

Resolution 17-104

RESOLUTION TO APPROVE LOCAL LIMITS REPORT AND TO PROPOSE AMENDMENTS TO THE ROCKAWAY VALLEY REGIONAL SEWERAGE AUTHORITY SERVICE RULES ADDENDUM ESTABLISHING UPDATED LOCAL LIMITATIONS

WHEREAS, the Rockaway Valley Regional Sewerage Authority (hereinafter "the Authority") is authorized by the Sewerage Authorities Law [N.J.S.A. 40:14A-7(11)] to make and enforce rules and regulations for the management and regulation of its business and affairs and/or the use, maintenance, and operation of the sewerage system and any other of its properties and to amend the same; and

WHEREAS, the Authority is a Delegated Local Agency of the New Jersey Department of Environmental Protection and administers an industrial pretreatment program within the service area of the Authority; and

WHEREAS, the Authority is required by N.J.A.C. 7:14A-19.7 and the terms of its NJPDES Discharge Permit to perform a headworks analysis in order to develop local limits or demonstrate that local limits are not necessary. The headworks analysis and, if necessary, development of local limits must be conducted in accordance with the "Guidance Manual on the Development and Implementation of Local Discharge Limitations under the Pretreatment Program" (December 1987, USEPA Office of Water Enforcement), including all supplements and amendments thereto and must ensure compliance with (1) the numerical effluent limitations in the local agency's NJPDES permit; (2) The local agency's process inhibition and upset criteria; (3) The local agency's worker health and safety protection criteria; and (4) The sludge quality criteria for RVRSA's chosen method(s) of sludge management; and

WHEREAS, a headworks analysis was performed by Kleinfelder, Inc. and report prepared based upon the results of the headworks analysis entitled, “Local Limits Study Rockaway Valley Regional Sewerage Authority Wastewater Treatment Plant (NJPDES Permit Number NJ0022349)”, dated December, 2016, available at the offices of the RVRSA and incorporated herein by reference, demonstrating that revisions to RVRSA’s Service Rules Addendum, entitled, *Regulations Concerning Industrial Users and General Sewer Use Requirements* (“RVRSA Service Rules Addendum”) are warranted; and

WHEREAS, it is necessary and desirable to amend Section 203 of the RVRSA Service Rules Addendum, available at the offices of the RVRSA and on the RVRSA website, to establish updated Local Limits and establish a policy for future growth reserve and a policy applicable to high strength dischargers; and

WHEREAS, consistent with the attached letter from the RVRSA’s consulting engineer, James Cosgrove, Jr., P.E., Kleinfelder, Inc., to JoAnn Mondini, Executive Director, dated December 7, 2016, amendment of Section 204 of the RVRSA Service Rules is warranted to revise all references to “Biochemical Oxygen Demand” or “BOD₅” to “Carbonaceous Biochemical Oxygen Demand” or “CBOD₅” and to revise the surcharge formula; and

WHEREAS, pursuant to N.J.A.C. 7:14A-1 et seq., the attached changes must be reviewed and approved for publication by the Bureau of Pretreatment and Residuals, New Jersey Department of Environmental Protection (“Department”); and

WHEREAS, in accordance with requirements promulgated at N.J.A.C. 7:14A-19.10, public notice was published in the Daily Record on June 20, 2017, and written notice was provided to the industrial dischargers to the RVRSA System, and the public comment period ended on July 20, 2017 regarding the proposed revisions to the Service Rules as required by law;

and

WHEREAS, pursuant to the Service Contract between the Rockaway Valley Regional Sewerage Authority (“RVRSA”) and its Member Municipalities dated July, 1976, RVRSA held a public hearing on July 13, 2017 thereon.

NOW, THEREFORE, BE IT RESOLVED, by the Rockaway Valley Regional Sewerage Authority as follows:

1. The RVRSA hereby approves the report prepared by Kleinfelder, Inc. entitled “Local Limits Study Rockaway Valley Regional Sewerage Authority Wastewater Treatment Plant (NJPDES Permit Number NJ0022349)” (hereinafter “Local Limits Study”), dated December, 2016 and hereby adopts the attached revisions Section 203 and 204 of the RVRSA Service Rules Addendum.

2. The Executive Director is hereby authorized and directed to submit a copy of this Resolution along with the Local Limits Study, dated December, 2016, and proposed revisions to Section 203 and Section 204 of the RVRSA Service Rules Addendum, attached hereto and made a part hereof, to NJDEP, Bureau of Pretreatment and Residuals.

3. The Executive Director is hereby authorized and directed to publish notice of adoption of the attached revisions to the RVRSA’s Service Rules Addendum in the Daily Record and to provide to the industrial dischargers to the RVRSA System and Member Municipalities written notice of the same.

4. This Resolution shall take effect as provided by law and consistent with the provisions of the Service Contract between the Rockaway Valley Regional Sewerage Authority

("RVRSA") and its Member Municipalities dated July, 1976.

CERTIFICATION

I hereby certify that this Resolution was adopted at a meeting of the Rockaway Valley Regional Sewerage Authority held on August 10, 2017

On motion of Michael Guadagno

Second by John Cegelka

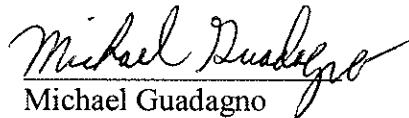
And a Roll Call Vote as Follows:

Yeas: (7) Andes, Cegelka, Corbett, Guadagno, Recchia, Rossi, Schorno

Nays: (0) None

Abstain: (1) Vincitore

Absent; (2) Lavery and Lowell


Michael Guadagno
Board Secretary

A. LOCAL LIMITS

The RVRSA has developed the following specific maximum daily effluent limitations to protect against pass through and interference and to implement the provisions of these Regulations. No person shall discharge wastewater containing in excess of the following Local Limits without prior authorization of the RVRSA:

<u>Parameter</u>		Concentrations (mg/L)
Arsenic (As)		0.2
Cadmium (Cd)		0.4
Chromium		1.3
Copper (Cu)		1.7
Lead (Pb)		1.0
Mercury (Hg)		0.06
Molybdenum (Mo)		0.3
Nickel (Ni)		0.8
Zinc (Zn)		2.1
Cyanide (CN)		0.5
Phenols		Report
Biochemical Oxygen Demand – 5 Day (BOD ₅)		Report
Carbonaceous Biochemical Oxygen Demand – 5 Day (CBOD ₅)*		250/500
Total Suspended Solids (TSS)*	250/500	
Total Dissolved Solids (TDS)		Report
Total Phosphorus		Report
pH (in Standard Units; s.u.)	5.5 - 9.5	
Oil & Grease (O&G)	100	
Ammonia (NH ₃ -N)*		40/80

- (*) All users discharging wastewater containing CBOD₅ and/or TSS in concentrations exceeding 250 mg/L and/or NH₃N in concentrations exceeding 40 mg/L shall be responsible for the payment of a surcharge to be calculated as set forth herein. However, in no instance shall a discharge exceed CBOD₅ or TSS of 500 mg/L or NH₃N of 80 mg/L unless a variance has been issued by the RVRSA providing therefore.

The above Local Limits apply at the Point Source and at all sampling locations as defined in the Industrial Sewer Connection Permit. All concentrations for metallic substances are for "total" metal unless indicated otherwise. RVRSA may impose mass limitations in addition to, or in place of the concentration-based limitations above.

No user shall ever increase the use of process water, or in any way attempt to dilute a discharge, as a partial or complete substitute for adequate treatment to achieve compliance with a discharge limitation unless expressly authorized by an applicable pretreatment standard or requirement. The Executive Director may impose mass limitations on users who are using dilution to meet

applicable pretreatment standards or requirements, or in other cases when the imposition of mass limitations is appropriate.

B. VARIANCES

The RVRSA may permit non domestic users to discharge wastewater with concentrations greater than the limits stated in Section 203(A) by variance provided that sufficient capacity exists at the RVRSA Treatment Plant and the plant can process the higher concentration and such concentrations will not be deleterious to the conveyance system or cause or threaten to cause, alone or in combination with other wastes, (1) cause an inability to comply with the numerical effluent limitations in the RVRSA's NJPDES permit; (2) exceed RVRSA's process inhibition and upset criteria; (3) violate RVRSA's worker health and safety protection criteria; or (4) exceed the sludge quality criteria for RVRSA's chosen method(s) of sludge management. The determination of sufficient capacity shall be based on a comparison of the maximum allowable concentrations and loadings and the actual concentrations and loading of the plant influent.

The discretion for granting a variance shall lie solely with the Authority. The Authority may deny a variance and require pretreatment to meet the limitations of Section 203(A) above. The Authority may also require the installation of pretreatment equipment to reduce concentrations as a condition of granting a variance. No user shall be allocated more than 50% of the available capacity of any parameter. A variance which will reduce the rated capacity of the Treatment Plant will be denied if the Authority determines that capacity is needed to service future users.

Users who wish to apply for a variance shall do so by submitting an application along with the required fee. The application shall be made on forms provided by the Authority and shall include the following information:

- a) Requested maximum daily and average monthly concentrations.
- b) Source of high strength waste.
- c) Type of pretreatment employed.
- d) Summary of test results of analysis of wastewater,
- e) Any other information deemed necessary by the Authority's Executive Director.

The variance granted by the Authority shall be based on the application and the Authority's judgment as to the probable strength of the discharge.

If, due to the nature of the proposed discharge, the Authority determines that a treatability study is required, the user will be required to place sufficient funds in escrow to pay for the cost of the study. Treatability studies shall be performed by the Authority's Engineer.

Variances for users with Industrial Sewer Connection Permits shall be incorporated into said permit. Variances for users without Industrial Sewer Connection Permits shall be in the form of a letter authorizing such discharge.

Variances shall include the following conditions:

- a) Durations shall be one (1) year except where a longer term agreement exists between the Authority and the user.
- b) Discharge limitations
- c) Requirements for sampling
- d) Requirement to reimburse the Authority for sampling and analysis costs and other costs incurred.
- e) Requirement to reapply
- f) Requirement to pay surcharge fees
- g) Exceedance of the limitations shall constitute a violation of the Authority's Regulations.

Surcharge fees shall be calculated in accordance with the provisions of Section 204, RVRSA Service Rules Addendum.

Sampling and analysis fees and variance fees shall be paid prior to issuance of the variance.

Users who desire to continue variances shall reapply sixty (60) days prior to the expiration of the variance.

The Authority reserves the right to revoke any and all variances on thirty (30) days notice, if conditions at the Treatment Plant warrant.

Limitations based upon Section 203(A) may be modified by the Authority on a case-by-case basis under the following circumstances:

- a) The maximum allowable waste load available to the treatment plant at the present flow will not be exceeded and the Authority will comply with all applicable permit and other regulatory requirements, even after the limit(s) are modified.
- b) The applicant has considered and exhausted pretreatment, technical achievability and/or O&M options to comply with the limit(s).
- c) The applicant is not able to achieve the proposed limit(s) even after implementation of the Best Available Technology (BAT) and/or the proposed limit(s) are at/below the Method Detection Level (MDL) or Practical Quantitation Level (PQL).
- d) Cost of the compliance and/or pretreatment will be very burdensome or fatal to economic survival of the applicant.
- e) The exemption(s) will comply with applicable Federal Categorical Standards and an approval is granted by NJDEP (Bureau of Pretreatment and Residuals).

f) The applicant has provided all the supporting documents and information requested by the RVRSA. In addition, the applicant has agreed to bear the cost of the entire review and approval process.

g) The applicant agrees to all special conditions or requirements imposed by the Authority.

h) Any other information, data and/or requirements deemed necessary by the RVRSA.

204 SURCHARGE FOR CBOD, TSS AND OTHER POLLUTANTS AND UNUSED CAPACITY CHARGE

A. SURCHARGE FOR CBOD₅, TSS AND OTHER POLLUTANTS

Whenever the combined sanitary discharge exceeds the limitations for CBOD₅, TSS or ammonia set forth in these regulations or an Industrial Sewer Connection Permit, a surcharge for the treatment of said discharges shall be payable directly to the RVRSA and shall be calculated in accordance with the Excess Pollutant Surcharge Program Report, prepared by the consulting Engineer to the RVRSA, as amended and supplemented from time to time. The Surcharge for wastewaters of excessive strength will be calculated using the following formulae:

Total Surcharge Cost = CBOD₅ Surcharge Cost + TSS Surcharge Cost + Ammonia Surcharge Cost

CBOD₅ Surcharge Cost = CBOD₅ Unit Cost (\$/lbs) x CBOD₅ Excess Concentration (mg/L) x Average flow (MGD) x No. of Days (days) x Conversion Factor (8.34)

TSS Surcharge Cost = TSS Unit Cost (\$/lbs) x TSS Excess Concentration (mg/L) x Average flow (MGD) x No. of Days (days) x Conversion Factor (8.34)

Ammonia Surcharge Cost = Ammonia Unit Cost (\$/lbs) x Ammonia Excess Concentration (mg/L) x Average flow (MGD) x No. of Days (days) x Conversion Factor (8.34)

Where:

CBOD₅ Excess Concentration = CBOD₅ Discharge Concentration minus 250 mg/l

TSS Excess Concentration = TSS Discharge Concentration minus 250 mg/l

Ammonia Excess Concentration = Ammonia Discharge Concentration minus 40 mg/l

CBOD₅ Unit Cost = the operation and maintenance cost for treatment of a pound of CBOD₅

TSS Unit Cost = the operation and maintenance cost for treatment of a pound of TSS

Ammonia Unit Cost = the operation and maintenance cost for treatment of a pound of Ammonia

Average Flow = the average flow in million gallons per day on the days when excess concentrations are discharged

No. of Days = the number of days for which the surcharge is being assessed

B. UNUSED CAPACITY CHARGE

Upon the renewal of each Industrial Sewer Connection Permit by the RVRSA, the RVRSA shall undertake an evaluation of whether the capacity established in the existing permit is consistent with the amount of flow discharged by the Industrial User.

The RVRSA shall review the prior twelve months monitoring reports and where the difference between the permitted gallonage set forth in an Industrial Sewer Connection Permit and the highest monthly average flow reported by an Industrial Discharger is in excess of ten (10) percent of the permitted gallonage, the RVRSA shall consider adjusting the permitted flow condition consistent with the highest reported monthly average flow value reported in the prior twelve months plus ten (10) percent.

In the event that an Industrial User submits written justification substantiating the need for a permitted flow value in excess of 10% of the highest monthly average flow value reported in the preceding twelve months, the RVRSA shall, in its sole discretion, consider adjusting the flow value established in the previous Industrial Sewer Connection Permit to allow the permittee to reserve capacity that it is not presently using for the duration of that renewal permit term only. When exercising its discretion, RVRSA shall consider the written justification submitted by the permittee, the obligations of the RVRSA to provide sewer service within the sewer service area; actual capacity needs of others in the service area identified at the time of the request and such other factors and information provided to the RVRSA that are relevant and appropriate. If an adjusted flow value is included in the Industrial Sewer Connection Permit at the request of the Industrial User, a charge for said allocated but unused gallonage shall be assessed annually for each twelve month consecutive period wherein the permitted flow value exceeds the highest monthly average flow value reported by ten (10) percent or more.

An unused capacity charge, representing the debt service portion of the RVRSA user charge for the prior year calculated on the number of gallons per day allocated but unused, shall be assessed for each gallon of the total permitted gallonage unused above the highest monthly average flow value plus ten (10) percent, in accord with the following formula:

$$\text{Annual Charge for Unused Capacity} = (A + B) \times (Q_{iu}/Q_p)$$

A = Prior Year Debt Service Costs

B = Prior Year Capital Improvements

Q_{iu} = Flow in GPD from Industrial User (unused)

Q_p = Metered plant flow inclusive of industrial Users unused flow

Such payment shall be made each year or portion thereof, until the allocated gallonage is used or permit modified to reduce the total permitted gallonage to eliminate the unused gallonage portion. Charges shall be payable directly to the RVRSA. Prior Year Debt Services Costs, Prior Year Capital Improvements, and Charge for Unused Capacity shall be calculated in accordance with the Unused Capacity Charge Program Report, reviewed by the auditor to the RVRSA, as amended and supplemented from time to time.



December 7, 2016

JoAnn Mondsini
Executive Director
Rockaway Valley Regional SA
RD #1, 99 Green Bank Road
Boonton, NJ 07005

**RE: RVRSA INDUSTRIAL PRETREATMENT PROGRAM
PROPOSED REVISIONS TO SURCHARGE FOR EXCESSIVE STRENGTH WASTEWATER**

Dear Ms. Mondsini:

In conjunction with the development of updated Local Limits for indirect discharges to the Rockaway Valley Regional Sewerage Authority (RVRSA) Wastewater Treatment Plant, I was asked to review RVRSA's Regulations Concerning Industrial Users and General Sewer Use Requirements ("RVRSA Service Rules Addendum"), Section 204, entitled "Surcharge for BOD(5), TSS and Other Pollutants and Unused Capacity Charge." Based upon my review, changes to Section 204A, "Surcharge for BOD(5), TSS and Other Pollutants", are warranted. First, the Local Limits Study proposes the imposition of local limits for 5-Day Carbonaceous Biochemical Oxygen Demand (CBOD₅) in place of local limits for 5-Day Total Biochemical Oxygen Demand (BOD₅); therefore, the surcharge formula must be revised to reflect this change. Second, since RVRSA intends to surcharge for ammonia, I recommend the title of the section be revised to "Surcharge for CBOD₅, TSS, Ammonia, and Other Pollutants". Third, I recommend that the surcharge for wastewaters of excessive strength be clarified and revised as follows:

The Surcharge for wastewaters of excessive strength will be calculated using the following formulae:

Total Surcharge Cost = CBOD₅ Surcharge Cost + TSS Surcharge Cost + Ammonia Surcharge Cost

Where:

CBOD₅ Surcharge Cost = CBOD₅ Unit Cost (\$/lbs) x CBOD₅ Excess Concentration (mg/L) x Average flow (MGD) x No. of Days (days) x Conversion Factor (8.34)

TSS Surcharge Cost = TSS Unit Cost (\$/lbs) x TSS Excess Concentration (mg/L) x Average flow (MGD) x No. of Days (days) x Conversion Factor (8.34)

Ammonia Surcharge Cost = Ammonia Unit Cost (\$/lbs) x Ammonia Excess Concentration (mg/L) x Average flow (MGD) x No. of Days (days) x Conversion Factor (8.34)

CBOD₅ Excess Concentration = CBOD₅ Discharge Concentration minus 250 mg/l

TSS Excess Concentration = TSS Discharge Concentration minus 250 mg/l

Ammonia Excess Concentration = Ammonia Discharge Concentration minus 40 mg/l

CBOD₅ Unit Cost = the operation and maintenance cost for treatment of a pound of CBOD₅

TSS Unit Cost = the operation and maintenance cost for treatment of a pound of TSS

Research Park, 321 Wall Street, Princeton, NJ 08540 p | 609.924.8821 f | 609.924.8831

Ammonia Unit Cost = the operation and maintenance cost for treatment of a pound of Ammonia

Average Flow = the average flow in million gallons per day on the days when excess concentrations are discharged

No. of Days = the number of days for which the surcharge is being assessed

Please do not hesitate to contact me with any questions. I can be reached via telephone at 609-924-8821 (Ext. 111) or via email at JCosgrove@Kleinfelder.com.

Sincerely,



James F. Cosgrove, Jr., P.E.
Vice President/Principal

c: Diane Alexander, Esq.
Natalie Pisarcik, RVRSA Industrial Pretreatment Coordinator