

TO: Ande Banks, Interim City Manager
FROM: Mike Collins, Public Utilities
DATE: November 6, 2017
RE: HRRSA Pretreatment Program

Summary:

On October 17, 2017 Harrisonburg Rockingham Regional Sewer Authority (HRRSA) gave written notice to its member jurisdictions that it will be amending its Operating Rules and Regulations. The specific topic of importance was the “Local Limits” program for “Significant Industrial Users” (SIUs). HRRSA is providing opportunity for comments before adopting the referenced rules and regulations.

Background:

The “Local Limits” program is an EPA and VADEQ mandate to HRRSA. The essence of the program is to assure that wastewaters with higher contaminant strengths, in comparison to typical domestic wastewaters, are addressed such to protect the performance of the treatment plant and to provide a platform for economic fairness.

Key Issues:

- 1) The capacity of the wastewater treatment plant is determined by design loadings that include hydraulic loading (MGD) and multiple contaminant loadings (#/d); any loading may become the limiting factor.
- 2) The HRRSA – Harrisonburg (and other member jurisdictions) Contract Services Agreement allocates capacity to its member jurisdictions by hydraulic daily volume; the agreement is absent of consideration to address contaminant loading.
- 3) The HRRSA facility has provided levels of treatment that have advanced from “Secondary Treatment”, through “Biological Nutrient Removal” technology and now provides state of the art technology as “Enhanced Nutrient Removal”. As a result, contaminant loadings are becoming more important than ever before.
- 4) Most recently, HRRSA operated at the following average levels of capacity:
 - Hydraulic 52%-61% over previous 3 year period
 - Contaminant BOD 62%
 - Contaminant TSS 66%
 - Contaminant Nitrogen 54%
 - Contaminant Phosphorous 44%
- 5) With the levels of loading as shown, BOD and TSS loadings have been slightly higher than hydraulic loading; therefore, there is some potential for these contaminants to limit HRRSA and Harrisonburg to less than 22.0 MGD and 12.6MGD hydraulic capacity, respectively.
- 6) With the levels of loading as shown, it appears that the HRRSA facility has ample unused capacity; with the current Local Limits Program the facility should incur maximum daily loads similar to annual loads. The latter does not prevail as extreme variations in daily loads place stresses upon the ENR operations and potential future performance.

7) The proposed revisions to the Local Limits Program:

- increase monitoring in an attempt to reduce the significant fluctuations in daily loadings;
- engage financial penalties with purpose to deter noncompliance and to offset HRRSA costs of treatment;
- include some new limits for nitrogen and phosphorous
- include some tradeoff of less strict limits for existing BOD and TSS limits.

Environmental Impact:

The revisions proposed to the Local Limits Program will provide stronger support to the environmental functionality of the HRRSA objective (to provide wastewater treatment at a state of the art technology for Enhanced Nutrient Removal technology).

Fiscal Impact:

EPA Guidelines for developing Local Limits Programs allows for allocation and use of unused capacity in several formats. Some of these formats provide opportunities to use other regulatory structure in the Local Limits Program to market unused capacity and to create an added revenue stream. For environmental reasons as stated, these opportunities have been abandoned. Any future opportunity to revisit this option would depend upon results of the proposed Local Limits Program, growth of wastewater demand among member jurisdictions and resolution of the HRRSA Contract Service Agreement.

Prior Actions:

The City of Harrisonburg uses HRRSA to administer their responsibilities under the Local Limits Program; this arrangement goes back to the incorporation of HRRSA and the subsequent onset of the mandate of the Local Limits mandate.

Alternatives:

Request HRRSA for alternatives

Community Engagement:

HRRSA has contacted contributing SIUs and compiled their feedback; this feedback has been shared with HRRSA Board members.

Recommendation:

Recommendation is for City Council to understand the purpose, status, goals and impacts of this program.

Attachments:

- 1) City Council Subject Statement Memo
- 2) Documents provided by HRRSA
- 3) Power Point

Review:

The initiating Department Director will place in Legistar, in sequence of transmittal, the names of each department that must initial their review in order for this item to be placed on the City Council agenda. The completion of review only addresses the readiness of the issue for Council consideration. This does not address the recommendation for approval or denial of the issue.

###