records must be retained by Contractor and kept accessible for at least three years after final payment, termination of the Contract, or until the conclusion of any audit, controversy, or litigation related to the Contract. All subcontracts must comply with these provisions. County may access all records of the Contractor related to the Contract.

#### 16. Remedies.

- a. **Corrections of errors and omissions**. Contractor must perform work necessary to correct errors and omissions in the services required under the Contract, without undue delays and cost to the County. The County's acceptance will not relieve the Contractor of the responsibility of subsequent corrections of errors.
- b. **Set-off**. The County may deduct from any amounts payable to the Contractor any back-charges, penalties, or damages sustained by the County, its agents, or employees caused by Contractor's breach. Contractor will not be relieved of liability for any costs caused by a failure to satisfactorily perform the services.
- c. **Cumulative**. These remedies are cumulative and without waiver of any others.

#### 17. Responsibility of Contractor.

- a. The Contractor must perform the services with the standard of care, skill, and diligence normally provided by a Contractor in the performance of services similar the services.
- b. Notwithstanding any review, approval, acceptance, or payment for the services by the County, the Contractor will be responsible for the accuracy of any work, design, drawings, specifications, and materials furnished by the Contractor under the Contract.
- c. If the Contractor fails to conform with subparagraph (a) above, then it must, if required by the County, perform at its own expense any service necessary for the correction of any deficiencies or damages resulting from the Contractor's failure. This obligation is in addition to any other remedy available to the County.
- 18. **Severability/Waiver**. If a court finds any term of the Contract to be invalid, the validity of the remaining terms will not be affected. The failure of either party to enforce any term of the Contract is not a waiver by that party.
- 19. **Subcontracting or Assignment**. The Contractor may not subcontract or assign any part of the Contract without the prior written consent of the County. The County may withhold consent for any reason the County deems appropriate.

- 20. **Termination**. If the Contractor violates any provision of the Contract, the County may terminate the Contract by written notice. All finished or unfinished work provided by the Contractor will, at the County's option, become the County's property. The County will pay the Contractor fair compensation for satisfactory performance that occurred before termination less the amount of damages caused by the Contractor's breach. If the damages are more than the compensation payable to the Contractor, the Contractor will remain liable after termination and the County can affirmatively collect damages.
- 21. **Termination of Contract for Convenience**. Upon written notice, the County may terminate the Contract when the County determines termination is in the County's best interest. Termination for convenience is effective on the date specified in the County's written notice. The County will pay for reasonable costs allocable to the Contract for costs incurred by the Contractor up to the date of termination. But the Contractor will not be reimbursed for any anticipatory profits that have not been earned before termination.
- 22. **Termination of Multi-year Contract**. If funds are not available for any fiscal period of the Contract after the first fiscal period, then the Contract will be terminated automatically as of the beginning of unfunded fiscal period. Termination will discharge the Contractor and the County from future performance of the Contract, but not from their rights and obligations existing at the time of termination.
- 23. **Third Party Beneficiaries**. The County and Contractor are the only parties to the Contract and are the only parties entitled to enforce its terms. Nothing in the Contract gives any benefit or right to third persons unless individually identified by name and expressly described as intended beneficiaries of the Contract.
- 24. **Use of County Facilities**. Contractor may only County facilities that are needed to perform the Contract. County has no responsibility for the loss or damage to Contractor's personal property which may be stored on County property.
- 25. **Whole Contract**. The Contract, the Standard Terms, and attachments are the complete agreement between the parties and supersede all earlier agreements, proposals, or other communications between the parties relating to the subject matter of the Contract.



Larry Hogan, Governor Boyd K. Rutherford, Lt. Governor

Ben Grumbles, Secretary Horacio Tablada. Deputy Secretary

# NOV 2 0 2018

**CERTIFIED MAIL** 

John S. Ross, Deputy Director Worcester County Dept. of Public Works 1000 Shore Lane Berlin, MD 21811

RE: State Discharge Permit No. 18-DP-3851

Newark Wastewater Treatment Plant

Dear Mr. Ross:

Enclosed is the above referenced discharge permit with the effective date indicated on the cover page. The permittee is responsible for complying with all permit conditions. Therefore, you are advised to read the permit carefully and to become thoroughly familiar with the requirements.

The Maryland Department of the Environment requires NetDMR for filing your required Discharge Monitoring Report (DMR) forms. NetDMR is a freely available Web based tool that allows NPDES permittees to electronically sign and submit their DMRs to EPA via a secure internet connection. NetDMR is designed to improve data quality, reduce reporting liabilities, save paper, and provide cost savings. It allows participants to discontinue mailing in hard copy forms under 40 CFR 122.41 and 403.12. For more information go to the EPA website (<a href="www.epa.gov/netdmr">www.epa.gov/netdmr</a>) or call the MDE Water Management Administration, Compliance Program, at <a href="410-537-3510">410-537-3510</a> and ask to speak to a NetDMR coordinator.

As indicated in Condition II.C.2 of your permit, before you can submit official DMRs using NetDMR you must attend a training Webinar and successfully set-up and submit test monitoring results electronically. While paper DMR reporting is being phased out, those who are unable to use the NetDMR system may continue to submit paper copies after applying for a waiver (see Condition II.C.2.b). Enclosed are (EPA No. 3320-1) Discharge Monitoring Report (DMR) forms, which, unless you are already using NetDMR, must be completed for each reporting period and submitted to the Department in accordance with the requirements of the permit. Copies of these forms can also be downloaded from the Department's website ((http://cm.gy/MD-DMRForm) Using the latest version of Adobe Acrobat Reader, the DMR form can be completed from a keyboard and printed for mailing to the Department.

You will also find enclosed a copy of the Code of Federal Regulations, 40 CFR Part 136,

"Guidelines Establishing Test Procedures for the Analysis of Pollutants." Unless otherwise specified, these guidelines are to be used for the analyses required by this permit. The most current version of 40 CFR Part 136 can be found online at EPA's website. The link is: www.epa.gov/epahome/cfr40.htm.

Please note that the permit authorizes wastewater discharge to groundwaters of the State; discharges to surface waters are prohibited. Please direct all future correspondence regarding permit compliance to the following address:

Compliance Program
Water and Science Administration
Maryland Department of the Environment
1800 Washington Boulevard, Suite 420
Baltimore, MD 21230-1708

If you have any questions, please do not hesitate to call Ching-Tzone Tien, Deputy Program Manager, Wastewater Permits Program at (410) 537-3662.

Sincerely,

D. Lee Currey, Director

Water and Science Administration

Vuguna & Kearneyffor

Enclosures

cc: Eastern Inspection Division Chief

Bob Mitchell



Larry Hogan, Governor Boyd K. Rutherford, Lt. Governor

Ben Grumbles, Secretary Horacio Tablada, Deputy Secretary

### **GROUND WATER DISCHARGE PERMIT**

Permit Number:

18-DP-3851

Effective Date:

January 1, 2019

**Expiration Date:** 

December 31, 2024

Pursuant to the provisions of Title 9 of the Environment Article, <u>Annotated Code of Maryland</u> and regulations promulgated thereunder, the Department of the Environment, hereinafter referred to as "the Department", hereby authorizes

County Commissioners of Worcester County, Maryland 1 West Market Street, Room 103 Snow Hill, Maryland 21863

hereinafter referred to as "Permittee", to discharge treated wastewater by spray irrigation as described herein from:

Newark Wastewater Treatment Plant 8025 Worcester Highway Newark, Maryland 21841

to ground water of the State in accordance with the following special and general conditions, including the attached maps made a part hereof

# I. Special Conditions

# A. Waste and Wastewater Limitations

1. The Permittee is authorized to discharge secondary treated wastewater via spray irrigation to groundwaters of the State. The Permittee is not authorized to discharge any treated or untreated industrial wastewaters to waters of the State.

2.. Prior to discharge to the the spray irrigation site, all wastewaters shall be treated to produce an effluent which

does not exceed the following maximum limitations.

	Effluent Limitations					
Parameter Code (STORET)	Parameter Description	Loading		Concentration	Monitoring Frequency	Sample Type
		Yearly Average <sup>(2)</sup>	Monthly Average	Monthly Average	8	
00310	BOD₅	N/A	N/A	70 mg/l	Weekly	Grab (3)
00530	Suspended Solids	N/A	N/A	90 mg/l	Weekly	Grab (3)
74055	Fecal Coliform (4)	N/A	N/A	200 MPN/100 ml	Weekly	Grab ( <sup>3</sup> )
00400	pН	N/A	N/A	$6.5 - 9.5^{(5)}$	Daily	Grab ( <sup>3</sup> )
50050	Flow	57,000 GPD	(1)		Continuous	Recorded
00600	Total Nitrogen	N/A	N/A	(1)	Weekly	

(1) Monitoring and reporting are required without limits.

- (2) The yearly average flow is to provide operational flexibility to accommodate the water demand variation of vegetation.
- (3) Grab samples shall be obtained from the effluent line just prior to spray irrigation.
- (4) The fecal coliform shall be determined as a geometric mean of the monthly data.
- (5) pH 6.5 is a minimum limit and pH 9.5 is a maximum limit at all times.

- 3. Groundwater samples taken from six (6) groundwater monitoring wells per requirements of Section I.D..shall be monitored by the permittee according to the following limitations:
  - a. The discharge of the wastewater authorized in this permit shall not cause groundwater quality to exceed the limitations listed below, as measured in the designated down gradient monitoring wells (MW3, MW4, MW5 and MW6 shown on Map B). The Table below includes limitations based on the drinking water standards for NO<sub>3</sub>, NO<sub>2</sub>, Total Dissolved Solids, Chloride, and Fecal Coliform.

Parameter Code (STORE T)	Parameter Description	Concentration	Monitoring Frequency	Sample Type
		Yearly Average		
00400	pН	(1)	Once every 3 months	Grab
00600	Total Nitrogen TKN+NO <sub>2</sub> +NO <sub>3</sub> )	10 mg/l	Once every 3 months	Grab
00615	NO <sub>2</sub> Nitrite Nitrogen	1 mg/l	Once every 3 months	Grab
00620	NO <sub>3</sub> Nitrate Nitrogen	10 mg/l	Once every 3 months	Grab
00625	TKN	(1)	Once every 3 months	Grab
00650	PO <sub>4</sub> Total Phosphate	(1)	Once every 3 months	Grab
00940	Chloride	250 mg/l	Once every 3 months	Grab
70295	Total Dissolved Solids	500 mg/l	Once every 3 months	Grab
74055	Fecal Coliform	Non-Detect	Once every 3 months	Grab

- (1) Monitoring required without limitation.
- (2) For any reported exceedance at the downgradient well, if the average groundwater quality in either background upgradient well (MW1 and MW2) or background downgradient wells (MW3, MW4, MW5 and MW6) exceeds the groundwater
- discharge standards, the Department may evaluate whether a violation exists on a case by a case basis.
- (3) The groundwater quality limitations are not applicable to the upgradient wells MW1 and MW2 as shown on Map B.
- b. For other parameters not included in (a) above, the discharge of the treated wastewater, which is authorized in this permit, shall not cause an exceedance of the groundwater quality standards adopted by the Department of the Environment in COMAR 26.04.01, and 26.08.02.09.C. For any exceedance, if the average groundwater quality in the background upgradient wells exceeds the groundwater discharge standards, the Department may evaluate whether a violation exists on a case by a case basis.

Perl.... No. 18-DP-3851 Page No. 4

# B. <u>Effluent and Groundwater Monitoring</u>

- 1. Measurements and Reporting Requirements
  - a. Discharge Monitoring Reports\*

Discharge monitoring results obtained each month shall be summarized on a Discharge Monitoring Report form (EPA No. 3320-1). Reports shall be submitted to the Department postmarked no later than the 28th day of the month following the reporting month. One signed copy of these reports shall be submitted to:

Attention: Discharge Monitoring Reports
WSA – Compliance Program
Maryland Department of the Environment
1800 Washington Boulevard, STE-425
Baltimore, MD.21230-1708

b. Monthly Operating Reports\*

The permittee shall submit monthly operating reports on a form supplied or approved by the Inspection and Compliance Program. Reports shall be submitted to the Inspection and Compliance Program postmarked no later than 28th day of the month following the reporting month.

c. Groundwater Monitoring Reports (GMRs)\*

Groundwater monitoring data required by this permit under I.A.3 shall be summarized on a Discharge Monitoring report form supplied by the Compliance Program. The yearly report shall be submitted on or before the 28<sup>th</sup> day of the month following the end of each calendar year to the address shown on I.B.1a.above. The permittee shall report any violations of the groundwater quality standards in accordance with General Condition II.A.3.

\* The Permittee shall submit the reports electronically via NetDMR.

# 2. Definitions

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- a. The monthly average shall be determined by the summation of all the required measurements divided by the number of days during the month when the measurements were made. The yearly average shall be determined by the yearly accumulated flow divided by 365 days. The fecal coliform shall be determined as a geometric mean of the monthly data.
- b. The weekly average shall be determined by the summation of all the required measurements divided by the number of days during the week when the measurements were made.
- c. A grab sample is an individual sample collected in less than 15 minutes. Grab samples for pH must be analyzed within 15 minutes of sample collection.

Per.... No. 18-DP-3851 Page No. 5

The analytical methods used shall conform to test procedures for the analysis of pollutants as identified in "Guideline Establishing Test Procedures for the Analysis of Pollutants" 40 CFR Part 136, as amended.

# 4. Monitoring Equipment Maintenance

The Permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation to insure accuracy of measurements.

# 5. Data Recording Requirements

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For each measurement or sample taken pursuant to the requirements of this permit, the Permittee shall record the following information:

- a. The exact place, date, and time of sampling:
- b. The dates the analyses were performed;
- c. The person(s) who performed the analyses;
- d. The analytical techniques or methods used; and
- e. The results of all required analyses.

# 6. Records Retention

All records and information resulting from the monitoring activities required by this permit, including all records of analyses performed, calibration and maintenance of instrumentation and original recordings from continuous monitoring instrumentation shall be retained for a minimum of three years. This period may be extended during the course of litigation, or when so requested by the Department.

# C. Land Application Requirements and Limitations

- 1. The Permittee shall apply the treated wastewaters by spray irrigation onto the 22 acres initial and reserve areas outlined on the attached Maps B and C. The reserve area (Zone 3a) is for future use in the event application rates need to be adjusted.
- 2. At no time shall spray irrigation be conducted on areas with bare unvegetated soils.
- 3. Irrigation of treated wastewater shall not take place during periods of precipitation, high winds, freezing conditions, or saturated soil. The Permittee shall provide a storage facility designed to hold treated wastewater during periods when irrigation cannot take place. The storage facility shall be capable of containing wastewater generated during no less than 60 days of the winter flow. The storage facility shall be sealed or constructed to prevent the direct seepage of stored waters into groundwaters beneath the site. The permittee shall ensure it has sufficient effluent storage capacity to allow the discharge to be consistent with the Department of Agriculture regulations at COMAR 15.20.07.02, Supplement No. 7 (May 2012) which was amended on 12/13 /2016 to prohibit Winter Application from December 16 through February 28 of the following year.

- 4. The Permittee shall provide adequate means to prevent spray droplets from entering adjacent properties either by direct application or wind carry-over. These means shall include a buffer zone that is:
  - a. At least 200 feet from the wetted perimeter of the spray irrigation site to property lines in open area or 100 feet in area with tree buffer; and
  - b. At least 500 feet from the wetted perimeter of the spray irrigation site to houses or other occupied structures in open area or 250 feet in area with tree buffer.
- 5. Daily logs of each disposal area relative to the application of treated effluent shall be kept by the plant operator. Subjects to be included in the log are:
  - a. area(s) or section(s) under irrigation;
  - b. application rates (hourly and weekly);
  - c. effect of irrigation on vegetation;
  - d. instances of ponding or runoff; and
  - e. weather conditions.

The log shall be kept at the waste treatment facility and be available for inspection by the Department personnel upon request.

- 6. The Permittee shall develop a "Manual of Operation and Maintenance". The manual shall clearly state how the entire treatment facility shall be managed to insure satisfactory treatment and operation. The manual shall include:
  - a. operating and maintenance procedures involving the sewage treatment facility and spray application equipment;
  - b. testing procedures to determine acceptable maximum application rates and cycles;
  - c. monitoring and sampling procedures as required in this permit; and
  - d. personnel requirements.

The manual shall be submitted to the Department for approval within three months from the effective date of this permit.

- 7. Installations of the storage ponds shall be in compliance with all applicable State and county guidelines.
- 8. The weekly hydraulic loading rate shall be limited to two inches per week (annual average). Excessive irrigation resulting in surface runoff and ponding is prohibited.
- 9. Within 6 months of the effective date of this permit, the Permittee shall submit a nutrient management plan (NMP) to the Department. The NMP shall be prepared by a nutrient management consultant licensed by the State of Maryland in accordance with COMAR 15.20.07 and 15.20.08. and describe how nitrogen will be removed via vegetative uptake in minimizing the nitrogen leaching to the groundwater system. Operation of the spray irrigation system shall conform with NMP.

### D. Monitoring Requirements of the Land Application System

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- 1. The wastewater treatment plant and the spray irrigation system shall be operated by a Maryland State Certified Operator in accordance with the provisions of COMAR 26.06.01 and consistent with the approved operation and maintenance manual. In order to ensure that the Operator is proficient in the operation of the spray irrigation system, the operator shall take required training courses at a frequency approved by the MD Board of Waterworks and Waste Systems Operator. This training shall be specific to the operation of the wastewater system in addition to any other training requirements of the operator's class.
- 2. The Permittee is responsible for the installation, operation and maintenance of six (6) ground water monitoring wells. These wells are to be used for obtaining grab or pumped samples of the ground water. Locations of the monitoring wells are shown on attached map B.
  - a. The monitoring wells shall be installed according to the following specifications:
    - (1) Installation of the wells shall be by a licensed Maryland Well Driller in accordance with the following:
      - i. Schedule 40 P.V.C. or better quality well casing, 4-inch diameter shall be used.
      - ii. Commercial well screen or neatly slotted well casing, approved by the Department shall be used in conjunction with a gravel pack.
      - iii. The screen, or slotted casing, shall extend from the seasonally high water table downward approximately 15 feet.
      - iv. The wells shall be grouted from near the top of the screen to ground surface.
      - v. The wells shall be equipped with locking watertight removal caps.
    - (2) The well driller selected to install the observation wells shall obtain all necessary State and local well drilling permits.
  - b. So that the background quality of the ground water may be determined, the monitoring wells shall be installed in the irrigation areas at least twelve (12) months prior to the start-up of the spray irrigation system.
    - (1) The Permittee shall take and analyze one sample each month from each of the monitoring wells during the twelve month period before start-up of the spray irrigation system.
    - (2) Water samples may be obtained by either pumping or bailing the monitoring wells. Prior to taking the sample, a volume of water equal to 300% of the wetted volume of the casing and screen shall be removed.

- (3) The water sample shall be analyzed for the parameters shown in Section I.A.3.a.
- c. The Permittee shall take and analyze one water sample every three months from each monitoring well after the start-up of the spray irrigation system. Samples shall be taken as outlined in I.D.2 b.(2), and analyzed for the same parameters listed in I.A.3 a..

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### A. Management Requirements

### 1. Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant in toxic amounts, as determined by the Department during the effective period of this permit, is prohibited. Any anticipated facility expansion, production increases, or process modifications which will result in new, different, or increased discharge of pollutants shall be reported by the Permittee by submission of a new application at least one year prior to the commencement of the changed discharge or, if such changes will not violate the effluent limitations specified in this permit, by notice to the Department. Following such notice, the permit may be modified by the Department to specify and limit any pollutants not previously limited.

### 2. Operational Restrictions

The operation of a waste treatment or disposal facility shall at no time create: (1) a direct discharge to surface waters of the State; (2) any standing or ponded water condition on adjacent properties; or (3) a persistent standing or ponded water condition on the Permittee's property, excluding actual storage lagoons.

### 3. <u>Noncompliance Notification</u>

- a. If, for any reason, the Permittee does not comply with or will be unable to comply with the special and general conditions of this permit, the Permittee shall, within 24 hours, notify the Department by telephone at (410) 537-3510 during work hours and at (866) 633-4686 during evenings, weekends and holidays and provide the Department with the following information in writing within five days of such notification:
  - i. a description of the noncompliance, including its impact upon the receiving ground or surface waters;
  - ii. cause of noncompliance;
  - iii. anticipated time the condition of noncompliance is expected to continue or if such condition has been corrected, the duration of the period of noncompliance;
  - iv. steps taken by the Permittee to reduce and eliminate the noncompliance discharge;
  - v. steps to be taken by the Permittee to prevent recurrence of the condition of noncompliance; and
  - vi. a description of the accelerated or additional monitoring by the Permittee to determine the nature and impact of the noncompliance.

- 3. <u>Noncompliance Notification continued.....</u>
  - b. In the case of any discharge subject to any toxic pollutant effluent standard under Section 307 (a) of the Clean Water Act of 1987, the Department shall be notified within 24 hours of the time the Permittee becomes aware of the noncomplying discharge. Notification shall include information as described in paragraph 3.a. above. If such notification is made orally, a written submission must follow within five days of the time the Permittee becomes aware of the noncomplying discharge.

### 4. <u>Facility Operation and Quality Control</u>

All waste collection, control, treatment, monitoring, and disposal facilities shall be maintained in good working order and operated at all times as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants.

### 5. Adverse Impact

The Permittee shall take all reasonable steps to minimize any adverse impact to the ground water quality resulting from noncompliance with any limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

### 6. Removed Substances

The Permittee shall comply with all existing State and federal laws and regulations that apply to sewage sludge monitoring requirements and utilization practices, and with any regulations promulgated pursuant to Environment Article, Section 9-230 et seq. The Permittee is responsible for ensuring that its sewage sludge is utilized in accordance with a valid sewage sludge utilization permit issued by the Department.

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### A. <u>Management Requirements</u> continued.....

### 7. Bypassing

Any bypass of treatment facilities necessary to maintain compliance with the terms and conditions of this permit is prohibited unless:

- a. the bypass is unavoidable to prevent loss of life, personal injury or substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources; and
- b. there are no feasible alternatives; and
- c. the Department is notified within 24 hours (if orally notified, then followed by a written submission within five days of the Permittee's becoming aware of the bypass). Where the need for a bypass is known (or should have been known) in advance, this notification shall be submitted to the Department for approval at least ten days before the date of bypass; and
- d. the bypass is allowed under conditions determined by the Department to be necessary to minimize adverse effect; and
- e. there is an existing flow of any such diversion or bypass, then a schedule for the elimination of such shall be included in a schedule of compliance.

### B. Responsibility

### 1. Right of Entry

The Permittee shall allow the Secretary of the Department, or authorized representatives, upon the presentation of credentials:

- a. to enter upon the Permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit;
- b. to have access to and to copy, at reasonable times, any records required to be kept under the terms and conditions of this permit;
- c. to inspect, at reasonable times, any monitoring equipment or monitoring method required in this permit;
- d. to sample at reasonable times any discharge of pollutants;
- e. to inspect, at reasonable times, any collection, treatment, pollution management or discharge facilities required under this permit; or
- f. to drill and install monitoring wells for the purpose of obtaining samples of the groundwater.

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### B. Responsibility continued.....

### 2. Property Rights/Compliance with Other Requirements

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, State or local laws or regulations.

### 3. Availability of Reports

Except for data determined to be confidential under COMAR 26.08.04.01.F., all reports, plans, maps, or other specifications submitted for review shall be available for public inspection at the Department.

### 4. <u>Transfer of Ownership or Control</u>

This permit is not transferable to any person except after notice to the Department. The Department may require modification or revocation and re-issuance of the permit to change the name of the Permittee and may incorporate other requirements as may be necessary. The written notice to the Department shall include at least the following information:

- a. the legal name, address and telephone number of the new owner or operator;
- b. a statement, signed by the new owner or operator, indicating that the new owner or operator has read, understands and accepts the terms and conditions of the existing permit; and
- c. the date that the new owner or operator took control or expects to take control of the facility. In the event that new ownership or control is expected in the future, the current Permittee and the anticipated new owner or operator both must sign the written notice to the Department.

### 5. Reapplication for a Permit

At least one year before the expiration date of this permit, unless permission for a later date has been granted by the Department, the Permittee shall submit an application for renewal of the permit or notify the Department of the intent to cease discharging by the expiration date. In the event that a timely and sufficient reapplication has been submitted and the Department is unable, through no fault of the Permittee, to issue a new permit before the expiration date of this permit, the terms and conditions of this permit are automatically continued and remain fully effective and enforceable.

### 6. <u>Permit Modification</u>

A permit may be modified by the Department upon the written request of the Permittee and after notice and opportunity for a public hearing in accordance with the reasons set forth in COMAR 26.08.04.10.

Permit No. 18-DP-3851 Page No. 13

### II. GENERAL CONDITIONS

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### B. Responsibility continued.....

### 7. Permit Modification, Suspension, or Revocation

A permit may be modified, suspended, or revoked by the Department in the event of a violation of the terms or conditions of the permit, or federal or State laws and regulations and in accordance with the procedures set forth in COMAR 26.08.04.10.

### 8. <u>Civil and Criminal Liability</u>

Environment Article, Sections 9-342 and 9-343 provide that any person who violates a permit condition implementing Environment Article, Section 9-322 et seq. is subject to a civil penalty in an amount not to exceed \$10,000 per day for such violation; and to criminal penalties of a \$25,000 fine or imprisonment not exceeding one year or both for a first offense, and a \$50,000 fine or imprisonment not exceeding two years or both for subsequent offenses.

### 9. Waterway Construction and Obstruction

This permit does not authorize the construction or placing of physical structures, facilities, debris, or the undertaking of related activities in any waters of the State including the 100-year flood plain.

### 10. Severability

If any provision of this permit shall be held invalid for any reason, the remaining provisions shall remain in full force and effect, and such invalid provisions shall be considered severed and deleted from this permit.

### 11. Nuisance and Odor Restrictions

The facility shall be operated at all times to prevent offensive odors from escaping the facility boundaries and to prevent the facility from becoming a public nuisance. In the event that prolonged or excessive odors are noted outside of the property line, the Permittee shall take actions necessary to remedy the problem.

### 12. Action on Violations

The issuance or reissuance of this permit does not constitute a decision by the State not to proceed in any administrative, civil or criminal action for any violations of State law or regulations occurring prior to the issuance or reissuance of this permit, nor a waiver of the State's right to do so.

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### C. MONITORING AND REPORTING

### 1. REPRESENTATIVE SAMPLING

Samples and measurements, if required herein, shall be taken at such times as to be representative of the quantity and quality of the discharges during the specified monitoring periods.

### 2. SUBMISSION OF REPORTING-MONITORING RESULTS VIA NETDMR

### a. NetDMR

Monitoring results obtained during each month shall be reported using NetDMR. Results shall be submitted to the Department no later than the 28th day of the month following the end of the reporting month.

NetDMR is a freely available U.S. EPA tool allowing permittees to submit monitoring reports electronically via a secure Internet application. You must apply for access to NetDMR at <a href="https://www.epa.gov/netdmr">www.epa.gov/netdmr</a> and register for a NetDMR Webinar.

Before you can submit official DMRs using NetDMR you must attend a training Webinar and successfully set-up and submit test monitoring results electronically. You must complete all requirements to gain access to NetDMR within six (6) months of authorization under this permit, including applying for access within one (1) month of being registered.

Hard copies of monitoring results obtained before the permittee is granted access to NetDMR shall be submitted postmarked no later than the 28th of the month following the end of the reporting month. Signed copies of the results shall be submitted to the Department at the following address:

Attention: Discharge Monitoring Reports
Compliance Program
Water and Science Administration
Maryland Department of the Environment
1800 Washington Boulevard, STE-425
Baltimore, MD 21230-1708

NetDMR is designed to improve data quality, reduce reporting liabilities, save paper, and provide cost savings. It allows participants to discontinue mailing in hard copy forms. For more information call the MDE Water and Science Administration, Compliance Program, at 410-537-3510 and ask to speak to a NetDMR coordinator.

### b. NetDMR Waiver Request

The permittee may be eligible for a temporary waiver by MDE from electronic reporting requirements if the permittee has no current internet access and is physically located in a geographic area (i.e., zip code) that is identified as under-served for broadband internet access in the most recent National Broadband Map from the Federal Communications Commission (FCC); or if the permittee can demonstrate that such electronic reporting of the monitoring data and reports would pose an unreasonable burden or expense to the permitted facility. Waiver requests must be submitted in writing to the Department for written approval at least 120 days prior to the date the permittee would be required under his permit to begin using NetDMR. This demonstration shall be valid for one (1) year from the date of the Department approval and shall thereupon expire. At such time, DMRs and reports shall be submitted electronically to the Department unless the permittee submits a renewed waiver request and such request is approved by the Department. All hardcopy DMRs shall be sent to the following address:

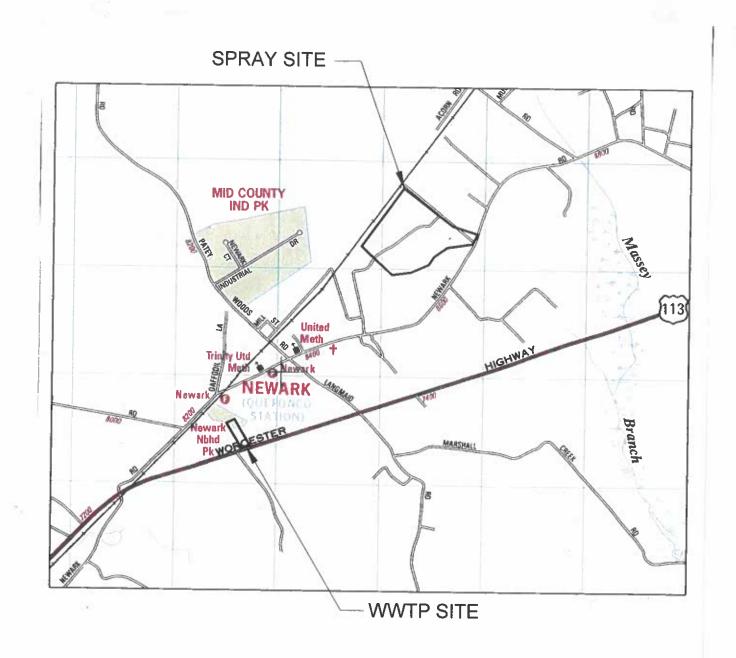
Permit No. 18-DP-3851 Page No. 15

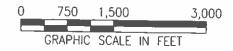
Attention: Discharge Monitoring Reports
Compliance Program
Water and Science Administration
Maryland Department of the Environment
1800 Washington Boulevard, STE-425
Baltimore, MD 21230-1708

D. Lee Currey, Director

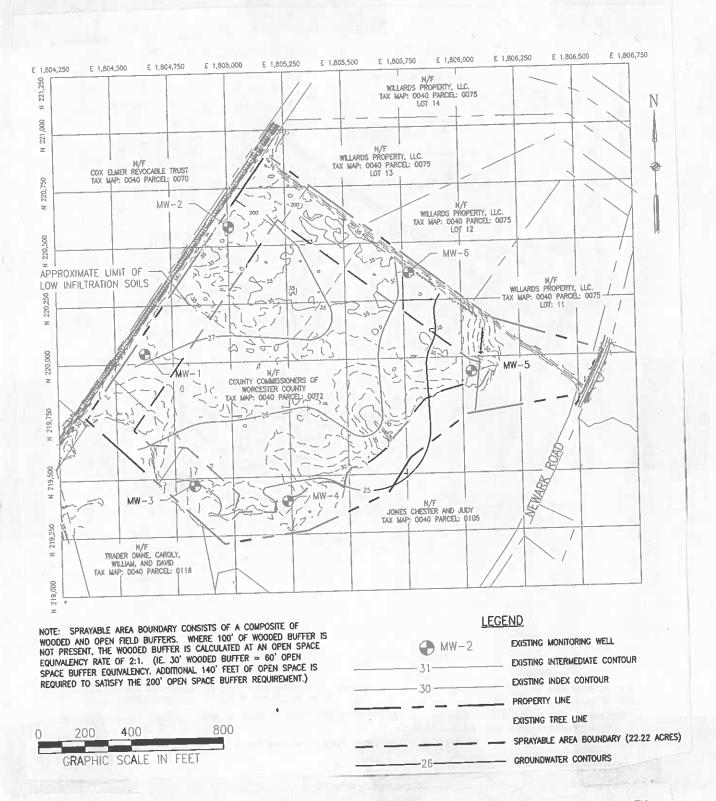
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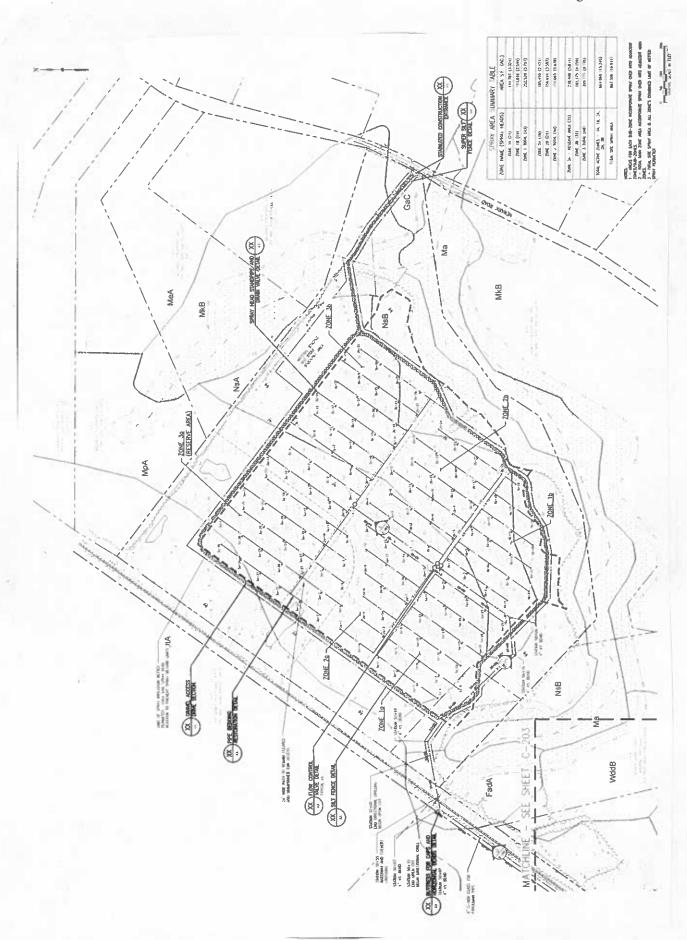




Map A. Site Map



Map B. Locations of Monitoring Wells and Spray Irrigation Site



Map C. Locations of Sprinklers and Reserve Area (Zone 3a)

## NUTRIENT MANAGEMENT PLAN for

### **NEWARK WASTEWATER SPRAY FIELD**

**Dominic Ross** 

Wastewater Supervisor
Worcester County Water and Wastewater
1000 Shore Lane
Berlin, MD 21811

BRIEF DESCRIPTION OF OPERATION: Worcester County Department of Public Works operates a municipal wastewater treatment plant for Newark, MD located on 4.2 acres on Newark Rd, Newark in Worcester Co., MD. Treated wastewater effluent is pumped underground and applied via an overhead pivot spray system on 19.8 acres of a 42.9-acre field located at 8677 Newark Rd. Newark, MD. Worcester County Department of Public Works, Water and Wastewater Division, will oversee the field management and crop production. This nutrient management plan is required by the Maryland Dept. of Environment to update municipal ground water discharge permit #18-DP-3851 for Newark, MD wastewater treatment plant.

DATE OF PLAN: August 31, 2023

**DURATION OF PLAN**: August 31, 2023--August 10, 2026 An updated nutrient management plan will be needed by August 11, 2026. The plan duration is limited by the soil analysis date as plan expiration date cannot exceed 3 years from soil analyses date.

**SOIL SAMPLING AND TESTING**: Soil samples were collected by Dominic Ross and analyzed at AgroLab on August 11, 2023.

WASTEWATER SAMPLING AND TESTING: Worcester County Public Works Department staff collected the effluent samples which were analyzed at Town of Ocean City Laboratory Services, 6405 Seabay Drive, Ocean City, MD 21842.

WASTEWATER MANAGEMENT: The Newark wastewater treatment plant consists of a 3.5-million-gallon capacity aerated treatment lagoon divided into two sections on 2.75 acres of land with an average depth of 4 feet. The first section receives the municipal wastewater which then goes to the second section where it is aerated. As the wastewater is being pumped out of the lagoon, it is injected with chlorine and then pumped underground approximately 1.5 miles to a 42.9-acre field on Newark Rd where it can be applied to a 19.8 acres spray field via an overhead pivot spray system.

Spray zones are delineated between the irrigation wheels of the pivot system. The first three zones are reserved for overflow use or for when event application rates need to be adjusted; the other 4 unreserved zones are for normal use.

From December 16<sup>th</sup> until March 1<sup>st</sup> each year, treated effluent cannot be applied to fields and thus is stored in the fill lagoon. On March 1<sup>st</sup>, underground pumping of effluent to the Newark spray field resumes. From March 1, 2021 through July 31, 2023, 19,254,459 gallons of effluent were pumped out of the lagoon for an average of 30,758 gallons per day. For this

nutrient management plan, the projected amount of effluent shown possibly being land applied is the total of 2,393,460 gallons pumped as of July 31<sup>st</sup> plus potentially 4,213,846 gallons estimated for August 1 through December 15, 2023 for an approximate total of 6,607,306 gallons or18,102 gallons per day and 333,702 gallons per acre for 2023.

Fescue hay at a yield goal of 3 tons per acre requires 150 lbs. per acre of nitrogen. At the above application rate of treated effluent, a total of 27 lbs. per acre of nitrogen would be applied annually leaving a deficit of approximately 123 lbs. of nitrogen needed for best crop production. Vegetative uptake would prevent nitrogen leaching.

Since day-to-day nutrient amounts vary, 13 effluent sample test results from November and December 2022 as well as April, June and July 2023 were averaged, and those averages used to calculate nitrogen, phosphate, and potash application amounts for this plan. Worcester Co Water and Wastewater may need to report total pounds of each of these nutrients applied during the previous calendar year on an Annual Implementation Report to the Maryland Dept. of Agriculture.

The spray field is planted with pasture mix seed for hay production (55% Tall Fescue, 20% Orchard grass, 15% Ryegrass and 10% Clover). When cut, the hay will be taken to the landfill for erosion control on slopes and banks as well as hydroseeding use. Some parts of the non-spray area could be affected by irrigation spray at end of the spray arm.

**BASIS OF RECOMMENDATIONS**: Nutrient recommendations are both nitrogen & phosphorus based, as required by State of Maryland regulations.

NUTRIENT APPLICATION EQUIPMENT CALIBRATION: Application equipment must be calibrated to estimate actual application rates for all nutrient applications. Equipment must be recalibrated when equipment settings, consistency or density of a product varies from the original calibration. Documentation of the calibrations must be recorded and made available during an implementation review conducted by MDA. This documentation must include any of the necessary calculations to demonstrate the nutrient rate that was determined.

**SOURCE OF YIELD GOAL INFORMATION:** Standard accepted yield goal of 3 tons per acre for hay was used.

**TIMING**: Nutrient application is prohibited from December 16<sup>th</sup> until March 1<sup>st</sup> or when ground is hard-frozen greater than two inches, the ground is covered with snow greater than one inch or during periods of high winds, precipitation or freezing conditions.

BEST MANAGEMENT PRACTICES: Worcester Co Water and Wastewater Division is following guidelines as required by Maryland Dept of Environment Groundwater Discharge Permit. MDE permit does not allow spray irrigation to be applied on any bare unvegetated soils. Spray application is halted during crop harvesting. Buffer zones which prevent spray droplets from entering adjacent properties by wind or direct application must be at least 200 feet from the wetted irrigation perimeter in open areas or 100 feet in tree buffered areas. Approximate 200 feet of wide grass areas buffer both the northern and western sides of the spray perimeter. Buffers on eastern and southern sides of spray perimeter include grass and forest areas together that are greater than 200 feet wide. Excessive irrigation resulting in surface runoff or ponding is prohibited. Six monitoring wells around the property are checked quarterly by Worcester Co.

wastewater staff for effluent effects on ground water and are reported to Maryland Dept of Environment.

**UM-PHOSPHORUS MANAGEMNT TOOL (UM-PMT);** Soil analysis for 1 zone and 2 zone are above University of Maryland FIV-P ratings of 150 or greater. PMT determination rating for both zones was low so up to 33,702 gallons of wastewater effluent per acre may be applied annually.

**RECORD KEEPING REQUIREMENTS**: The Water Quality Improvement Act requires that producers keep records on generation and usage or disposal of organic or commercial fertilizer application materials. Required records would include name of applicator, size of area fertilized, date and rate of nutrient application, total amount and analysis of any fertilizer product used as well as legible copy of fertilizer label. Worcester Co. reports monthly to Maryland Dept. of Environment amounts of discharge and land application.

Field Identification Summary

Field Name	Tax Account ID  Numbers	Watershed Location Code	Total Acres
Newark Spray Field	24-04-00854	0208 Newport Bay	42.9
	24-04-00846		

### **Plan Update Requirements**

As stated in the cover sheet, this plan was developed for use from

### August 31, 2023—August 10, 2026

The following is a list of situations that will impact whether the attached Nutrient Management Plan will need updating **before** the end of the time period for which the plan was developed.

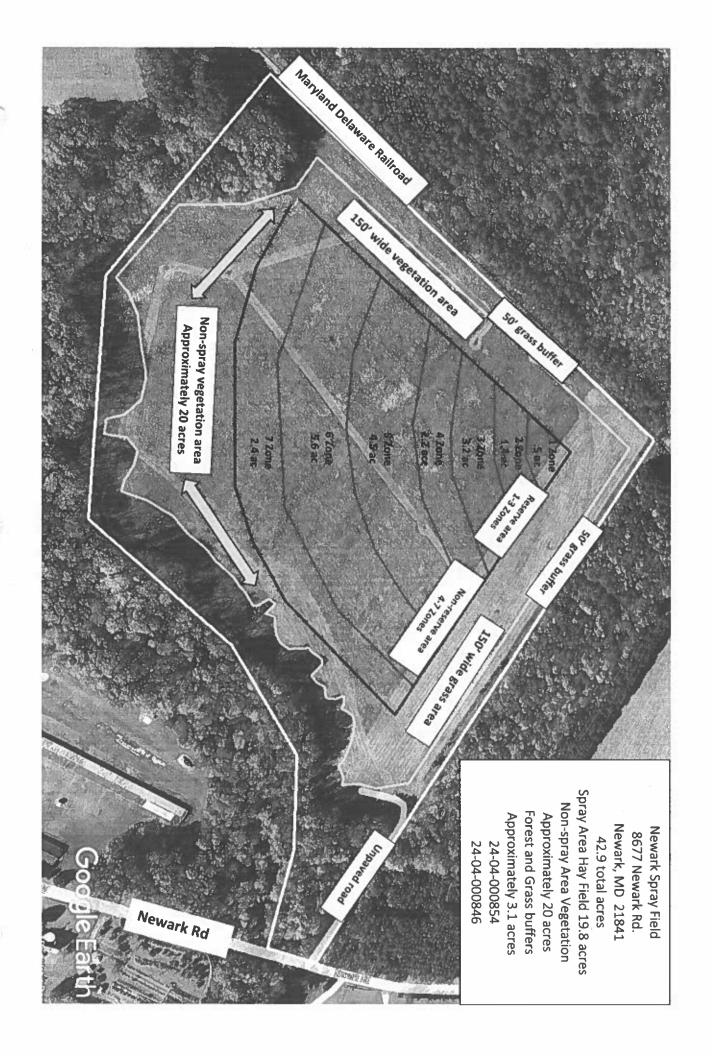
- 1. A change to the planned crop or cropping rotation, or introduction of a new crop not currently addressed in the existing nutrient management plan,
- 2. A change in nutrient source or soil test results.
- 3. A change in **acreage** managed of 10 percent or greater, or 30 acres, whichever is less.

Shirley Hastings

**Nutrient Management Consultant** 

Certification # 1749

**License # 2380** 



Farmer/Operator		Newark Spr	Newark Spray Field Worcester Co Water & Wastewater Div	Co Water & Wi	astewater Div Plan 1	Plan Year			2024				
Street Address		1000 Shore Lane	Lane			Tier - Phase			N/A-N/A				
City, State, Zip, County	Ŋ	Berlin MD 2	Berlin MD 21811 Worcester			Date Pian Prepared	repared		8-29-2023				
Tract No.	Field No.	Lab	Test Date	Soil Texture	Test Number	PH	M.O	ъ	×	Mg	Ω <sub></sub>	A	F
Newark	1 Zone	AGL	8/11/23	IS	18045	5.68	3.20	169	72	201	623		
! !- !					Conversion to FIV	5.68	3.20	186 (E)	45 (M)	155 (E)	52 (0)		
Newark	2 Zone	AGL	8/11/23	TS	18046	6.18	3.20	169	98	127	710		
10 10 10 10 10 10 10 10 10 10 10 10 10 1					Conversion to FIV	6.18	3.20	186 (E)	62 (0)	99 (0)	63 (0)		
Newark	3 Zone	AGL	8/11/23	IS	18047	6.32	2.20	134	106	110	673		
} \$ • •					Conversion to FIV	6.32	2.20	148 (E)	67 (0)	86 (0)	58 (0)		
Newark Sprav Fld	4 Zone	AGL	8/11/23	ZZ	18048	6.28	2 50	102	97	96	615		
1					Conversion to FIV	6.28	2.50	113 (E)	61 (0)	76 (0)	51 (0)		
Newark	5 Zone	AGL	8/11/23	SL	18049	6.40	2.20	112	91	86	628		
) 					Conversion to FIV	6.40	2.20	124 (E)	57 (0)	68 (0)	53 (0)		
Newark	6 Zone	AGL	8/11/23	SiL	18050	6.16	2.20	106	59	69	468		
, i					Conversion to FIV	6.16	2.20	118 (E)	36 (M)	55 (0)	32 (M)		
Newark	7 Zone	AGL	8/11/23	SiL	18051	6.23	2.20	122	89	109	649		
10 10 10 10 10 10 10 10 10 10 10 10 10 1					Conversion to FIV	6.23	2.20	135 (E)	56 (0)	86 (0)	55 (0)		
									MAA-dja-Madig-dis-dja-dja-dja-dja-dja-dja-dja-dja-dja-dja				

			Organic Analysis	alysis						
Farmer/Operator	Newark Spray Field Worcester Co Water & Wastewater Div	Co Water & Wastewater Di	100000	Plan Year			2024		NAME OF TAXABLE PARTY.	
Street Address	1000 Shore Lane		2	Tier - Phase			N/A-N/A	THE REST NAMED IN COLUMN 2 IN COLUMN 2		
City, State, Zip, County	City, State, Zip, County Berlin MD 21811 Worcester			Date Plan Prepared	er ed		8-25-2023			
**	Lab# County	Туре	Source	Z %	NH4-N %	NO3-N%	P205%	K20%	Moist %	Lbs/100 gal
ta ta	Vorcester	Waste Water Effluent	Newark WWTP	0.001	0.001	0.001	0.000	0.001		835.00
100										
										-

Date	Total N	Organic N Ammonia	Ammonia	Nitrate	٥	Phospate	~
11/15/2022	7.2	5.15	0.3	1.75	1.04	2.392	
11/17/2022	6.48	5.02	0.08	1.38	1.08	2.484	
11/28/2022	8.25	5.35	0.25	2.65	1.38	3.174	
12/1/2022	7.17	4.55	0.22	2.4	1.01	2.323	
12/8/2022	8.43	4.18	0.4	3,85 58,5	0.97	2.231	
12/15/2022	7.5	4.24	0.08	3.18	0.91	2.093	
4/6/2023	17.88	14.18	0.32	3.38	2.49	5.727	
4/13/2023	18.64	3.6	6.84	8.2	2.65	6.095	
4/20/2023	14.3	4.84	0.92	8.55	2.8	6.44	
4/27/2023	14.98	5.084	1.6	ω ,ω	3.06	7.038	
6/14/2023	5.15	2.14	0.72	2.29	2.39	5.497	
6/14/2023	5.64	2.99	0.13	2.52	2.34	5.382	
7/20/2023	35,6	1.22	2.12	32.25	2.4	5.52	

\*mg/L

Total	157.22	62.544	13.98	80.7 24.52	24.52	56.396	150.25	180.5
Average	12.09385	12.09385 4.811076923 1.075384615 6.207692 1.8861538 4.33815385 11.5	1.075384615	6.207692	1.8861538	4.33815385	11.55769	.55769 13.88462
pounds								

per 1000 gallons

1.311215 0.52161696

0.1165932 0.673038 0.2044968 0.47034264 1.253085 1.50537

Farmer Name	UM Phosph Newark Spra	UM Phosphorus Management Tool (PMT) Report  Newark Spray Field Worcester Co Water & Wastewater Div	Year Phase	2024 - N/A - N/A
		2		
Account ID	2404000854 ^	2404000854 ^		A STATE OF THE PERSON NAMED OF THE PERSON NAME
County	Worcester	Worcester		
Tract or Farm ID	Newark Spray Fld	Newark Spray Fld		
Field ID	1 Zone	2 Zone		
MYSUM	MpA	MpA		
Area   Crop	0.54 Acres   75	1.40 Acres   75		
Organics	W W Eff	WWEff		
R Factor				
Adj. K Factor   LS Factor				
C   P Factors				
RUSLE A	0.78	0.78		
		Transport Risk Factors		
SED Value	2	2		
Soil Permeability Class	Slow	Slow		
Field slope   Concave?   SR Factor	1.00   No   6.3	1.00   No   6.3		
Soil Drainage Class	moderately well	moderately well		
HSG   Artificial Drainage?   SD Factor	C No I 0.0	CINO10.0		
		Management Factors		
Distance to Water (DF)	200-349 ft   0.6	200-349 ft   0.6		ama i perpara penga penaran penaran pengangan panan ang pangan pengan pengan pengan pengan pengan pengan pengan
Buffer Width & Type (BF)	> 35' veg.   0.9	> 35' veg.   0.9		
Soil Test P Fertility Index Value	186	186		
Degree of P Saturation (DPS M3)	40.0	35.0		
Fert. P appl. rates, lb/A   FP * PSC	- - -	- - 0		
Org. P appl. rates, lb/A   OP * PSC	111  -   -   7	111  -   -   7	di konvenzentenneller erdeller blitch (-be-br-b), op britzlijke pringskapa kepala ti majakasa makapena	
Runoff Fert. P appl. methods   AMr(f)	-   -   -   0.00	-   -   -  0.00		
Runoff Org. P appl. methods   AMr(o)	M3  -   -  0.60	M3  -   -  0.60		
Subsurface Fert. P appl. methods   AMsub(f)	-   -   -   0.00	- - - 0.00		
Subsurface Org. P appl. methods   AMsub(o)	M3  -   -  0.64	M3  -   -  0.64		
P particulate   P runoff   P subsurface	20   29   0	20  25  0		
P Loss Rating Score	49 (L)	45 (L)		





# **RUSLE2 Erosion Calculation Record**

File: plans\Worcester Co WWTP--Newark Spray Field 2023-2026
Access Group: R2\_NRCS\_Fld\_Office

# Inputs:

Owner name: Worcester Co WWTP--Newark Spray Field Location: USA\Maryland\Worcester County

Info: Waste water effluent sprayed on hay crop

	2 Zone		1 Zone	name	Field
rine sandy loam 80%	soils\Worcester County, Maryland\MpA Mattapex fine sandy loam, 0 to 2 percent slopes\Mattapex	Fine sandy loam 80%	soils\Worcester County, Maryland\MpA Mattapex fine sandy loam, 0 to 2 percent slopes\Mattapex		Soil
	4.0		4.0	Value	Slope T
	200		200	length, ft	Slope
	1.0		1.0	steepness, %	Slope

# Results:

ŀ					
	0.59	0.78	0.78	Newark waste water effluent sprayed on hay crop	2 Zone
	0.59	0.78	0.78	Newark waste water effluent sprayed on hay crop	1 Zone
	index (SCI)	t/ac/yr	loss, t/ac/yr		
	Soil conditioning	Sed. delivery,	Cons. plan. soil	Description	Field name

under that system. to decline under that production system. If the index is a positive value, soil organic matter levels are predicted to increase The SCI is the Soil Conditioning Index rating. If the calculated index is a negative value, soil organic matter levels are predicted

are evaluated for the entire cropping rotation as shown in the management description. the differences in the degree of soil disturbance between systems. The kind, severity and number of ground disturbing passes parameters to calculate a tillage intensity rating for the system used in growing a crop or a rotation. STIR ratings tend to show The STIR value is the Soil Tillage Intensity Rating. It utilizes the speed, depth, surface disturbance percent and tillage type

Farmer/Operator	Newark Spray Field Worcester Co Water & Wastewater DivPlan Year	r Co Water & Was	stewater DivP	lan Yea	T 0	2	er Co Water & Wastewater DivPlan Year 2024							
Street Address	1000 Shore Lane			Tier - Phase	ase		N/A-N/A	ļ						
City, State, Zip,	Berlin MD 21811 Worcester	ļ		ate Pla	Date Plan Prepared		8-27-2023							
Tract No. / Field No. Farm	Area Crops & Note Numbers Yield Goal		Plant Nutrients Needed N-P205-K20	Nitrog	Nitrogen Credits (lbs/A)	its		Nutrient	Nutrient Sources to be Applied	Applied			Com Fert N-P-K	Lime
		Q.		Leg.	Man. S	Sh.	Method	N-P2O5-K2O		Огда	Organic Sources			
									Type / Source Min. Rate	Min, Rat	Applic. Rate [Days Inc.]	Organic Waste Applic- Basis		
Newark   1 Zone   0.54 Spray Fld   2024   [*] Acres	0.54 75 Acres Fescue: Maint (NOT	3.0 T/A 1	150- 0- 63 #/A	#/A 0	#/A 0	# o	Total	271139#/A				Preset Rate	123-0- 24#/A	1.3 V/A
		· · · · · · · · · · · · · · · · · · ·						9		i				
	7 28 29 4 6 53 60 70 71 88 89 92 93 184 185						after hvst-l	27- 11- 39 #/A	(1) W W Eff	0.20	333702 gal/A [No Till]			
	100													
Newark 2 Zone 1.40 Spray Fld 2024 [*] Acres	1.40 75 Acres Fescue, Maint (NOT	3.0 T/A	150- 0- 43 #/A	#/A	#/A #	#/A	Total	27- 11- 39#/A				Preset Rate	123-0- 4#/A	0.6 VA
	accumulated for late fall/winter grazing)													
	7 28 29 4 6 53 60 70 71 88 89 92 93 184 185						after hyst-l	27- 11- 39 #/A (1) W W Eff	(1) W W Eff	0.20	333702 gal/A [No Till]			
	180				···		į							
Newark 3 Zone Spray Fld 2024 [*]	e 3.20 75  [*] Acres Fescue, Maint (NOT	3.0 T/A	150- 0- 40 #/A	#/A	#/A	#/A	Total	27- 11- 39 #/A				Preset Rate	123-0- 1 #/A	0.0 VA
is:	-						:							
	28 29 4 6 53 60 70 71 88 89 92 93 184 185					<del>                                     </del>	after hvst-1	27- 11- 39 #/A (1) W W Eff	(1) W W Eff	0.20	333702 gal/A [No Till]			
	100													
Newark 4 Zone Spray Fld 2024 [*]	ne 2.18 75 [*] Acres Fescue; Maint (NOT	3,0 T/A 1	150- 0- 44 #/A	#/A	#/A	#/A	Total	27- 11- 39#/A				Preset Rate	123-0- 5#/A	V/4 0.0
										·			i	_
	28 29 4 6 53 60 70 71 88 89 92 93 184 185						after hvst-1	27- 11- 39#/A	11- 39 #/A (1) W W Eff	0.20	333702 gal/A [No Till]			
	186				_	$\neg$								

Farmer/Operator	Newark Spray Field Worcester Co Water & Wastewater DivPlan Year	er Co Water & Wastewater Divplan Year 2024	vPian Year	2024	ANTONO WASH	The state of the s	TO MAN	The state of the s	A TOTAL DESIGNATION OF THE PERSON OF THE PER	
Street Address	1000 Shore Lane		Tier - Phase	N/A-N/A						
City, State, Zip,	Berlin MD 21811 Worcester		Date Plan Prepared	8-27-2023						
Tract No. / Field No. Farm Name	Area Crops & Note Numbers	Yield Goal Plant Nutrients Needed N-P205-K20	Nitrogen Credits (lbs/A)		Nutrient	utrient Sources to be Applied	2		Com Fert N-P-K	Lime
		(Lbs./Acre)	Leg. Man. Shu.	Method	N-P205-K20		Organic Sources			
						Type / Source Min. Rate	Applic. Rate [Days Inc.]	Organic Waste Applic- Basis		
Newark 5 Zone 4.50 Spray Fld 2024 [*] Acres	4.50 75 ] Acres Fescue, Maint (NOT	3.0 T/A 150- 0- 46°	0 0 0 0 0 A/W	Total	27- 11- 39#/A			Preset Rate	123-0- 7#/A	0.0 V/A
	28 29 4 6 53 60 70 71 88 89 92 93 184 185			after hvst-1	27- 11- 39#/A	(1) W W Eff 0.20	20 333702 gal/A [No Till]			
	• • • • • • • • • • • • • • • • • • • •									
Newark 6 Zone 5,60 Spray Fld 2024 [*] Acres		3.0 T/A 150- 0- 84 #/A	#/A #/A #/A	Total	27- 11- 39#/A			Preset Rate	123-0- 45 #/A	0.7 VA
	accumulated for late fall/winter grazing)									
_	7 28 29 4 6 53 60 70 71 88 89 92 93 184 185			after hvst-l	27- 11- 39#/A	(1) W W Eff 0.20	20 333702 gal/A [No Till]			
	58									
Newark 7 Zone 2.38 Spray Fld 2024 [*] Acres	2.38 75 Acres Fescue; Maint (NOT	3.0 T/A 150- 0- 47	V# V# V#	Total	27- 11- 39#/A			Preset Rate	123-0- 8#/A	0.5 VA
	7 28 29 4 6 53 60 70 71 88 89 92 93 184 185			after hvst-1	27- 11- 39#/A	11- 39 #/A (1) W W Eff 0,20	20   333702 gal/A [No Till]			<u>-</u>
	180									
Ж										
		_								
		<del></del> -								

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		Notes	
Farmer/Operator	Newark Spray Field Worcester Co Water & Plan Year	Pian Year	2024
Street Address	1000 Shore Lane	Tier - Phase	N/A-N/A
City, State, Zip,	Berlin MD 21811 Worcester	Date Plan Prepared	8-25-2023
4. If	topdressing ag-lime withou	4. If topdressing ag-lime without tillage, reduce the total amount	mount of oxides recommended by 50 percent.

- of oxides in any one application. The balance can be applied the next year. It would be best to do a soil test before making the second application. When topdressing ag-lime, and soil mixing is not possible, do not apply more than 1500 lbs per
- . თ Split-application of nitrogen is required for optimal production and nitrogen use efficiency of established pasture and hay land and for the protection of ground water resources.
- Magnesium will be recommended when the soil test indicates a low or very low level. Use dolomitic acidity. The magnesium (Mg) recommendation is expressed as elemental Mg when lime is not required lime as a liming material when magnesium is recommended AND when lime is needed to correct soil
- Proper timing of nutrient applications is important. Apply nutrient sources as close to planting or runoff into surface water or leach into ground water. nutrient demand as possible so that nutrients are absorbed by plants quickly and not allowed to
- 29. When applying liquid wastes, application rate should not exceed the soil's infiltration rate
- 5ω recommendation ranges from 150-200 lbs per acre. Topdress 35-50 lbs per acre at greenup. In addition, topdress 40-50 lbs per acre after the first harvest, 35-50 lbs in late summer, and 40-50 lbs per acre grazing), orchardgrass or reed canarygrass (4 tons per acre yield goal), the TOTAL nitrogen (See related 70, 71, 88 & 89) For the maintenance of fescue (not accumulated for late fall/winter in late fall.
- If the nitrogen requirement is met by surface broadcasting UAN either prior to or at planting, use proven urease and nitrification inhibitors is recommended to minimize nitrogen loss via volatilization and/or denitrification pathways.
- For the maintenance of fescue (not accumulated for late fall/winter grazing), orchardgrass or reed per acre. Topdress 60-80 lbs per acre at greenup. In addition, topdress 50-60 lbs per acre after the canary grass (5 tons per acre yield goal), the TOTAL nitrogen recommendation ranges from 200-250 lbs first harvest, 50-60 lbs per acre in late summer, and 40-50 lbs per acre in late fall.
- per acre. Topdress 80-100 lbs per acre at greenup. In addition, topdress 65-75 lbs per acre after the grass (6 tons per acre yield goal, and up), the TOTAL nitrogen recommendation ranges from 250-300 lbs For the maintenance of fescue (not accumulated for late fall/winter grazing), orchardgrass or canary first harvest, 65-75 lbs per acre in late summer, and 40-50 lbs per acre in late fall.

Farmer/Operator	Newark Spray Field Worcester Co Water & Plan Year	Plan Year	2024
Street Address	1000 Shore Lane	Tier - Phase	N/A-N/A
City, State, Zip,	Berlin MD 21811 Worcester	Date Plan Prepared	8-25-2023

- 88 For the maintenance of fescue (not accumulated for late fall/winter grazing), orchardgrass or reed per acre in late fall. lbs per acre. Topdress 35-50 lbs per acre after the first harvest. canarygrass (up to 2 tons per acre yield goal), the TOTAL nitrogen recommendation ranges from 75-100 In addition, topdress 40-50 lbs
- 89. For the maintenance of fescue (not accumulated for late fall/winter grazing), orchardgrass or reed acre in late summer and 30-40 lbs in late fall. per acre. Topdress 30-50 lbs per acre after the first harvest. In addition, topdress 30-50 lbs per canarygrass (3 tons per acre yield goal), the TOTAL nitrogen recommendation ranges from 100-150 lbs
- 92. If UAN is dribbled or streamed on the soil surface, use a proven urease inhibitor to help minimize nitrogen loss via volatilization.
- 93. If nitrogen source volatilization. is granular urea, use a proven urease inhibitor to help minimize loss via
- 184. For each yield goal, the combined nitrogen (N) from the split applications must not exceed the maximum total N recommendation.
- 185. The sufficient rainfall to move the nitrogen into the soil. and perennial ryegrass, should be applied between mid-August and early September, depending late summer topdress application for fescue, orchardgrass, reed canarygrass, bromegrass, timothy, Op
- 186. application. where all N is readily available. Manure or other organic sources of nitrogen are not recommended for growth and leads to a more vigorous stand. This application must be a commercial nitrogen source Late fall nitrogen application (mid- to late October in the mountains of western Maryland and late October to mid-November elsewhere in Maryland, (approximately the killing frost date) stimulates root the late fall application. If late fall application is not made, add 40-50 lb.N/acre to the greenup