



RFP # 004-2018

REQUEST FOR PROPOSALS
FOR THE PROVISION OF
WANAQUE WATER TREATMENT PLANT (WWTP)
RESIDUAL TRUCKING & MANAGEMENT

Issuance of Request for Proposals: Friday, July 6, 2018

Mandatory Pre-Proposal Meeting: Wednesday, July 18, 2018

Question Cut-off Date: Wednesday, July 25, 2018

Proposals Due: Friday, August 3, 2018

Time: 3:00 PM Prevailing Time

Issued by:

NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION
ONE F.A. ORECHIO DRIVE
WANAQUE, N.J. 07465

DEFINED TERMS

The following definitions shall apply to and are used in this Request for Qualifications and Proposals:

"Applicable Law" – means any statute, law, constitution, charter, ordinance, resolution, judgment, order, decree, rule, regulation, directive, standard or similarly binding authority, which shall be enacted, adopted, promulgated, issued or enforced by a governmental body relating to the Commission, the Selected Respondent or the performance of the Services.

"Commission" - refers to the North Jersey District Water Supply Commission.

"Contractor" - as referenced in Section 1.8 of this RFP refers to the Selected Respondent/Consultant.

"RFP" – refers to this Request for Proposals, including any amendments thereof or supplements thereto.

"Respondent" or "Respondents" - refers to the interested person(s) and/or firm(s) that submit a Proposal.

"Qualified Respondent" - refers to those Respondents who (in the sole judgment of the Commission) have satisfied the qualification criteria set forth in this RFP.

"Selected Respondent" or "Managing Firm" – refers to the qualified respondent selected by the Commission for the award of a contract to perform the Services.

"Services" - refers to the services to be provided by the Selected Respondent for the provision of **Wanaque Water Treatment Plant (WWTP) Residual Trucking & Management** in accordance with the provisions of this RFP and the contract to be prepared by the Commission.

"WWTP" – refers to the Wanaque Water Treatment Plant.

"NJDEP" – New Jersey Department of Environmental Protection

"RTF" – Residual Treatment Facility

SECTION 1

INTRODUCTION AND GENERAL INFORMATION

1.1. Introduction and Purpose.

The Commission is organized and exists under and pursuant to N.J.S.A. 58:5-1 et seq., and is a public body politic and corporate formed by its member municipalities and authorized to acquire, develop and operate a water supply system for use by any municipality in the Counties of Sussex, Warren, Hunterdon, Passaic, Morris, Monmouth, Somerset, Bergen, Hudson, Essex, Union and Middlesex (the "District"). Pursuant to its enabling legislation, the Commission is authorized to finance, construct and place into operation, and operate and use facilities deemed necessary for and incidental to the treatment, filtration, transmission and distribution of potable water for the benefit of municipalities within the District. The Commission presently contracts with municipalities, regional municipal purveyors, and publicly and privately-owned utilities. It is operated on a non-profit basis and funded through the municipalities and utilities that are contract participants of the Commission.

Through its Wanaque North and South projects, the Commission provides potable water to numerous contracting municipalities. In addition, the Wanaque South Project includes a joint venture between the Commission and Suez - New Jersey.

The Commission is soliciting Proposals from New Jersey Department of Environmental Protection ("NJDEP") certified contractors to manage the beneficial reuse of all residuals generated at the Commission's Wanaque Water Treatment Plant for a period of two (2) years. Through this RFP, firms interested in assisting the Commission with the provision of the Services must prepare and submit a Proposal in accordance with the procedures and schedule in this RFP. The Commission will review Proposals only from those firms that submit a Proposal that includes all the information required to be included as described herein (in the sole judgment of the Commission).

1.2. Procurement Process and Schedule.

The Commission has structured a competitive process that seeks to obtain the desired results described above in order to assure that each person and/or firm is provided an equal opportunity to submit a Proposal in response to the RFP. Proposals will be evaluated in accordance with the criteria set forth in Section 5 of this RFP, which will be applied in the same manner to each Proposal received.

The award of a contract to the Selected Respondent is subject to P.L. 2005, c. 51 (Chapter 51), codified at N.J.S.A. 19:44A-20.13 et seq., and Executive Order 117 (2008) (commonly known as "pay to play" limitations) and the New Jersey

Election Law Enforcement Commission disclosure requirements set forth in P.L. 2005, C. 271, as amended, codified at N.J.S.A. 19:44A-20.26, and as more fully described in Section 1.8 of this RFP. Respondents, as part of this procurement process and, if selected, must at all times abide by all requirements of New Jersey law, and all relevant Executive Orders.

Proposals will be reviewed and evaluated by a Commission-established "Evaluation Committee" to determine if each Respondent has met the required professional and administrative requirements set forth in this RFP. Under no circumstances will a member of the Evaluation Committee review responses to an RFP for services for which they or their firm submitted a response hereunder. Based upon the totality of the information contained in the Proposal, including information about the reputation and experience of each Respondent, the Commission will, in its sole judgment, determine which Respondents are qualified from professional, administrative and financial standpoints. Each Respondent who meets the requirements of the RFP, in the sole judgment of the Commission, will be designated as a qualified respondent and, from that pool of qualified respondents; the Commission will choose the Selected Respondent.

The RFP process commences with the issuance of this RFP. The steps involved in the process and the anticipated completion dates are set forth in Table 1, Procurement Schedule. The Commission reserves the right to amend, modify or alter the Procurement Schedule upon notice to all potential Respondents.

All communications concerning this RFP or the RFP process shall be directed to the Commission's Designated Contact Person, William Schaffner, Chief Financial Officer, in writing and e-mailed to bschaffner@njdwsc.com. Respondents are advised not to call the Commission for information.

Respondents must submit one (1) original, ten (10) copies, and an electronic copy of the proposal on a CD or USB drive. Proposals must be in a sealed envelope clearly marked with the RFP's title, date, and time due and submitted to:

**William Schaffner
Chief Financial Officer
North Jersey District Water Supply Commission
One F.A. Orechio Drive
Wanaque, New Jersey 07465**

Proposals must be received by the Commission, via mail, overnight delivery, or hand delivery, by 3:00 PM, Prevailing Time, on Friday, August 3, 2018. Proposals will not be accepted by facsimile transmission or e-mail.

Subsequent to issuance of this RFP, the Commission (through the issuance of addenda to all firms that have received a copy of the RFP) may modify, supplement or amend the provisions of this RFP in order to respond to inquiries received from prospective Respondents or as otherwise deemed necessary or appropriate by, and in the sole judgment of, the Commission.

**TABLE 1
ANTICIPATED PROCUREMENT SCHEDULE**

ACTIVITY	DATE
1. Issuance of Request for Proposals	<u>Friday, July 6, 2018</u>
2. Mandatory Pre-Proposal Meeting.....	<u>Wednesday, July 18, 2018</u>
3. Question Cut-Off Date.....	<u>Wednesday, July 25, 2018</u>
4. Proposal Submission Date.....	<u>Friday, August 3, 2018</u>
5. Tentative Contract Award Date	<u>Wednesday, August 22, 2018</u>

A one-time mandatory Pre-Proposal Meeting will be held at the Commission offices at One F.A. Orechio Drive, Wanaque, NJ 07465 at 10:00 AM on Wednesday, July 18, 2018. Participation at the pre-proposal meeting is a pre-requisite for submitting a proposal in response to this solicitation and prospective respondents are required to attend. Access Approval Forms should be submitted, via email to Security, with a copy of a photo ID of each visitor, twenty-four (24) hours in advance of arrival on site. Interested Respondents who have not emailed an Access Approval Form prior to the meeting start time will not be permitted to attend. Access Approval Forms may be found attached to this RFP.

1.3. Conditions Applicable to RFP.

Upon submission of a Proposal in response to this RFP, the Respondent acknowledges and consents to the following conditions relative to the submission and review and consideration of its Proposal:

- All costs incurred by the Respondent in connection with responding to this RFP shall be borne solely by the Respondent.
- The Commission reserves the right, in its sole judgment, to reject for any reason any and all Proposals, and components thereof, and to eliminate any and all Respondents responding to this RFP from further consideration.

- The Commission reserves the right, in its sole judgment, to reject any Respondent that submits incomplete responses to this RFP, or to reject a Proposal that is not responsive to the requirements of this RFP.
- The Commission reserves the right, without prior notice, to supplement, amend, or otherwise modify this RFP, or otherwise request additional information.
- All Proposals shall become the property of the Commission upon submission and will not be returned.
- All Proposals will be made available to the public at the appropriate time, as determined by the Commission in its sole discretion, and in accordance with applicable law.
- The Commission may request qualified respondents to send representatives to the Commission for interviews.
- Any and all Proposals not received by the Commission by 3:00 PM, Prevailing Time on **Friday, August 3, 2018** will be rejected.
- Neither the Commission, nor its respective Commissioners, staff, consultants or advisors (including, but not limited to, the Evaluation Committee) shall be liable for any claims or damages resulting from the solicitation or preparation of any Respondent's Proposal, nor will there be any reimbursement to Respondents for the cost of preparing and submitting a Proposal or for participating herein.

1.4. Rights of Commission.

The Commission reserves, holds and may exercise, in its sole discretion, the following rights and options with regard to this RFP and the procurement process in accordance with applicable law:

- To determine that any Proposal received complies or fails to comply with the terms of this RFP.
- To change or alter the schedule for any events called for in this RFP upon the issuance of notice to all prospective Respondents who have received a copy of this RFP.
- To conduct investigations of any or all of the Respondents, as the Commission deems necessary or appropriate, to clarify the information provided as part of the Proposal and to request additional information to support the information included in any Proposal.
- To suspend or terminate the procurement process described in this RFP at any time, in its sole discretion. If terminated, the Commission may

determine to commence a new procurement process or exercise any other rights provided under applicable law without any obligation to the Respondents.

- To supplement, amend or otherwise modify the RFP through issuance of addenda to all prospective Respondents who have received a copy of this RFP.
- To waive any technical non-conformance with the terms of this RFP.
- To reject any Proposal as non-responsive, to the extent permitted by applicable law, that takes any exception or makes any additions to any term or condition of the RFP (including the Proposal forms in the Appendices).
- To request clarification or amplification from any Respondent of its Proposal or any portion thereof.
- To request an oral presentation with all qualified respondents, if it believes that it would be helpful to the Commission or Evaluation Committee to do so.
- To negotiate with one or more Respondents after receipt of Proposals on any of the final terms and conditions of the retention, including price, so long as the Commission maintains a written record of all such negotiations.
- To award a contract to multiple Respondents, if the Commission determines that the same is in its best interests.
- To reserve the right to waive minor irregularities. The Commission also reserves the right to waive a mandatory requirement provided that:
 1. the requirement is not mandated by law;
 2. all of the otherwise responsive Proposals failed to meet the mandatory requirement; or
 3. in the sole discretion of the Commission, the failure to comply with the mandatory requirement does not materially affect the procurement or the Commission's interests associated with the procurement.

1.5. Addenda or Amendments to RFP.

During the period provided for the preparation of responses to the RFP, the Commission may issue addenda, amendments or answers to written inquiries. Those addenda, amendments or answers to written inquiries will be issued to all Respondents and will constitute a part of the RFP. All responses to the RFP shall be

prepared with full consideration of the addenda, amendments or answers to written inquiries issued prior to the submission date for the Proposal.

1.6. Cost of Proposal Preparation.

Each Proposal shall contain all information required to be submitted pursuant to the RFP and shall be prepared at the sole cost and expense of the Respondent. The Respondent agrees that it will not seek reimbursement from the Commission, its Commissioners, staff or consultants for the costs or expenses incurred in the submission of a Proposal.

1.7. Proposal Format.

Proposals should include all information requested in this RFP. Proposals that, in the sole judgment of the Commission, fail to meet the requirements of the RFP or are in any way conditional, incomplete, obscure, contain additions or deletions from requested information, or contain errors, may be rejected.

1.8. Campaign Contributions and Expenditure Reporting.

In order to safeguard the integrity of the Commission's procurement process, the Commission has imposed restrictions to insulate the award of contracts from political contributions that pose the risk of improper influence, purchase of access, or the appearance thereof. The terms and conditions set forth in this section are material terms of any contract resulting from this RFP.

a. Definitions. For the purposes of this section, the following shall be defined as follows:

(i) Contribution – means a contribution reportable by a recipient under “The New Jersey Campaign Contributions and Expenditures Reporting Act.” N.J.S.A. 19:44A-1 et seq., and implementing regulations set forth at N.J.A.C. 19:25-7 and N.J.A.C. 19:25-10.1 et seq. Currently, contributions in excess of \$300 during a reporting period are deemed “reportable” under these laws.

(ii) Contractor – means any natural or legal person, business corporation, professional service corporation, limited liability company, partnership, limited partnership, business trust, association or any other legal commercial entity organized under the laws of New Jersey or any other state or foreign jurisdiction. It also includes (a) all principals who own or control more than 10 percent of the profits or assets of a Contractor or 10 percent of the stock in the case of a Contractor that is a corporation for profit, as appropriate; (b) any subsidiaries directly or indirectly controlled by the Contractor; (c) any political organization organized under 26 U.S.C.A. 527 that is directly or indirectly controlled by the Contractor, other than a candidate committee, election fund, or political party

committee; and (d) if a Contractor is a natural person, that person's spouse or child, residing in the same household.

b. Breach of Contract.

It shall be a breach of the terms of any contract for the Contractor to (i) make or solicit a contribution in violation of the terms of this section, (ii) knowingly conceal or misrepresent a contribution given or received; (iii) make or solicit contributions through intermediaries for the purpose of concealing or misrepresenting the source of the contribution; (iv) make or solicit any contribution on the condition or with the agreement that it will be contributed to a campaign committee or any candidate for or holder of the public office of Governor, or to any State or county party committee; (v) engage or employ a lobbyist or consultant with the intent or understanding that such lobbyist or consultant would subject that entity to the restrictions of this section; (vi) fund contributions made by third parties, including consultants, attorneys, family members, and employees; (vii) engage in any exchange of contributions to circumvent the intent of this section; or (viii) directly or indirectly through or by any other person or means, do any act which would subject that entity to the restrictions of this section.

c. Certification and Disclosure Requirements.

(i) The Commission is prohibited from entering into a contract with any Contractor for services or any material, supplies or equipment, or to acquire, sell or lease any land or building, where the value of the transaction exceeds \$17,500, if that Contractor has solicited or made any contribution of money, or pledge of contribution, including in-kind contributions to a candidate committee and/or election fund of any candidate for or holder of the public office of Governor, or to any State or county political party committee: (1) within the eighteen months immediately preceding the commencement of negotiations for the contract or agreement; (2) during the term of office of a Governor, in the case of contributions to a candidate committee or election fund of the holder of that office, or to any State or county political party committee of a political party nominating such Governor in the last gubernatorial election preceding the commencement of such term; or (3) within the eighteen months immediately preceding the last day of the term of office of Governor, in which case such prohibition shall continue through the end of the next immediately following term of the office of Governor, in the case of contributions to a candidate committee or election fund of the holder of that office, or to any State or county political party committee of a political party nominating such Governor in the last gubernatorial election preceding the commencement of the latter term. Effective November 15, 2008, Executive Order No. 117 extends the above prohibition to contributions made to a candidate committee or election fund of any candidate for or holder of the office of Lieutenant Governor, and to contributions made to a legislative leadership committee or a municipal political party committee.

(ii) At the time of the submission of its Proposal, a Contractor shall report all contributions the Contractor made during the preceding four years to any political organization organized under 26 U.S.C. 527 of the Internal Revenue Code that also meets the definition of a "continuing political committee" within the meaning of N.J.S.A. 19:44A-3(n) and N.J.A.C. 19:25-1.7. The required forms and instructions are included in this RFP package (See Attachment #1) and must be returned with a Contractor's Proposal fully complete. **Failure to submit the fully completed Certification and Disclosure(s) with a Proposal may result in the rejection of the Proposal, as well as preclude future contract opportunities (in the sole judgment of the Commission).**

(iii) Further, the Contractor is required, on a continuing basis, to report any contributions it makes during the term of the contract, and any extension(s) thereof, at the time any such contribution is made. The required form and instructions are available for review on the Purchase Bureau website at <http://www.state.nj.us/treasury/purchase/forms.shtml> and shall be provided to the intended awardee with the Notice of Intent to Award.

d. Disclosure Review.

The Commission shall ensure that the disclosures submitted pursuant to this section, as well as any other pertinent information concerning the contributions or reports thereof by the intended awardee, prior to award, or during the term of the contract, by the Contractor are reviewed by the appropriate authorities. If it is determined that any contribution or action by the Contractor constitutes a breach of contract that poses a conflict of interest in the awarding of the contract under this solicitation, the Commission shall disqualify the Contractor from award of such contract.

1.9. Requirements of Executive Order #37.

On September 25, 2006, Governor Corzine signed Executive Order #37, which sets forth a series of reforms concerning the State's independent authorities. This RFP process shall at all times comply with the provisions of E.O. #37 requiring a "fair and transparent process." The Commission has established a scoring process and an Evaluation Committee pursuant to EO #37 and will be using both when determining which firm(s) to award a contract to. The factors that the Commission will use as part of this scoring process may include, but are not limited to, the following:

- a. The background, qualifications, skills, and experience of the firm and its staff;
- b. The firm's degree of expertise concerning the area at issue;
- c. The Commission's prior experiences with the firm;

- d. The firm's familiarity with the work, requirements, and systems of the State authority;
- e. The firm's proposed approach to the issues raised in the project description or specifications;
- f. The firm's capacity to meet the requirements of the project at issue;
- g. The firm's references;
- h. Interviews with prospective firms; and
- i. Geographical location of the firm's offices.

Respondents are directed to Section 5 of this RFP for a complete description of the criteria to be utilized by the Commission in reviewing and evaluating Proposal.

Section 2 of the RFP describes the scope of services to be performed by the Selected Respondent during the term of the contract. As part of the criteria that the Evaluation Committee and the Commission will use to assess the Proposals submitted in response to the RFP, Respondents are required to demonstrate their qualifications and experience in providing these services, and to describe their experience in performing these services under similar contracts.

Should an oral presentation be requested by the Commission, it will be an opportunity for the Respondent to introduce its staff to the Commission, and to present supplementary information regarding its Proposal and credentials as related to the specific needs of the Commission. The Respondent may use materials during this oral presentation; provided, however, that the presentation will be restricted to a maximum time period specified by the Commission, including the time allotted for a question and answer period. Information relating to the Respondent's recent experience on similar assignments, approach to the work and the use of innovative and/or cost-effective measures should be included in the oral presentation.

END OF SECTION 1

SECTION 2

SCOPE OF SERVICES

2.1. Overview.

The North Jersey District Water Supply Commission (the "Commission") is seeking proposals from New Jersey Department of Environmental Protection ("NJDEP") certified contractors to manage the beneficial reuse of all residuals generated at the Commission's Wanaque Water Treatment Plant ("WWTP") for a period of two (2) years.

All WWTP residuals are generated as the end product of the following two processes:

- Filter presses located at the Commission's Residual Treatment Facility ("RTF")
- Centrifugation (process equipment located adjacent to the WWTP's Residual Lagoon)
- Other de-watering equipment

Both of the above processes dewater residuals to approximately 13% - 20% solids. All residual management processes, including the operation of filter pressing and centrifugation, generate from 20 – 150 cubic yards ("CYs")/day.

The management of the beneficial reuse process consists of blending and/or removing WWTP residuals from Commission property and then placing these residuals (under the permit conditions and requirements delineated in **Section 2.2**) with various end user markets.

There are two options for managing and removing WWTP residuals from Commission property. They are:

Option 1

- Submit a Proposal to manage the beneficial reuse process by removing **unblended residuals** from Commission property and then placing either unblended or blended residuals with various end user markets.

Note: For the above option, all non-Commission owned residual storage, recycling, and/or blending sites that are utilized must be approved by the NJDEP **prior** to the award of a Residual Management Contract. For a prospective respondent to become part of a Commission permitted site, see Residual Permit Part IV, Land Application Industrial Residuals, Part B - Reporting, Section 1 - Distribution Site Conditions & Procedures (see Attachment #3).

Option 2

- Submit a Proposal to manage the beneficial reuse process by storing, drying and blending residuals on Commission property and then placing either unblended or blended residuals with various end user markets.

Note: For either option listed above, Respondents may choose to mine the Commission's Wanaque Reservoir for sand, silt, and stone at designated areas. These products may be utilized in blends with Commission residuals. Respondents may also mine the bank run locally along the Wanaque Reservoir shoreline (Sites TBD).

It should also be noted that the prospective Respondents can choose to submit a proposal on either one or both of the options listed above. Each Proposal should clearly delineate the following:

- **A list of the prospective end user markets that will be utilized for the placement of all unblended/blended residuals.**
- **The source of all sub soil/aggregates utilized in any/all residual blends, including the use of Commission materials that are currently in inventory or will be mined from the reservoir.**
- **A list of all equipment that will be utilized in the management process.**
- **A detailed description of the management process which highlights all steps/actions that will be executed to dispose of existing residual inventory and the daily production at both the RTF and the Centrifuge.**

2.2 Scope of Services.

The Commission has been permitted by the NJDEP to blend Water Treatment Residuals with suitable sub-soil components to create a usable land applied product meeting 40 Code of Federal Regulation 503 Subpart B pollutant limits (to be distributed the mandatory pre-proposal meeting).

It is the intent of the Commission to solicit Proposals from interested firms having expertise in both the management and operation of soil blending activities associated with the beneficial re-use of water treatment residuals including, but not limited to planning, permitting, screening, drying, blending, staging, stacking, on/off site trucking, and end-user determination and placement. The Selected Respondent (or "Managing Firm") shall be an experienced operator of a soil blending site with expertise in soil testing and analysis, soil erosion and sediment control, reservoir mining, and record keeping. Firms, and/or persons responding to this RFP, shall be able to demonstrate that they have the continuing capabilities to perform these services.

2.2.1. Physical Requirements for all Soil Blends:

- All soil blends shall conform to 40 CFR 503(B) with maximum pollutant average concentrations of: Arsenic at 41mg/kg, Cadmium 39 mg/kg, Copper 1500 mg/kg, Lead 300 mg/kg, Mercury 17 mg/kg, Molybdenum 57mg/kg, Nickel 420 mg/kg, Selenium 100 mg/kg, and Zinc 2800 mg/kg.
- The Managing Firm shall submit two (2) sets of composite data results performed on different batches of any subsoil component brought onto Commission property by a certified laboratory in solid waste.
- Water Treatment Residuals at the Managing Firm's site, assuming the off-site option is utilized, **if greater than 50% by volume, will be subject to additional conditions as identified in the Permit.**
- The combined volume of blended water treatment residuals at storage yards, other than the Commission's Water Treatment Plant storage and blending areas, shall be limited to a total of 1300 cubic yards initially, until additional volume is authorized by the NJDEP.
- The Managing Firm cannot comingle water treatment residuals ("WTR") supplied by the Commission with any other WTR source.

2.2.2. Items, Services, Facilities and Raw Materials Supplied by the Commission:

In addition to supplying the applicable NJDEP permit(s) referenced above, the Commission will provide the following items, services, facilities and raw material in the administration of the beneficial re-use management process. Samples of unblended WWTP residuals and raw materials will be available at mandatory pre-proposal meeting.

- Approximately ten (10) acres of Commission property on Stonetown Rd. (Nursery), Ringwood, NJ, available for the Managing Firm to run independently at their discretion for residuals, yard waste and stone. Area is near main road junction, provides one (1) clear acre, with nine (9) acres to be cleared by the Managing Firm at their own expense. The Managing Firm is also responsible for obtaining any necessary

permits with the exception of The Residual Permit.

- Unblended WWTP residuals. Residuals may be moved to drying areas by Commission (Air Drying Beds and area north of Lagoon). Dumpster may be used at Centrifuge by the Managing Firm.
- Various drying, blending and material/equipment storage areas totaling ~ three (3) acres (AD5). Air Drying areas 1, 2, 6 and 4 may also be available (~ 1 acre).
- Top soil and fill located on Commission properties, as available per permission of Utility Department. Current Inventories are roughly 20,000 CYs.
- Leaf compost and woody material at Commission properties (Yard Waste Site) is available.
- Ability to mine the Commission's Wanaque Reservoir for sand, silt, and stone at designated areas during low Reservoir levels.
- Ability to remove sand/silt at Reservoir bank side; locations TBD.
- Sampling and analysis of unblended residuals at least once per quarter to comply with Residual's permit. Analysis to be performed by the Commission's certified laboratory.
- The Commission will determine the quantity of WTRs in cubic yards (CYs) removed from Commission property daily for state reporting and payment on a monthly basis. The Managing Firm may verify quantification and any differences will be discussed with Commission administration making the final decision. Maximum quantities of unblended residuals loaded in tri-axle will be determined by actual measurement and geometric calculation of volume. 30 CY dumpsters will be filled to 20 CYs per dumpster volume. For any other size truck or container, Commission staff will determine based on container volume for safe fill.
- In order to ensure WTRs are properly managed at an off-site blender's distribution location, the Commission may send staff to visit site up to 3x/wk.

- The Commission will report analytical results and quantities of residuals moved off its site on state forms such as Discharge Monitoring Reports (DMRs), etc., to the NJDEP.

2.2.3. Services Provided by the Successful Managing Firm:

The Managing Firm will be responsible for providing all services, equipment, and qualified personnel for the management of the entire beneficial reuse process including the operation of any/all residual storage/blending sites and the marketing, sale, and delivery of all (blended or unblended) product to end various user markets. Additional responsibilities include the following:

- Ensure all residual blends meet permit requirements and specifications as described in Section 2.1 (A copy of the blending permit will be supplied at Mandatory pre-proposal meeting).
- Ensure any reservoir mining operations are in compliance with applicable Mining Permit requirements. Sand and silt may be mined at any time upon prior approval from the Commission; if rock will be removed and crushed, a mining permit will be needed for heavy equipment.
- The Management Firm has the option to either provide suitable sub-soils intended for blending operations or to utilize existing materials available through the Commission.
- Transportation of any sub-soils and/or mined materials to all blending sites.
- Transportation of both blended and/or unblended residuals off Commission property to end-user markets using water-tight trucks to prevent spillage.
- Written reports on quantities and locations of blended residual placement at end-user sites including data on quantities and sources of blending materials, as detailed by the Commission's Blending Permit.
- If designated Commission facilities are utilized for storing, drying, or blending residuals, the Managing Firm must adhere to the Commission's Soil Erosion and Sediment Control Plan (to be supplied at the mandatory pre-proposal meeting).

- The Managing Firm must follow the guidance of the "Land Application of Water Treatment Residuals" (document supplied at the mandatory pre-proposal meeting) which details that the agent cannot exceed the most limiting rate (20 dry tons per acre of aluminum based residuals).
- The Managing Firm must provide end users with guidance and instructional literature regarding land application of WTRs.
- The Managing Firm shall provide a monthly (by the 10th of the following month) report of quantities of WTRs sent to various end users and the percent of the Commission's WTRs that are used in any blends. A form for this purpose will be provided by the Commission.
- Adherence to the Commission's Site Access/Security procedures through the main gate at One F.A. Orechio Drive or back gate off Storms Avenue (details to be provided at mandatory pre-proposal meeting).
- Installation and maintenance of stone "mud mats" to prevent the tracking of mud/dirt/residuals onto all paved surfaces and public roads.
- Clean any mud/dirt and/or debris from trucks/equipment to prevent the tracking of foreign material onto all paved surfaces.
- Provide a comprehensive Safety Program to the Commission to ensure the safety of all personnel. The safety program must include site specific training of all Managing Firm's employees.
- A stock of spill kits for fuel and/or organic chemicals shall be kept on site for the Managing Firm to immediately mitigate any chemical spill. The Firm shall immediately report any fuel/chemical spill to the Commission and be solely responsible for any and all site remediation/restoration as required by the Commission.
- If the Managing Firm utilizes Commission facilities, it must maintain and, if necessary, restore all areas to the condition documented at the start of the Contract. This includes but is not necessarily limited to the following activities: (i) maintenance, grading, and re-grading of blending sites,

reservoir bank side areas, reservoir beds, and existing access roadways; (ii) removal of brush and trees as may be required for egress; and (iii) repair of any damaged paved roadways caused equipment mobilization/demobilization and trucking.

- Any equipment left on site is the sole responsibility of the Managing Firm. Any damages or alleged issues that occur during periods of inactivity/non-working hours are the sole responsibility of the Managing Firm.

2.3. Personnel.

The Selected Respondent represents and agrees that:

1. It has the personnel necessary to provide the Services as requested;
2. No personnel provided by the Selected Respondent are or shall be employees of the Commission nor shall they have any contractual relationship with the Commission;
3. All of the Services to be provided by the Selected Respondent pursuant to the contract will be provided by personnel qualified to perform the particular work; and
4. None of the Services to be provided by the Selected Respondent shall be provided by any subconsultant, or under any subcontract for services, without the prior consent of the Commission.
 - a. The Selected Respondent shall include within their proposal any subcontract, along with the subconsultant's qualifications, all inclusive rate sheet and work tasks to be performed by subconsultant.
 - b. Any and all work performed by a subconsultant is to be supervised by the Selected Respondent.

2.4. Confidentiality & Non-Disclosure Requirements.

The Selected Respondent shall hold in trust and not reveal to any third party, except as provided in this RFP and/or subsequent Contract, if applicable, between the Commission and the successful Respondent(s), any and all confidential or "Security Related" information as defined herein. The Respondent shall require its employees and subconsultants to comply with the provisions of this RFP and/or subsequent Contract, if applicable, as it pertains to confidentiality. This Section must be included in all subcontracts entered into by the Managing Firm.

Confidential or "Security Related" information shall include:

- Any and all financial, statistical, personnel and/or technical data supplied to the Respondent.
- Any and all data, technical information, material gathered, originated, developed, prepared, used or obtained in the performance of this Contract, including results and opinions of the Managing Firm.
- Any and all communications between the Commission and the Managing Firm, and the Managing Firm and any third party regarding the performance of this Contract.

The Managing Firm is required to protect the confidentiality of such data. Any use, copying, distribution, sale or offering of this data in any form by the Managing Firm, or any individual or entity in the Managing Firm's charge or employ for purposes not connected with this Contract, will be considered a violation of this Contract and may result in contract termination and the Managing Firm's suspension or debarment from State contracting. In addition, such conduct may be reported to the State Attorney General for criminal prosecution to the extent allowed by law.

It is further agreed that any information supplied by the Commission to the Managing Firm and any information developed by the Managing Firm in satisfaction of the Scope of Work within this Contract is subject to the following conditions and restrictions:

- Information received from or developed for the Commission is to be used solely for the purpose(s) established in this Contract.
- The data confidentiality matters coming within this Contract shall continue beyond the completion of all work involved in this Contract, unless specifically waived in writing by the Commission.
- Any and all asset information received from prior to the issuance of this RFP shall be considered confidential or "Security Related" information; however, other information that was already known to the Respondent prior to the issuance of this RFP, or any information that is or has become publicly available and is rightfully received by the Respondent, or any information that is approved by the Commission for the Respondent to release shall not be considered confidential.

2.5. Work Hours.

All work on Commission-owned property shall be performed between the hours of 7:00 AM and 4:00 PM, Monday through Friday, New Jersey State Holidays excepted, unless other arrangements are made in advance with, and approved, by the Commission.

2.6. Security.

Anyone entering the grounds of the Commission MUST submit an Access Approval Form with copy of Photo ID at least two (2) business days before arrival on site. (See Attachment #2)

Any and all photographs, drawings, information related to this RFP, and Proposal, shall be classified as CONFIDENTIAL (See Section 2.4) and will become the property of the Commission. No documents, photos and information as it relates to this RFP, the Proposal, and the Services, are to be disseminated by the Selected Respondent.

2.7 Fee Proposal.

Respondents shall provide a lump sum price for the management and removal of WWTP residuals, as described in Section 2.1, for Option 1, Option 2 or both. **Prices are to be quoted per cubic yard of unblended residuals removed from Commission property*, including labor, materials, subcontractors and expenses.** (**If residuals leave Commission property as part of a blend, the Commission will only reimburse the Managing Firm for the amount of unblended cubic yards.*)

The price is to include the trucking and management of the beneficial re-use process, which consists of removing all WWTP residuals from Commission property and then placing these residuals (under permit conditions and requirements delineated in Section 2.1 of the Scope of Services) with various end user markets. It shall also cover all items listed under Section 2.2.3 and the furnishing of the necessary reports, results, machinery, tools, apparatus and other means of removal, and all material and labor called for by the specifications and necessary to complete the work in the manner set forth by the specifications.

2.8. Payments.

Compensation shall be payable within sixty (60) days of receipt of invoices with the approval of the Commission and, in accordance with the Commission's standard accounting policies and procedures.

2.9. Contract Term.

The initial term anticipated for this Contract is two (2) years. The Commission

reserves the right to renew the Agreement, at its sole discretion but with the consent of the Managing Firm, for up to two (2) consecutive, one (1) year terms, under the same conditions of the original Contract.

END OF SECTION 2

SECTION 3

SUBMISSION REQUIREMENTS

3.1. General Requirements.

The Proposal submitted by the Respondent must meet or exceed the professional, administrative and financial qualifications set forth in this Section 3 and shall incorporate the information requested below.

In addition to the information required as described below, a Respondent may submit supplemental information that it feels may be useful in evaluating its Proposal. Respondents are encouraged to be clear, factual, and concise in their presentation of information.

3.2. Administrative Information Requirements.

The Respondent shall, as part of its Proposal, provide the following information:

1. An executive summary (not to exceed two (2) pages) of the information contained in all the other parts of the Proposal.
2. A completed and executed Letter of Qualification (See Appendix A to this RFP).
3. Name, address and telephone number of the firm or firms submitting the Proposal pursuant to this RFP, and the name of the key contact person.
4. A description of the business organization (i.e., corporation, partnership, Limited Liability Company, joint venture, etc.) of each firm, its ownership and its organizational structure.
 - (a) Provide the names and business addresses of all Principals of the firm or firms submitting the Proposal. For purposes of this RFP, "Principals" means persons possessing an ownership interest in the Respondent. If the Respondent is a corporation, "Principals" shall include each investor who would have any amount of operational control over the Respondent and every stockholder having an ownership interest of 10% or more in the firm.
 - (b) If a firm is a partially owned or a fully-owned subsidiary of another firm or company, identify the parent firm or company and describe the nature and extent of the parents' approval

rights over the activities of the firm submitting a Proposal. Describe the approval process.

- (c) If the Respondent is a partnership, Limited Liability Company, joint venture or similar organization, it shall provide comparable information as required in 4 (a) and (b) above for each member of the partnership, Limited Liability Company, joint venture or similar organization.
- 5. An executed Letter of Intent (See Appendix B).
- 6. The number of years your organization has been in business under the present name.
- 7. The number of years your organization has been under the current management.
- 8. A statement that the Respondent is in compliance with all applicable affirmative action (or similar) requirements with respect to its business activities, together with evidence of such compliance.
- 9. Any judgments within the last three (3) years in which Respondent has been adjudicated liable for professional malpractice. If yes, please provide a written description of the circumstances underlying the adjudication and a copy of any legal ruling relevant thereto.
- 10. Whether the business organization is now or has been involved in any bankruptcy or re-organization proceedings in the last ten (10) years. If yes, please provide a written description of the circumstances underlying the bankruptcy proceedings and a copy of any legal rulings relevant thereto.
- 11. Confirm appropriate federal and state licenses to perform the Services.
- 12. Respondent shall submit a copy of its Business Registration Certificate.

3.3. Professional Information Requirements.

1. Respondent shall submit a description of its overall experience in providing the Services sought in the RFP, and provide proof of all certifications necessary to perform such Services. Respondents must provide the following:

- (a) An explanation of the Respondent's fields of expertise, specifically highlighting any experience with public and/or government organizations and an explanation of why the

Respondent feels that the firm is qualified to perform the scope of work described herein;

- (b) A description of the Respondent's experience in soil blending operations and if available, reference three soil blending projects and /or operational services that the Respondent has been involved with during the past three (3) to five (5) years. Include a contact for each reference provided;
 - (c) A brief description of the Respondent's largest, smallest, and mid-sized project during the last three (3) years;
 - (d) Any other information the Respondent deems pertinent and which demonstrates an ability to perform the requested services.
- 2. Describe the services that Respondent would perform directly.
 - 3. Describe those portions of the Services, if any that will be sub-contracted out by the Respondent. Identify all subcontractors the Respondent anticipates using in connection with the Services set forth in this RFP.
 - 4. List all immediate relatives of Principal(s) of Respondent who are Commission employees or elected officials of the Commission, if any. For purposes of the above, "immediate relative" means a spouse, parent, stepparent, brother, sister, child, stepchild, direct-line aunt or uncle, grandparent, grandchild, and in-laws by reason of relation. If none, so state.

3.4. Experience of Key Personnel.

The Respondent must demonstrate the experience and qualifications of the firm, its principals and associates that will be performing work for the Commission. Therefore, the Respondent shall provide the following:

- (a) Organizational chart;
- (b) Resumes of the principals and associates that will be assigned and committed to the Commission, including their applicable experience and their individual qualifications; and
- (c) Other information Proposer deems pertinent which demonstrates an ability to perform the requested services.

3.5. Technical Proposal.

The Respondent must submit an Operation Plan specifically detailing the blending operations. The Operations Plan should include:

- (a) Process Flow Diagram and description for blending activities.

Description should include:

1. Step by Step soil blending process including final placement, quality and safety control.
2. Type and quantity of any blending equipment to be used.
3. Type and quantity of any screening equipment to be used.
4. Type and quantity of any heavy machinery to be used.
5. Type and quantity of any equipment used in reservoir mining operation.
6. Size and quantity of dump trucks to be used.
7. Approximate schedule in days per week or month the Respondent intends to be on site.
8. Weather conditions that may prohibit blending operations.

- (b) Methods for ensuring permit compliance.

- (c) Sample Report for Residuals blend quality and tracking to end-user destinations.

- (d) Methods of adhering to the Commission's Soil Erosion and Sediment Control Plan.

- (e) Methods of adhering to the Commission's Storm Water Pollution Prevention Plan.

- (f) Plan to ensure the protection of the Commission's watershed from possible fuel, oil, chemical contamination.

- (g) Target markets for sale and ultimate destination of blended residuals product.

3.6. Expense Detail.

In an effort to ensure that the Soil Blending Operations are attractive and mutually beneficial for both the Commission and the Respondent, the Commission will provide access to: a) The Blending Site(s); b) Residuals; c) Top Soil and Fill; d) Reservoir shore line where removal operations of sand and silt may take place in designated areas; and e) Reservoir Mining area as detailed in

Section 2.2.2. All of these items are being supplied at no cost to the Managing Firm. If applicable, the Respondent shall submit a cost structure detailing any and all costs and/or incentives incurred by or due to the Commission for the Soil Blending Operation services.

3.7. Insurance Requirements.

The Selected Respondent shall indemnify, hold harmless, and defend the Commission, its Commissioners, officers, directors, agents, employees and servants from and against any and all claims, demands, suits, damages, recoveries, settlements, actions, costs, counsel fees, expenses, judgments or decrees arising from or as a result of any acts, errors or omissions by the Selected Respondent, its principals, employees, officers, agents, servants, independent contractors or subcontractors.

The Selected Respondent retained to perform the Services will be required to obtain and maintain continuously, at its own expense, and file with the Commission and its insurance broker evidence of coverage as enumerated below:

1. Commercial General Liability Insurance:

Commercial General Liability Insurance, written on an industry standard occurrence form (CG 00 01), 1207 Edition or Equivalent.

The Selected Respondent shall maintain Products Completed Operations liability coverage for a period of at least twenty-four (24) months following the Final Project Completion Date.

Such policy(ies) must provide the following minimum limits:

\$2,000,000	General Aggregate - Applies Per Project
\$1,000,000	Products & Completed Operations Aggregate
\$1,000,000	Personal & Advertising Injury
\$1,000,000	Each Occurrence Limit
\$ 100,000	Fire Damage Legal Liability

Any deductible or self-insured retention must be disclosed and is subject to approval by the Commission. The cost of any claim payments falling within the deductible shall be the responsibility of the Selected Respondent.

2. Business Automobile Liability:

Including coverage for owned, non-owned, leased or hired vehicles, written on an industry standard form (CA 00 01) or equivalent. Such policy(ies) must provide the following minimum limits:

\$1,000,000 Combined Single Limit (Bodily Injury & Property Damage)

3. **Worker's Compensation:**

- Worker's Compensation Limits: Statutory
- Employer's Liability:
 - \$1,000,000 Each Accident
 - \$1,000,000 Disease – Policy Limit
 - \$1,000,000 Disease – Each Employee

4. **Excess/Umbrella Insurance:**

Schedule of Underlying to include: General Liability, Employer's Liability and Auto Liability as outlined above.

Minimum Limit of Liability: \$5,000,000 per Occurrence
\$5,000,000 Aggregate

5. **Contractor's Pollution & Professional Liability Policy:**

Minimum Combined Limit of Liability: \$3,000,000 Each Incident
\$3,000,000 Policy Aggregate

Definition of Covered Services: Includes all services performed by the insured for a fee.

The Selected Respondent shall maintain this Insurance for a period of at least twenty-four (24) months following the expiration of the contract term and/or termination of service.

The Commission must be named as an additional insured under all applicable policies (except for Worker's Compensation and Contractor's Pollution & Professional Liability) and the Selected Respondent must provide the Commission with current Certificates of Insurance for all required insurance coverages upon execution of the contract for the Services.

In the event the Selected Respondent will utilize leased, contract or temporary employees to perform the Services, it will be necessary for the Selected Respondent to demonstrate to the Commission's full satisfaction prior to the award of a contract that all such employees are covered with Worker's Compensation insurance.

6. **Evidence of Insurance:**

The following documents must be provided in conjunction with a Certificate of Insurance:

- A copy of the endorsement naming the Commission as an Additional Insured, on Form CG2010 or equivalent on all policies except Worker's Compensation.
- A copy of an endorsement stating that the coverages provided by this policy to the Commission shall not be terminated, reduced or otherwise materially changed without providing at least sixty (60) days prior written notice to the Commission.
- A waiver of subrogation in favor of the Commission shall apply under all the policies outlined in this section.
- General Contractor and subcontractors, if any and only as permitted by the Commission in its full discretion, are required to maintain the same level of coverage as outlined in Section 1 and provide Certificates of Insurance and copies of supporting endorsements.

All policies must be rated A-VII or higher in the A.M. Best's Key Rating Guide and licensed to do business in the State of New Jersey or are an eligible Surplus Lines Insurer or are an acceptable Joint Insurance Fund.

Acceptance by the Commission of deficient evidence of insurance does not constitute a waiver of contract requirement as provided by conditions of the contract.

3.5. **Affirmative Action.**

During the performance of the Services, the Selected Respondent must agree as follows:

- a. The Selected Respondent will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation, gender identity or expression, disability, nationality the contractor will take affirmative action to ensure such applicants are recruited and employed, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation gender identity or expression, disability, nationality, or sex. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or

termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Selected Respondent agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth provisions of this nondiscrimination clause.

- b. The Selected Respondent will, in all solicitations or advertisements for employees placed by or on behalf of the Selected Respondent, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.
- c. The Selected Respondent will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer advising the labor union or workers' representative of the Selected Respondent's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- d. The Selected Respondent agrees to comply with the regulations promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time.
- e. The Selected Respondent shall furnish such reports or other documents to the affirmative action office as may be requested by the office from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the affirmative action office for conducting a compliance investigation pursuant to N.J.A.C. 17:27-1 et seq.
- f. The Selected Respondent agrees to attempt in good faith to employ minority and female workers consistent with the applicable county employment goals prescribed by N.J.A.C. 17:27-5.2 promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time or in accordance with a binding determination of the applicable county employment goals determined by the affirmative action office pursuant to N.J.A.C. 17:27-5.2 promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time.
- g. The Selected Respondent agrees to inform in writing appropriate recruitment agencies in the area, including employment agencies, placement bureaus, colleges, universities, labor unions, that it does not discriminate on the basis of age, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, and that it will discontinue the use of any recruitment agency that engages in direct or indirect discriminatory practices.

- h. The Selected Respondent agrees to revise any of its testing procedures, if necessary, to assure that all personnel testing conforms with the principles of job-related testing, as established by the statutes, laws, regulations and court decisions of the State of New Jersey and as established by applicable Federal law and applicable Federal court decisions.
- i. The Selected Respondent agrees to review all procedures relating to transfer, upgrading, downgrading, and layoff to ensure that all such actions are taken without regard to age, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, and conform with the applicable employment goals, consistent with the statutes, laws, regulations and court decisions of the State of New Jersey, and as established by applicable Federal law and applicable Federal Court decisions.

END OF SECTION 3

SECTION 4

INSTRUCTIONS TO RESPONDENTS

4.1. Submission of Proposals.

Respondents must submit an original and ten (10) copies of their Proposal and a .pdf copy on a CD or USB drive, to the Designated Contact Person:

William Schaffner
Chief Financial Officer
North Jersey District Water Supply Commission
One F.A. Orechio Drive
Wanaque, New Jersey 07465

Sealed Proposals must be received by the Commission no later than **3:00 PM, Prevailing Time, on Friday, August 3, 2018,** and must be mailed, overnight delivered, or hand-delivered. Proposals forwarded by facsimile or e-mail **will not** be accepted. Please indicate on the outside of the sealed envelope ***“Response to Request for Proposals for Wanaque Water Treatment Plant (WWTP) Residual Trucking and Management.”***

To be responsive, Proposals must provide all requested information, and must be in strict conformance with the instructions set forth herein. Proposals and all related information must be bound, and signed and acknowledged by the Respondent.

END OF SECTION 4

SECTION 5

EVALUATION

The Commission's objective in soliciting Proposals is to enable it to select a person(s) or firm(s) from among the qualified respondents that will provide high quality and cost-effective services. The Commission will consider Proposals only from firms or organizations that, in the Commission's sole judgment, have demonstrated the capability and willingness to provide high quality services to the citizens of the Commission in the manner described in this RFP.

Selection of a qualified respondent to perform the Services will be made on a competitive basis based on the Respondent's qualifications and the proposed fee, and familiarity with applicable law relevant to the performance of the Services. The selection will also take into consideration a Respondent's proficiency in providing the Services to governmental entities. The Commission will select the Respondent that it determines is best qualified to provide the Services to the Commission, price and other factors considered.

The factors that the Commission will use as part of evaluation may include, but are not limited to, the following:

<u>Item</u>	<u>Weight</u>
1. Proposed total cost and/or incentives to the Commission including any Commission assets required to implement and oversee Daily Blending Operations.	70%
2. Detailed Technical proposal including available machinery and target markets.	20%
3. Experience and reputation of the Firm in the field of soil blending operations, the Firm's history of regulatory compliance in daily operations and individual projects and specifically the details requested	5%
4. Safety and Quality Plan/Accident Record Rate	3%
5. Other factors demonstrated to be in the best interest of the Commission.	2%

APPENDIX A

LETTER OF QUALIFICATION

(Note: To be typed on Respondent's Letterhead. No modifications may be made to this letter)

[insert date]

Timothy J. Eustace, Executive Director
North Jersey District Water Supply Commission
One F.A. Orechio Drive
Wanaque, New Jersey 07465

Attn: Timothy J. Eustace, Executive Director

Dear Mr. Eustace:

The undersigned have reviewed our Proposal submitted in response to the Request for Proposals issued by the North Jersey District Water Supply Commission (the "Commission"), dated [insert date], in connection with the Commission's need for Wanaque Water Treatment Plant (WWTP) Residual Trucking and Management.

We affirm that the contents of our Proposal (which Proposal is incorporated herein by reference) are accurate, factual and complete to the best of our knowledge and belief and that the Proposal is submitted in good faith upon express understanding that any false statement may result in the disqualification of (Name of Respondent).

(Respondent shall sign and complete the spaces provided below. If a joint venture, appropriate officers of each company shall sign.)

(Signature of Chief
Executive Officer) _____

(Signature of Chief
Financial Officer) _____

(Typed Name and Title)

(Typed name and Title)

(Type Name of Firm)*

(Type Name of Firm)*

Dated: _____

Dated: _____

* If a joint venture, partnership or other formal organization is submitting a Proposal, each participant shall execute this Letter of Qualification.

APPENDIX B
LETTER OF INTENT

(Note: To be typed on Respondent's Letterhead. No modifications may be made to this letter)

[insert date]

Timothy J. Eustace, Executive Director
North Jersey District Water Supply Commission
One F.A. Orechio Drive
Wanaque, New Jersey 07465

Attn: Timothy J. Eustace, Executive Director

Dear Mr. Eustace:

The undersigned, as Respondent, has (have) submitted the attached Proposal in response to a Request for Proposals ("RFP"), issued by the North Jersey District Water Supply Commission ("Commission"), dated [insert date], in connection with the Commission's need for Wanaque Water Treatment Plant (WWTP) Residual Trucking & Management.

(Name of Respondent) HEREBY STATES:

1. The Proposal contains accurate, factual and complete information.
2. (Name of Respondent) agrees (agrees) to participate in good faith in the procurement process as described in the RFP.
3. (Name of Respondent) acknowledges (acknowledge) that all costs incurred by it (them) in connection with the preparation and submission of the Proposal and any proposal prepared and submitted in response to the RFP, or any negotiation which results therefrom shall be borne exclusively by the Respondent.
4. (Name of Respondent) hereby declares (declare) that the only persons participating in this Proposal as Principals are named herein and that no person other than those herein mentioned has any participation in this Proposal or in any contract to be entered into with respect thereto. Additional persons may subsequently be included as participating Principals, but only if acceptable to the Commission.
5. (Name of Respondent) declares that this Proposal is made without connection with any other person, firm or parties who has submitted a Proposal,

except as expressly set forth below and that it has been prepared and has been submitted in good faith and without collusion or fraud.

6. (Name of Respondent) acknowledges and agrees that the Commission may modify, amend, suspend and/or terminate the procurement process (in its sole judgment). In any case, the Commission shall have no liability ***whatsoever*** to the Respondent for any costs incurred by the Respondent with respect to the procurement activities described in this RFP.

7. (Name of Respondent) acknowledges that any contract executed with respect to the provision of [insert services] must comply with all applicable affirmative action and similar laws. Respondent hereby agrees to take such actions as are required in order to comply with such applicable laws.

(Respondent shall sign and complete the space provided below. If a joint venture, appropriate officers of each company shall sign.)

(Signature of Chief Executive Officer)

_____(Typed Name and Title)

_____(Type Name of Firm)*

Dated: _____

- If a joint venture, partnership or other formal organization is submitting a Proposal, each participant shall execute this Letter of Intent.

ATTACHMENT #1

CERTIFICATION & DISCLOSURE FORMS

(7 PAGES)

INFORMATION AND INSTRUCTIONS

For Completing the “Two-Year Vendor Certification and Disclosure of Political Contributions” Form

Background Information

On September 22, 2004, then-Governor James E. McGreevey issued E.O. 134, the purpose of which was to insulate the negotiation and award of State contracts from political contributions that posed a risk of improper influence, purchase of access or the appearance thereof. To this end, E.O. 134 prohibited State departments, agencies and authorities from entering into contracts exceeding \$17,500 with individuals or entities that made certain political contributions. E.O. 134 was superseded by Public Law 2005, c. 51, signed into law on March 22, 2005 (“Chapter 51”).

On September 24, 2008, Governor Jon S. Corzine issued E.O. 117 which is designed to enhance New Jersey’s efforts to protect the integrity of procurement decisions and increase the public’s confidence in government. The Executive Order builds upon the provisions of Chapter 51.

Two-Year Certification Process

Upon approval by the State Chapter 51 Review Unit, the Certification and Disclosure of Political Contributions form is valid for a two (2) year period. Thus, if a vendor receives approval on January 1, 2014, the certification expiration date would be December 31, 2015. Any change in the vendor’s ownership status and/or political contributions during the two-year period will require the submission of new Chapter 51/Executive Order 117 forms to the State Review Unit. **Please note that it is the vendor’s responsibility to file new forms with the State should these changes occur.**

State Agency Instructions: Prior to the awarding of a contract, the State Agency should first send an e-mail to CD134@treas.nj.gov to verify the certification status of the vendor. If the response is that the vendor is NOT within an approved two-year period, then forms must be obtained from the vendor and forwarded for review. If the response is that the vendor is within an approved two-year period, then the response so stating should be placed with the bid/contract documentation for the subject project.

Instructions for Completing the Form

NOTE: Please refer to pages 3 and 4 “USEFUL DEFINITIONS for the purposes of Chapter 51 and Executive Order 117” for guidance when completing the form.

Part 1: BUSINESS ENTITY INFORMATION

Business Name – Enter the full legal name of the vendor, including trade name if applicable.

Address, City, State, Zip and Phone Number -- Enter the vendor's street address, city, state, zip code and telephone number.

Vendor Email – Enter the vendor’s primary email address.

Vendor FEIN – Please enter the vendor’s Federal Employment Identification Number.

Business Type - Check the appropriate box that represents the vendor's type of business formation.

Listing of officers, shareholders, partners or members - Based on the box checked for the business type, provide the corresponding information. (A complete list must be provided.)

Part 2: DISCLOSURE OF CONTRIBUTIONS

Read the three types of political contributions that require disclosure and, if applicable, provide the recipient's information. The definition of "Business Entity/Vendor" and "Contribution" can be found on pages 3 and 4 of this form.

Name of Recipient - Enter the full legal name of the recipient.

Address of Recipient - Enter the recipient's street address.

Date of Contribution - Indicate the date the contribution was given.

Amount of Contribution - Enter the dollar amount of the contribution.

Type of Contribution - Select the type of contribution from the examples given.

Contributor's Name - Enter the full name of the contributor.

Relationship of the Contributor to the Vendor - Indicate the relationship of the contributor to the vendor. (e.g. officer or shareholder of the company, partner, member, parent company of the vendor, subsidiary of the vendor, etc.)

NOTE: If form is being completed electronically, click "Add a Contribution" to enter additional contributions. Otherwise, please attach additional pages as necessary.

Check the box under the recipient information if no reportable contributions have been solicited or made by the business entity. **This box must be checked if there are no contributions to report.**

Part 3: CERTIFICATION

Check Box A if the representative completing the Certification and Disclosure form is doing so on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity.

(No additional Certification and Disclosure forms are required if BOX A is checked.)

Check Box B if the representative completing the Certification and Disclosure form is doing so on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity with the exception of those individuals and/or entities that submit their own separate form. For example, the representative is not signing on behalf of the vice president of a corporation, but all others. The vice president completes a separate Certification and Disclosure form. **(Additional Certification and Disclosure forms are required from those individuals and/or entities that the representative is not signing on behalf of and are included with the business entity's submittal.)**

Check Box C if the representative completing the Certification and Disclosure form is doing so on behalf of the business entity only. **(Additional Certification and Disclosure forms are required from all individuals and/or entities whose contributions are attributable to the business entity and must be included with the business entity submittal.)**

Check Box D when a sole proprietor is completing the Certification and Disclosure form or when an individual or entity whose contributions are attributable to the business entity is completing a separate Certification and Disclosure form.

Read the five statements of certification prior to signing.

The representative authorized to complete the Certification and Disclosure form must sign and print her/his name, title or position and enter the date.

Public Law 2005, Chapter 51 and Executive Order 117 (2008)

State Agency Procedure for Submitting Form(s)

The State Agency should submit the completed and signed Two-Year Vendor Certification and Disclosure forms either electronically to: cd134@treas.nj.gov or regular mail at: Chapter 51 Review Unit, P.O. Box 230, 33 West State Street, Trenton, NJ 08625-0230. Original forms should remain with the State Agency and copies should be sent to the Chapter 51 Review Unit.

Business Entity Procedure for Submitting Form(s)

The business entity should return this form to the contracting State Agency. The business entity can submit the Certification and Disclosure form directly to the Chapter 51 Review Unit only when:

- The business entity is approaching its two-year certification expiration date and is seeking certification renewal;
- The business entity had a change in its ownership structure; OR
- The business entity made any contributions during the period in which its last two-year certification was in effect, or during the term of a contract with a State Agency.

Questions & Information

Questions regarding the interpretation or application of Public Law 2005, Chapter 51 (N.J.S.A. 19:44A-20.13) or E.O. 117 (2008) may be submitted electronically through the Division of Purchase and Property website at: <https://www.state.nj.us/treas/purchase/eo134questions.shtml>

Reference materials and forms are posted on the Political Contributions Compliance website at: <http://www.state.nj.us/treasury/purchase/execorder134.shtml>

USEFUL DEFINITIONS for the purposes of Chapter 51 and Executive Order 117

- **“Business Entity/Vendor”** means any natural or legal person, business corporation, professional services corporation, limited liability company, partnership, limited partnership, business trust, association or any other legal commercial entity organized under the laws of New Jersey or any other state or foreign jurisdiction. The definition also includes (i) if a business entity is a for-profit corporation, any officer of the corporation and any other person or business entity that owns or controls 10% or more of the stock of the corporation; (ii) if a business entity is a professional corporation, any shareholder or officer; (iii) if a business entity is a general partnership, limited partnership or limited liability partnership, any partner; (iv) if a business entity is a sole proprietorship, the proprietor; (v) if the business entity is any other form of entity organized under the laws of New Jersey or any other state or foreign jurisdiction, any principal, officer or partner thereof; (vi) any subsidiaries directly or indirectly controlled by the business entity; (vii) any political organization organized under 26 U.S.C.A. § 527 that is directly or indirectly controlled by the business entity, other than a candidate committee, election fund, or political party committee; and (viii) with respect to an individual who is included within the definition of “business entity,” that individual’s civil union partner and any child residing with that person. ¹
- **“Officer”** means a president, vice president with senior management responsibility, secretary, treasurer, chief executive officer or chief financial officer of a corporation or any person routinely performing such functions for a corporation. Please note that officers of non-profit entities are excluded from this definition.
- **“Partner”** means one of two or more natural persons or other entities, including a corporation, who or which are joint owners of and carry on a business for profit, and which business is organized under the laws of this State or any other state or foreign jurisdiction, as a general partnership, limited partnership, limited liability partnership, limited liability company, limited partnership association, or other such form of business organization.

¹Contributions made by a spouse, civil union partner or resident child to a candidate for whom the contributor is eligible to vote or to a political party committee within whose jurisdiction the contributor resides are permitted.

USEFUL DEFINITIONS for the purposes of Chapter 51 and Executive Order 117

- **“Contribution”** is a contribution, including an in-kind contribution, in excess of \$300.00 in the aggregate per election made to or received by a candidate committee, joint candidates committee, or political committee; or per calendar year made to or received by a political party committee, legislative leadership committee, or continuing political committee or a currency contribution in any amount.
- **“In-kind Contribution”** means a contribution of goods or services received by a candidate committee, joint candidates committee, political committee, continuing political committee, political party committee, or legislative leadership committee, which contribution is paid for by a person or entity other than the recipient committee, but does not include services provided without compensation by an individual volunteering a part of or all of his or her time on behalf of a candidate or committee.
- **“Continuing Political Committee”** includes any group of two or more persons acting jointly, or any corporation, partnership, or any other incorporated or unincorporated association, including a political club, political action committee, civic association or other organization, which in any calendar year contributes or expects to contribute at least \$4,300 to aid or promote the candidacy of an individual, or the candidacies of individuals, for elective public office, or the passage or defeat of a public questions, and which may be expected to make contributions toward such aid or promotion or passage or defeat during a subsequent election, provided that the group, corporation, partnership, association or other organization has been determined by the Commission to be a continuing political committee in accordance with N.J.S.A. 19:44A-8(b).
- **“Candidate Committee”** means a committee established by a candidate pursuant to N.J.S.A. 19:44A-9(a), for the purpose of receiving contributions and making expenditures.
- **“State Political Party Committee”** means a committee organized pursuant to N.J.S.A. 19:5-4.
- **“County Political Party Committee”** means a committee organized pursuant to N.J.S.A. 19:5-3.
- **“Municipal Political Party Committee”** means a committee organized pursuant to N.J.S.A. 19:5-2.
- **“Legislative Leadership Committee”** means a committee established, authorized to be established, or designated by the President of the Senate, the Minority Leader of the Senate, the Speaker of the General Assembly, or the Minority Leader of the General Assembly pursuant to N.J.S.A. 19:44A-10.1 for the purpose of receiving contributions and making expenditures.
- **“Political Party Committee”** means:
 1. The State committee of a political party, as organized pursuant to N.J.S.A. 19:5-4;
 2. Any county committee of a political party, as organized pursuant to N.J.S.A. 19:5-3; or
 3. Any municipal committee of a political party, as organized pursuant to N.J.S.A. 19:5-2



State of New Jersey
Department of the Treasury

Division of Purchase and Property

Two-Year Chapter 51/Executive Order 117 Vendor Certification and
Disclosure of Political Contributions

FOR STATE AGENCY USE ONLY

Solicitation, RFP, or Contract No. _____ Award Amount _____

Description of Services _____

State Agency Name _____ Contact Person _____

Phone Number _____ Contact Email _____

Check if the Contract / Agreement is Being Funded Using FHWA Funds

**Please check if requesting
recertification**

Part 1: Business Entity Information

Full Legal Business Name _____
(Including trade name if applicable)

Address _____

City _____ State _____ Zip _____ Phone _____

Vendor Email _____ Vendor FEIN (SS# if sole proprietor/natural person) _____

**Check off the business type and list below the required information for the type of business selected.
MUST BE COMPLETED IN FULL**

- Corporation: LIST ALL OFFICERS and any 10% and greater shareholder
- Professional Corporation: LIST ALL OFFICERS and ALL SHAREHOLDERS
- Partnership: LIST ALL PARTNERS with any equity interest
- Limited Liability Company: LIST ALL MEMBERS with any equity interest
- Sole Proprietor

Note: "Officers" means President, Vice President with senior management responsibility, Secretary, Treasurer, Chief Executive Officer or Chief Financial Officer of a corporation, or any person routinely performing such functions for a corporation.

All Officers of a Corporation or PC

**10% and greater shareholders of a corporation
or all shareholder of a PC**

All Equity partners of a Partnership

All Equity members of a LLC

If you need additional space for listing of Officers, Shareholders, Partners or Members, please attach separate page.

IMPORTANT NOTE: You must review the definition of "contribution" and "business entity" on the Information and Instructions form prior to completing Part 2 and Part 3. The Information and Instructions form is available at: <http://www.state.nj.us/treasury/purchase/forms.shtml#eo134>

Part 2: Disclosure of Contributions by the business entity or any person or entity whose contributions are attributable to the business entity.

- 1. Report below all contributions solicited or made during the 4 years immediately preceding the commencement of negotiations or submission of a proposal to any:**

Political organization organized under Section 527 of the Internal Revenue Code and which also meets the definition of a continuing political committee as defined in N.J.S.A. (See Information and Instructions form.)

- 2. Report below all contributions solicited or made during the 5 ½ years immediately preceding the commencement of negotiations or submission of a proposal to any:**

Candidate Committee for or Election Fund of any Gubernatorial or Lieutenant Gubernatorial candidate
State Political Party Committee
County Political Party Committee

- 3. Report below all contributions solicited or made during the 18 months immediately preceding the commencement of negotiations or submission of a proposal to any:**

Municipal Political Party Committee
Legislative Leadership Committee

Full Legal Name of Recipient _____
Address of Recipient _____
Date of Contribution _____ Amount of Contribution _____
Type of Contribution (i.e. currency, check, loan, in-kind) _____
Contributor Name _____
Relationship of Contributor to the Vendor _____
If this form is not being completed electronically, please attach additional contributions on separate page. Click the "Add a Contribution" tab to enter additional contributions.
<input type="button" value="Remove Contribution"/>
<input type="button" value="Add a Contribution"/>

Check this box only if no political contributions have been solicited or made by the business entity or any person or entity whose contributions are attributable to the business entity.

Part 3: Certification

- (A) I am certifying on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity as listed on Page 1 under **Part 1: Vendor Information**.
- (B) I am certifying on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity as listed on Page 1 under **Part 1: Vendor Information**, except for the individuals and/or entities who are submitting separate Certification and Disclosure forms which are included with this submittal.
- (C) I am certifying on behalf of the business entity only; any remaining persons or entities whose contributions are attributable to the business entity (as listed on Page 1) have completed separate Certification and Disclosure forms which are included with this submittal.
- (D) I am certifying as an individual or entity whose contributions are attributable to the business entity.

I hereby certify as follows:

- I have read the Information and Instructions accompanying this form prior to completing the certification on behalf of the business entity.**
- All reportable contributions made by or attributable to the business entity have been listed above.**

3. The business entity has not knowingly solicited or made any contribution of money, pledge of contribution, including in-kind contributions, that would bar the award of a contract to the business entity unless otherwise disclosed above:

- a) Within the 18 months immediately preceding the commencement of negotiations or submission of a proposal for the contract or agreement to:
 - (i) A candidate committee or election fund of any candidate for the public office of Governor or Lieutenant Governor or to a campaign committee or election fund of holder of public office of Governor or Lieutenant Governor; OR
 - (ii) Any State, County or Municipal political party committee; OR
 - (iii) Any Legislative Leadership committee.
- b) During the term of office of the current Governor or Lieutenant Governor to:
 - (i) A candidate committee or election fund of a holder of the public office of Governor or Lieutenant Governor; OR
 - (ii) Any State or County political party committee of the political party that nominated the sitting Governor or Lieutenant Governor in the last gubernatorial election.
- c) Within the 18 months immediately preceding the last day of the sitting Governor or Lieutenant Governor's first term of office to:
 - (i) A candidate committee or election fund of the incumbent Governor or Lieutenant Governor; OR
 - (ii) Any State or County political party committee of the political party that nominated the sitting Governor or Lieutenant Governor in the last gubernatorial election.

4. During the term of the contract/agreement the business entity has a continuing responsibility to report, by submitting a new Certification and Disclosure form, any contribution it solicits or makes to:

- (a) Any candidate committee or election fund of any candidate or holder of the public office of Governor or Lieutenant Governor; OR
- (b) Any State, County or Municipal political party committee; OR
- (c) Any Legislative Leadership committee.

The business entity further acknowledges that contributions solicited or made during the term of the contract/agreement may be determined to be a material breach of the contract/agreement.

5. During the two-year certification period the business entity will report any changes in its ownership structure (including the appointment of an officer within a corporation) by submitting a new Certification and Disclosure form indicating the new owner(s) and reporting said owner(s) contributions.

I certify that the foregoing statements in Parts 1, 2 and 3 are true. I am aware that if any of the statements are willfully false, I may be subject to punishment.

Signed Name _____ Print Name _____

Title/Position _____ Date _____

Procedure for Submitting Form(s)

The contracting State Agency should submit this form to the Chapter 51 Review Unit when it has been required as part of a contracting process. The contracting State Agency should submit a copy of the completed and signed form(s), to the Chapter 51 Unit and retain the original for their records.

The business entity should return this form to the contracting State Agency. The business entity can submit this form directly to the Chapter 51 Review Unit only when it -

- Is approaching its two-year certification expiration date and wishes to renew certification;
- Had a change in its ownership structure; OR
- Made any contributions during the period in which its last two-year certification was in effect, or during the term of a contract with a State Agency.

Forms should be submitted either electronically to: cd134@treas.nj.gov , or regular mail at: Chapter 51 Review Unit, P.O. Box 230, 33 West State Street, Trenton, NJ 08625.

ATTACHMENT #2

ACCESS APPROVAL FORM

(1 PAGE)



ACCESS APPROVAL FORM TO COMMISSION FACILITIES

COMPLETE ALL SECTIONS

PLEASE PRINT LEGIBLY

1. Name of Individual Entering Premises: _____
- a. Company Name: _____
- b. Date of Arrival: _____
- c. Time of Arrival: _____
- d. Your Contact Info: Phone: _____ Fax: _____ Email: _____

2. Purpose:
- a. Meeting: () Interview: () Pre-bid/Pre-Proposal Meeting: () Bid Opening: ()
 Bid/RFP # & Title: _____
 Meeting Scheduled With: _____
 Visiting which Commission Facility: _____
- b. Delivery: () Routine -or- () Special
 Purpose of Delivery: _____
 Contact Person at NJDWSC: _____
 Type: _____ Package: _____ Chemical: _____ Other: _____
 Hazardous Materials () (Attach MSDS Sheets)
 Other Materials Delivered or Transported to Commission Property (List Below):

3. Vehicle Make: _____ Year: _____ Color: _____ Lic. Plate #: _____
4. Emergency Contact Number of Your Firm: _____ Name: _____
 Tele #: _____

Email completed Access Approval Form & Photo ID to security@njdwsc.com 24 hours prior to arrival time. For any questions, please call (973) 831-6200. A new Access Approval Form is required for each and every visit.

Approved by Commission: _____ Date: _____

Comments: _____

ATTACHMENT #3

**RESIDUAL PERMIT PART IV, LAND APPLICATION INDUSTRIAL RESIDUALS, PART B -
REPORTING,
SECTION 1 - DISTRIBUTION SITE
CONDITIONS & PROCEDURES**

(5 PAGES)

FORM RMS-1E: DISTRIBUTION SITE INFORMATION SHEET

Permittee: _____ NJPDES No. _____

USER INFORMATION:

1. Name: _____

2. Address: _____

3. Phone No.: _____

4. Location of site (street address, block number, lot number, county, municipality) where storage, blending and/or land application will occur:

5. Total acreage to be utilized for land application (if applicable): _____

6. Affix hereon a U.S. Department of Agriculture, Soil Conservation Service Soil Survey Map (clear copy or original) for the area of the proposed site identified above.

- Delineate thereon the property boundaries for the site and the areas where water treatment residuals are to be stored, blended, and/or land applied.
- The map portion is from the _____ County Soil Survey.
- The map portion is from the sheet number _____ of the above Soil Survey.

7. Affix hereon a municipal tax map (clear copy or original) for the area of the site where water treatment residuals are to be stored, blended, and/or land applied.

- Delineate thereon the property boundaries for the site and the areas where water treatment residuals are to be stored, blended, and/or land applied. Indicate tax identification, Lot numbers, and Block numbers.

8. Describe specifically how the subject property is zoned:

Form RMS-1E

I certify that to the best of my knowledge the above information on this site is accurate. I also certify I have read the permittee's New Jersey Pollutant Discharge Elimination System (NJPDES) permit, including the document entitled "Guidance for the Land Application of Water Treatment Residuals" contained within the permit, and agree to comply with the conditions listed therein.

Name of Permittee: _____
(Please print or type) _____

Permittee Signature: _____ Date _____

Name of User: _____

User Signature: _____ Date _____

FORM RMS-2E: PROPERTY OWNER'S CERTIFICATION

Facility from which the water treatment residuals will be obtained:

I hereby certify that I, _____ am the property owner identified on Form RMS-1E, Distribution Site Information Sheet. This endorsement is certification that I have read and understand the conditions contained in the permittee's New Jersey Pollutant Discharge Elimination System (NJPDES) permit, including the document entitled "Guidance for the Land Application of Water Treatment Residuals" contained within the permit, and hereby grant permission for the use of the water treatment residuals on the subject property. This permission may be withdrawn at any time during the life of the project.

In addition, the aforementioned property owner shall certify:

- 1. Whether any water treatment residuals are to be stored, blended, and/or land applied within an easement.

Yes _____ No. _____
(Initial) (Initial)

If yes, what type of easement. _____

- 2. Whether any water treatment residuals are to be stored, blended, and/or land applied within areas under the jurisdiction of the Pinelands Development Commission.

Yes _____ No. _____
(Initial) (Initial)

Type or Print Name and Address of Owner

Phone Number of Owner

Date

Signature of Owner

Guidance for the Land Application of Water Treatment Residuals

There are minimal health and environmental risks associated with the properly managed application of acceptable quality water treatment residuals (WTR) to soils as a soil conditioner. Below find guidelines and recommendations for the land application of WTR which consider nutrient impacts, soil pH, crop selection, and application rates. Due to the variable chemical and physical properties of WTR, the guidelines are generalized to consider many different aspects of WTR that may not be exhibited by every WTR. This document serves as a tool to be used in conjunction with a New Jersey Pollutant Discharge Elimination System (NJPDES) permit for the distribution and land application of water treatment residuals. Be advised that these guidelines and recommendations are subject to change due to ongoing research on the beneficial use of WTR.

I. NUTRIENTS

As with all agricultural operations, a background soils analysis for nutrients should be conducted prior to application of WTR to ascertain the nutrient status of the soil.

A. Nitrogen - Land applied WTR contain varying amounts of nitrogen that can assist in attaining a crop's nitrogen fertilizer requirement. To determine the available nitrogen applied via WTR, the following calculations should be used:

- Determine pounds total nitrogen per dry ton WTR:

$$\text{Total N(mg/kg)} * 1/1,000,000 * 2000(\text{mg/kg}) = \text{Total Lbs N Per Dry Ton}$$

- Determine pounds of available nitrogen per dry ton:

$$\frac{.10(\text{assumed first year}) * \text{Total Lbs N}}{\text{N mineralization rate of 10\%}} = \frac{\text{Lbs Available N}}{\text{Per Dry Ton}}$$

- Determine amount of available nitrogen applied

$$\frac{\text{Lbs Available N}}{\text{Per Dry Ton}} * \text{Dry Tons Applied} = \text{Lbs Available N Applied}$$

The amount of available nitrogen applied via WTR and from all other nitrogen sources should not exceed the nitrogen requirement of the crop grown. The Rutgers University "Production Recommendations for New Jersey Field Crops" and/or the Soil Conservation Service should be consulted to determine appropriate nitrogen application rates for crops.

B. Phosphorus - Some WTR may bind plant available phosphorus which can result in phosphorus deficient WTR amended soils. Such soils can be managed by practices used for other phosphorus deficient soils. To satisfy the phosphorus binding capacity of WTR, phosphate fertilizer may need to be applied to WTR amended soil. Below is a generalized method used to determine the

approximate amount of additional phosphate fertilizer that is required to mitigate phosphorus binding:

$$\text{WTR Loading Rate (tons)} * 2 = \text{Lbs P}_2\text{O}_5$$

(It should be noted that a fertilizer such as Triple Superphosphate (TSP) contains 46% P₂O₅)

However, to more accurately determine the plant available phosphorus of WTR amended soil it is recommended the amended soil be tested using the Bray-1, Olsen, or Mehlich tests to ensure proper soil fertility.

In managing phosphorus fertility of WTR amended soils, the following principles should be considered:

- Phosphorus is used by annual crops predominantly in the early stages of growth. Phosphorus fertilizers should be banded (placed in bands about 2 inches from the seed) or applied directly to the seedbed. Be advised that direct application to the seedbed can injure some seedlings such as soybeans.
- Water soluble phosphorus fertilizers are immediately available to crops. If water insoluble forms like rock phosphate are used, apply a few weeks before planting to allow adequate time to dissolve.
- Organic matter enhances phosphorus availability. Therefore, application of WTR with compost, sewage sludge, and manure will assist in off-setting phosphorus binding.
- Phosphorus availability is maximum at a soil pH of about 6.6.
- Application of WTR to high phosphorus soils may be beneficial in decreasing phosphorus leaching to ground and surface waters. It should be noted that many of New Jersey's soils are high in phosphorus.

II. SOIL pH

Most coagulation WTR have a limited ability to serve as agricultural liming materials since their calcium carbonate equivalence (CCE) generally ranges from 10-20% of commercial limestone. When WTR and soil have nearly equal pH values the WTR may have a negligible effect on soil pH. WTR generated at treatment plants where large amounts of lime are added for pH control typically have a CCE of greater than 90%, which is a neutralizing ability comparable to commercial limestone. The application rates of such lime softening residuals will be limited by the liming requirements of the soil. Generally, for optimum plant growth soil pH should be maintained between 6.5 and 7.0. The calculation represented below demonstrates the maximum application rate of WTR based upon the soil liming requirement:

- Test WTR for CCE.

- Test soil to indicate pounds per acre of CCE required.
- Calculate tons of WTR to satisfy liming requirement:

$$\frac{1}{\text{WTR CCE (as decimal)}} \quad * \quad \frac{\text{lbs CCE req. by soil per acre}}{2000 \text{ lbs per ton (conversion factor)}} =$$

Maximum Application Rate (tons/acre)

Poor plant growth in acid soils resulting from restricted root penetration is usually associated with high concentrations of soluble aluminum. Because all soils contain substantial levels of aluminum (7.1% typical), phytotoxicity is directly related to conditions controlling aluminum solubility and not the total amount in the soil. Thus, as previously stated, if the soil pH is maintained around 6.5 by liming and/or WTR addition, aluminum toxicity due to alum WTR does not pose a problem.

Overly alkaline soil conditions should be avoided because they may result in deficiencies of crop micronutrients such as manganese and zinc.

III. CROP SELECTION

Through judicious crop selection the vegetation grown on WTR amended lands will consume nutrients, control soil erosion, maintain infiltration, and reach optimum growth potential. The following factors should be considered when selecting a crop:

- "Acid loving" plants may not be suitable for growth on WTR amended soils because WTR may increase the pH of low pH soils. However, WTR with a low CCE will have little impact on soil pH and may enhance the growth of such plants.
- Crops that are efficient absorbents of soil phosphorus are most suitable due to the phosphorus binding potential of WTR. Examples are wheat, ryegrass, and soybeans.
- Where additional phosphorus fertilizer is required, crops should be tolerant to direct application of phosphorus fertilizer. Examples are wheat (very tolerant), and corn and sorghum (intermediate tolerance).
- Application of WTR to turf farms is useful in replacing topsoil lost after sod production.

IV. APPLICATION RATES

As with all soil amendments, application rates must be compatible with sound agronomic practices. Strategies to avoid over application of nitrogen, phosphorus deficiencies and overly alkaline conditions will determine the maximum recommended application rates of WTR. The loading rates expressed are based upon nitrogen loading, phosphorus binding effects, and liming potential.

The maximum application rate permitted is the most limiting rate as specified below:

- The equation in Part I.A of this guidance document should be used to calculate the pounds of available nitrogen per dry ton of WTR. This figure divided into the crop nitrogen requirement will yield the maximum WTR application rate based upon available nitrogen.
- Available research on the phosphorus binding ability of WTR suggests that a WTR evenly incorporated into a 6 inch plow layer of soil may be applied at the following maximum application rates:
 - Alum WTR - 20 dry tons per acre
 - FeCl₃ WTR - 50 dry tons per acre
 - Polymerized Aluminum WTR - 20 dry tons per acre
(Polymerized aluminum WTR includes WTR generated with polyaluminum chloride, polyaluminum silica sulfate, and aluminum chlorhydrate.)
- The application rate calculated pursuant to Part II of this guidance document which is based upon the tons of WTR required to fulfill the liming requirement of the soil.

Sources

- a. Elliott, H.A., B.A. Dempsey, D.W. Hamilton and J.R. DeWolfe, 1990a, Land Application of Water Treatment Sludges: Impacts and Management, AWWA Research Foundation and American Water Works Association: Denver, Colorado. The research study established a scientific basis for the land application of water treatment residuals.
- b. Elliott, H.A. and Dempsey, B.A., "Agronomic Effects of Land Application of Water Treatment Sludges," Jour. AWWA, April, 1991.
- c. "Statewide Sludge Management Plan," January 2006. The "Plan" addresses management of residuals generated by domestic and some industrial wastewater treatment plants.
- d. Dempsey, B.A., DeWolfe, J., Lunetta, M., Elias, S., "Evaluation of Chemical and Physical Characteristics of Water Treatment Residuals Before and After a Freeze-Thaw Cycle," June, 1993.