

PRETREATMENT CORNER

Hauled Waste and Its Industrial Pretreatment Implications

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Whether or not your wastewater treatment plant accepts septage or any type of hauled waste, PA DEP has decided to include standard provisions in your NPDES permit regarding hauled waste. Regional DEP offices are being told by DEP Central Office that certain standard language shall be included in NPDES permits and the regional DEP offices have no latitude as to determine whether or not such language is necessary for a specific discharger and can therefore be removed.

Here is a sampling of the hauled waste language that is proposed for inclusion in POTW's upcoming NPDES permits:

“The permittee shall not accept hauled-in wastes under the following conditions, unless otherwise approved by the Department in writing:

- When acceptance of hauled-in wastes would cause a hydraulic or organic overload as defined in Chapter 94.1 of the Department's regulations.
- When the treatment facility is considered to be in an existing hydraulic or organic overload condition, as determined by the permittee or the Department, as defined in Chapter 94.1 of the Department's regulations.
- When the instantaneous flow at the treatment facility exceeds the Chapter 94 hydraulic design capacity of the facility multiplied by a peaking factor of three, and for 24 hours following exceedance of this threshold.

All flows reported on DMRs and Supplemental Reporting forms shall include septage and all other hauled-in wastes. In addition, all hauled-in wastes shall be recorded on a daily basis on the Supplemental DMR.

The influent mass BOD₅ loading to the plant, including all hauled-in wastes, shall be used for the development of annual Municipal Wasteload Management Reports.”

There is no regulatory basis for the inclusion of hauled waste language in NPDES permits; nor does DEP provide any definition in the NPDES permit for septage or hauled waste. Some states do have regulations pertaining to the treatment and disposition of hauled waste; Pennsylvania is not one of them. PA DEP does, however, have a *Handbook for the Collection, Transportation, Disposal and Land Application of Residential Septage in Pennsylvania*, in which residential septage is defined as “liquid or solid material removed from a septic tank, cesspool or similar treatment works that receives only waste or wastewater from humans or household operations. The term includes processed residential septage from a residential septage treatment facility. The term does not include liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from a grease trap at a restaurant.”

So are the “do not includes” considered hauled waste if disposed of via tank truck to a POTW treatment plant? One would think so. Are the “do not includes” considered industrial waste under a POTW's industrial pretreatment program? Only if the municipal ordinance or rules and regulations specifically define and regulate hauled waste. In other words, the buck is passed back to the POTW. EPA has not taken a regulatory stance on hauled waste either though EPA strongly suggests that you permit and monitor hauled waste. EPA has also been kind enough to provide a guidance document to you for this very purpose, *Guidance Manual for the Control of Wastes Hauled to Publicly Owned Treatment Works*, which does provide a lot of very useful information.

For the true environmental stewards out there, yes, it is prudent to monitor everything coming into your treatment plant. Typical characteristics of septage are as follows:

Constituent	Concentration, mg/L	
	Range	Typical
Ammonia Nitrogen (NH ₃ -N)	100 – 800	400
Biochemical Oxygen Demand (BOD ₅)	2,000 – 30,000	6,000
Chemical Oxygen Demand (COD)	5,000 – 80,000	30,000
Total Kjeldahl Nitrogen (TKN)	100 – 1,600	700
Total Phosphorus (TP)	50 – 800	250
Total Solids (TS)	5,000 – 100,000	40,000
Total Suspended Solids (TSS)	4,000 – 100,000	15,000
Volatile Suspended Solids (VSS)	1,200 – 14,000	7,000
Per <i>Wastewater Engineering Treatment, Disposal and Reuse</i> , Metcalf and Eddy, 3 rd Edition.		

But as long as EPA and DEP are passing the buck to you to make that decision to permit and monitor the hauled waste, should DEP govern your choice of accepting the hauled waste? Something to ponder until next time.