



DATE: February 8, 2018

To: Board of Estimate & Taxation Audit Committee Members

From: The Internal Audit Department

Subject: Internal Audit Report: Sewer Division Internal Controls Over Collection of Disposal Fee Revenue from Private Septic Haulers

Enclosed for your review is Internal Audit's report entitled "Sewer Division Internal Controls Over Collection of Disposal Fee Revenue from Private Septic Haulers". The report contains observations and recommendations regarding controls at the Sewer Division's Grass Island Wastewater Treatment Plant for monitoring private septic hauler disposal activity and for insuring full collection of disposal fees dues.

The report's Introduction describes the Sewer Division's responsibilities and organizational structure under the Department of Public Works. It also provides an overview of the disposal process. A description of our audit scope, objective, and methods follows, along with a summary of significant audit results, our conclusion, and our recommendations to Management. The body of the report begins with an analysis of Sewer Division operating revenue activity between Fiscal Years 2011 through 2017. Our observations are detailed next, followed by our Management recommendation(s). Both informational and analytical data has been disclosed throughout using tables, charts, and written narrative.

We have requested and received responses to our observations and recommendations from Sewer Division management. The responses appear in a Management Response section at the end of this report. We would like to express our appreciation for the cooperation extended to us by Sewer Division personnel during the course of this review.

Enclosure

cc: B. Branyan, Town Administrator
P. Mynarski, Comptroller
A. Siebert, Commissioner, Department of Public Works
R. Feminella, Wastewater Division Manager, Sewer Division, Department of Public Works

TOWN OF GREENWICH INTERNAL AUDIT

Internal Audit Report Sewer Division Internal Controls Over Collection of Disposal Fee Revenue from Private Septic Haulers

February 7, 2018

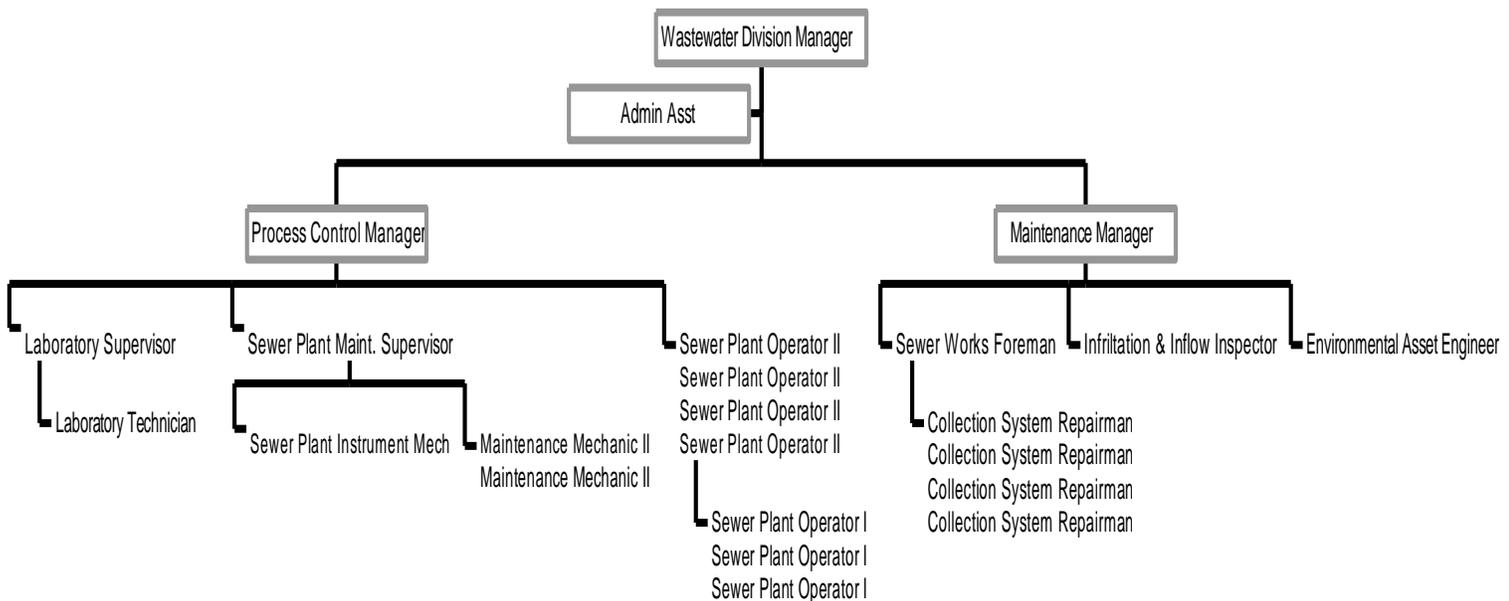
I. INTRODUCTION:

History and Organization:

The Town of Greenwich Department of Public Works (DPW) was created by Town Charter in 1939 under Article 12, Section 150¹. The DPW is organized under the Office of the First Selectman. It is led by a Commissioner of Public Works who manages all matters regarding the development, construction, maintenance and repair of physical properties controlled by the Town. The only exception applies to school properties which are managed by the Town’s Board of Education. The responsibilities assigned to the DPW are diverse and span six, critical areas: Engineering, Highway, Waste Disposal, Building Construction and Maintenance, Building Inspection, and Sewer. Each of the six divisions is supported by the DPW Administration.

The Sewer Division is responsible for the operation, maintenance and repair of 185 miles of public sewer lines, 28 pumping stations, approximately 350 grinder pumps installed in sewer extension areas, and the Grass Island Wastewater Treatment Plant (the Plant). The Plant has a permitted capacity to treat 12.5 million gallons of wastewater per day and reports treating about 3.85 billion gallons of waste water each year. Major Plant upgrades in 2010 and 2014 received awards from the American Council of Engineering Companies (ACEC) for innovative designs and project management excellence. The Town’s fiscal year 2016 Annual Report states the Sewer Division is budgeted for 25 full time employees and zero, permanent part-time employees. The Division’s organization chart, as presented in the Town’s fiscal year 2015 Annual Report, is reproduced below.

ORGANIZATION CHART: Town Of Greenwich Department Of Public Works Sewer Division:



Process Overview:

The Town is also home to approximately 5,500 properties located outside the Town’s sewer boundary and not connected to its public system. These properties include single family homes, apartment buildings, schools, country clubs, and other commercial buildings that are predominately serviced by private, on-site septic systems. The operation and maintenance of these septic systems is the responsibility of the property owner, not the Town. The

¹ S.A. 444, § 27, 1939; as amended by RTM, 4/27/1970; RTM, 4/10/1972; RTM, 4/12/1976; RTM, 12/10/1990; RTM, 1/17/1995; RTM, 6/13/2005; RTM, 4/10/2006; RTM, 6/12/2006.

on-site septic systems collect and pre-treat wastewater from the property. The pre-treatment process creates a substance known “septage” and is considered a form of partially treated sludge.² General maintenance guidelines for on-site septic systems recommend that accumulated septage be removed by a licensed professional at least once every three years. This frequency varies, of course, depending on septic system size and use.

Septage is removed, or pumped, from on-site septic systems using a specialized truck known as a pumper truck. The pumper truck uses a powerful vacuum pump attached to a hose that sucks the septage out, safely transferring it into a holding tank attached to the truck. The truck can then transport the tank’s contents to an approved wastewater plant for sanitary disposal. Septage collected from in-Town properties is required to be disposed at the Town’s Plant. The Plant has a designated area for the trucks to enter and park during the disposal process. The area is equipped with a four-inch drain feeding directly into a below ground, central collection sewage tank. The hauler attaches the truck’s vacuum hose to the drain, dumping its contents into the Plant’s central tank below to begin the treatment process. The area is gated and the gates can be secured by lock and chain to prevent illegal dumping (non-septic wastewater) or undocumented dumping outside of regular hours.

The Town charges private septic businesses a fee of \$35 for every 500 gallons of septage it disposes at the Plant. Septic companies pay the fees in advance by purchasing books of permits in the Sewer Division at Town Hall. Each book contains ten, individual, pre-printed, pre-numbered permits (commonly referred to as tickets) at a cost of \$350 per book. The tickets are printed with the label “Septic Tank Permit”. Septic hauling businesses typically pay for the permits by check. As of fiscal year 2017 however, the Sewer Division began accepting credit card payments, and charging a small processing fee, for purchase of the books. Sewer Division office staff is solely responsible for the custody, purchase, inventory, and tracking of all permit books and permit book sales and for reporting and submitting the revenue received to the Town’s Finance Department. No money is exchanged between septic haulers and Town employees at the Plant.

Holding tank sizes vary widely among pumper trucks, with maximum gallon capacities ranging anywhere between a couple hundred to several thousand. Our review found that the various septic companies doing business in the Town used trucks ranging in tank sizes between 1,000 to 3,500 gallons. When a hauler arrives at the Plant for disposal, it is required to fill out and submit one ticket for every 500 gallons of septage dumped. The hauler then leaves the tickets in a designated area inside the Plant’s laboratory. Each ticket has space for the hauler to write in the name of the hauling business, the name and address of the property owner, and the date. There is also a signature line for the receiving Plant employee to sign. The permit system does not account for gallons disposed of in anything less than 500 gallon increments. For example, a hauler disposing of 450 gallons is still required to pay the \$35 per 500-gallon fee. Similarly, a hauler disposing of 1,200 gallons is required to complete and submit three tickets representing payment of \$105 for 1,500 gallons. The fee is not calculated on a pro rata basis and practice has been to round up the gallons disposed when determining how much is due.

In addition to submitting the appropriate number of completed tickets, haulers are also required to bring in a specimen from the holding tank to the laboratory for pH testing. While there, the hauler completes an additional form labeled “Town of Greenwich, CT – Sewage/Septage Dumping Permit” (Dumping Permit). These forms are also preprinted, but not pre-numbered. The form asks the hauler to fill in the date, the hauling business name, its customer name and address, the pre-numbered numbers on the tickets submitted to document disposal fee payment, and the number of gallons dumped. There are also spaces for recording the time of day, the total dollar amount of fees paid, the pH results, and the hauler’s signature and a Plant employee signature. Later, the Plant batches the

² Septage is distinguished from sewage in that sewage enters the public sewer completely untreated, or raw before being fully treated and released into the waterway.

two forms separately, but by date. Thus, for every payment ticket(s) turned in per visit, there is also one, corresponding Dumping Permit. At the end of each month the batched forms are placed in a manila envelope, labeled with the month and year, and stored on-site at the Plant.

Objective, Scope and Methodology:

Earlier this year a former Sewer Division employee alleged that septic haulers were underreporting, and therefore underpaying, the number of gallons they were disposing per visit. The former employee also alleged that other Sewer Division employees received favors and kick-backs from the haulers for not enforcing the septage disposal fee policy. The objective of this review was twofold: to determine whether kick-back activity may be occurring at the Plant and require further investigation; and to evaluate the adequacy of the Plant's procedures for collecting the correct fee amounts due as outlined in its policy. We reviewed six months of private hauler septage disposal activities, from January 1, 2017 through June 30, 2017, using the tickets and Dumping Permit documents completed and submitted by the haulers and stored at the Plant. We compiled the data and then analyzed activity by individual septic hauling business. We considered the frequency and number of visits, the number of gallons reported as disposed per visit and tickets turned in, and the average truck holding tank sizes for each business. We obtained additional information by going on a treatment process walk-through at the Plant with the Wastewater Division Manager and Plant Process Control Manager, discussions with Division management, the Plant Process Control Manager, DPW business and administrative personnel, and the Greenwich Police Department. We also reviewed and documented DPW's procedures for the purchase, custody, and sales of septage disposal permits at Town Hall. For added insight, we met with the owner of a local, septic service and hauling company to discuss the industry in general and the different septage disposal policies in place in neighboring municipalities. We also reviewed Division revenues and expenses as reported in MUNIS over the last six fiscal years.

Summary of Significant Audit Results:

Using the methods outlined above, our review yielded no evidence to even remotely substantiate allegations of favors and kickbacks. As a result, we did not see reason for performing or requesting a further, in-depth investigation of it. Our analyses of septage disposal activity and the number of tickets submitted by haulers as proof of payment of the required fee(s) however did indicate the Plant's process over this responsibility is weak and needs improvement. The weakness stems from the system being entirely honor based. The amount of septage disposed by haulers at each visit is not monitored by Plant employees, instead relying on the discretion of the hauler to self-report how many gallons it dumped. Our review uncovered distinct patterns among individual haulers indicating that some self-report more accurately, and with more consistency, than others. We also observed times, when after regular business hours, even after dark, the gates remained open and the disposal area was unsecured.

Summary Conclusion and Recommendation:

Town policy does not allow its departments and agencies to rely on honor systems as a means of collecting Town revenue. Each is responsible for the accurate and complete collection and accounting of the revenues it is responsible for and as set forth in its policies. If management finds the existing process too cumbersome it must proactively identify the issue(s) and take reasonable measures to address the shortcomings and improve the process. We learned that other, nearby public water treatment plants utilize truck scales to better measure the number of gallons disposed. Still others use dispensing gauges to calculate number of gallons dumped. We learned that even these methods have shortcomings and are also subject to manipulation as well. One hauler alluded that it was well known that Greenwich was an honor system and its fees easy to avoid if you chose. At other area wastewater plants, ones with measuring equipment and employee monitoring, there was no choice but to pay the full fee.

There are many options available to Management to address this matter ranging from low cost, manual controls to high cost, high tech controls. Each option also comes with its own set of unique considerations and cost-benefit analyses. In the immediate term we recommend that Management develop and implement several low cost, manual controls to increase employee monitoring and recording of disposal activity at the Plant. We further recommend that Management begin exploring how to implement more sophisticated controls over disposal fee collections, whether by policy change, investment in advanced technologies, or a practical combination of both. We will follow-up with management on its progress within six to ten months of the date of this report and communicate the results to the Audit Committee. Given the current state of controls over the collection of septage disposal fees, we feel that immediate implementation of manual controls could result in measurable increases in revenues while Management develops its long term strategy.

II. OPERATING REVENUE:

Relative to its expenses, the revenue produced by the Division operations is minimal. For example, in the Town's fiscal year 2016 Annual Report the Sewer Division reported expenditures (both capital and current) of \$15,765,622 versus revenues of \$210,196. In fiscal year 2015, it reported respective amounts of \$13,031,188 and \$281,771. This ratio of expenses to revenue is typical for public wastewater operations which rely on taxes, assessments, and other financing to fund its operations. Its central mission is providing critical sanitary sewer services to the community in support of public health. It does this while insuring its operations have minimal impact on the surrounding environment. It must operate and maintain a complex, wide-ranging infrastructure dependent on numerous, multi-disciplinary processes. It requires compliance with a diverse set of Federal and State regulations, and is subject to considerable external monitoring and reporting requirements. Revenues generated by operating are either incidental or earned through government programs offering financial incentives to wastewater treatment facilities attaining proscribed policy goals or standards.

Table A below lists the Division's MUNIS revenue accounts and the total amounts earned by each one over the past six fiscal years. It shows that out of 13 total revenue categories, only three hold significant dollar amounts, and of the three, two represent revenue earned from regularly recurring activities. The two significant revenue generating activities are activities from the sale of septic disposal tickets to haulers and fees charged for sewer connections for inspections³. A third account, the Nitrogen Credit Exchange Program, has also collected sizable amounts over the years, but it represents money earned through a State Nitrogen Reduction Program, not from ongoing operations. The Nitrogen Credit Exchange Program was started in 2006 through the State of Connecticut Department of Energy and Environmental Protection (CTDEEP). It requires municipalities discharging into waters tributary to the Long Island Sound significantly reduce nitrogen amounts. The Division has been highly successful with the program, exceeding program requirements and earning additional money. In the Town's fiscal year 2016 Annual Report however, the Division notes that the plant is closing in on its nitrogen removal capacity and due to that and other factors, predicts its future "... potential for credits will decrease."

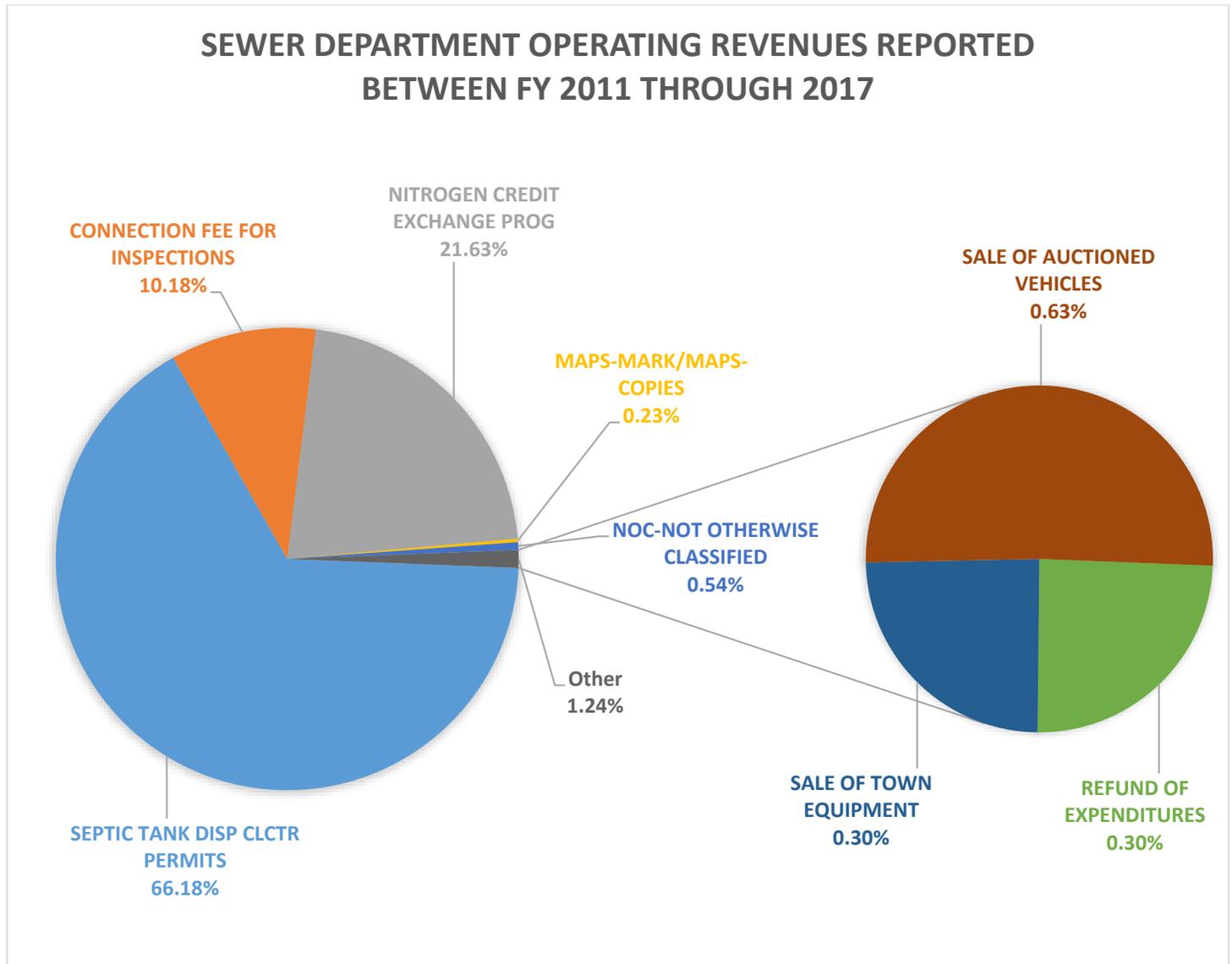
³ The collection and accounting for connection fees was outside the scope of this review.

TABLE A: SEWER DEPARTMENT OPERATING REVENUES REPORTED FY 2011 - FY 2017:

REVENUE ACCOUNT	2011	2012	2013	2014	2015	2016	2017	TOTAL
SEPTIC TANK DISP CLCTR PERMITS	165,185.00	151,090.00	161,255.00	146,120.00	161,000.90	172,370.00	147,095.00	1,104,115.90
SEPTIC TANK DISP COLLECTERS - CREDIT CARD FEES	-	-	-	-	-	-	951.92	951.92
CONNECTION FEE FOR INSPECTIONS	20,450.00	19,505.00	19,335.00	31,465.00	23,880.00	26,005.00	25,890.00	166,530.00
NITROGEN CREDIT EXCHANGE PROG	170,681.00	58,104.00	-	131,663.00	96,240.00	9,446.00	99,032.00	336,381.00
BOOKS	-	-	200.00	-	-	-	-	200.00
EMPLOYEE CELL PHONE REIMB	-	-	-	-	-	-	-	-
MAPS-MARK/MAPS-COPIES	-	-	-	-	650.00	2,375.00	1,000.00	4,025.00
NOC-NOT OTHERWISE CLASSIFIED	-	-	9,213.00	-	-	-	-	9,213.00
PHOTOCOPIES-RECORDS, REPORTS	-	-	-	-	-	-	22.00	22.00
GEN OBLIG BOND ISSUED	-	-	-	-	-	-	-	-
REFUND OF EXPENDITURES	-	-	-	-	-	-	5,227.40	5,227.40
SALE OF TOWN EQUIPMENT	-	-	-	-	-	-	5,220.50	5,220.50
SALE OF AUCTIONED VEHICLES	-	-	1,775.00	9,075.00	-	-	-	10,850.00
TOTAL	<u>356,316.00</u>	<u>228,699.00</u>	<u>191,778.00</u>	<u>318,323.00</u>	<u>281,770.90</u>	<u>210,196.00</u>	<u>284,438.82</u>	<u>1,871,521.72</u>

Chart 1, below, presents fiscal year revenue amounts as a percentage of the total. Accounts with less than \$4,000 in total revenue for the six-year period were omitted. It clearly depicts that the Division's sale of septic disposal tickets is its largest source of operating revenue.

CHART 1: SEWER DEPARTMENT OPERATING REVENUES REPORTED BETWEEN FY 2011 THROUGH 2017



III. OBSERVATIONS:

Collection of Private Hauler Disposal Fees at Plant:

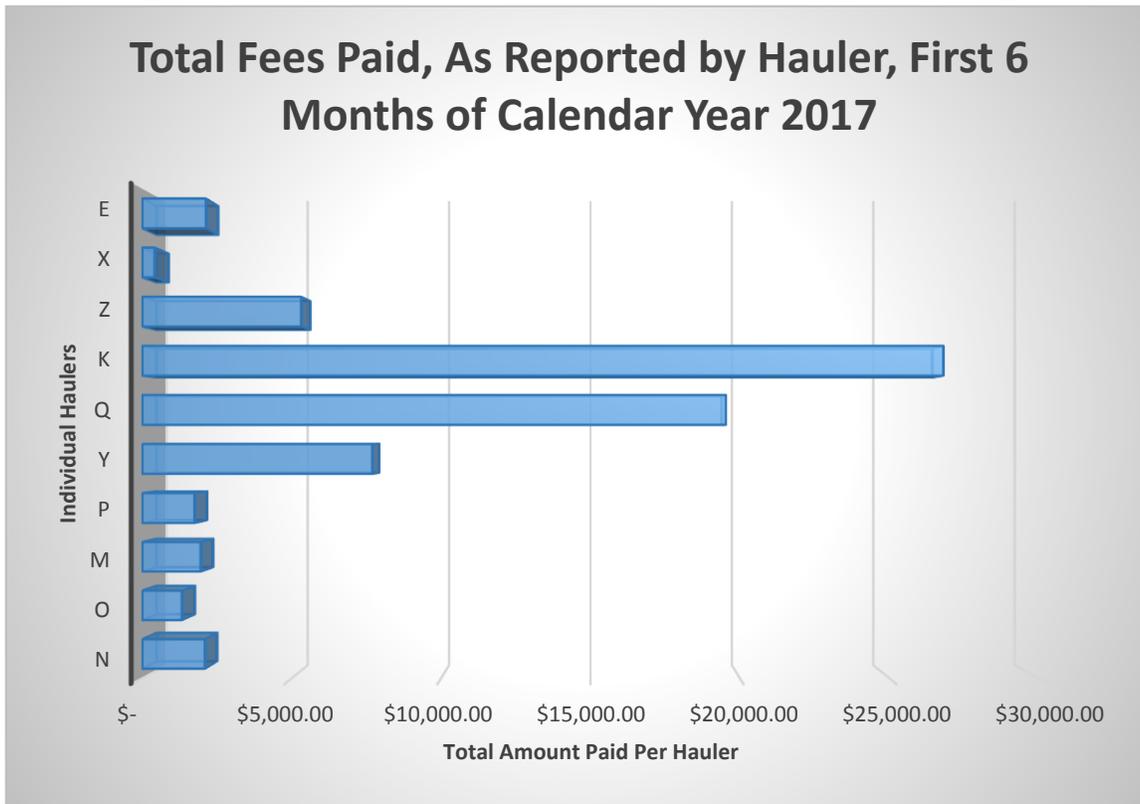
As stated in Section I, Objective, Scope and Methodology, above we analyzed six months of private hauler disposal activity (January 1, 2017 through June 30, 2017) based upon the two permit documents completed and submitted to the Plant by the haulers. We compiled this data and analyzed it by individual septic business. Over the course of six months 11 individual private haulers documented disposal activity at the Plant. The haulers are identified in this report using a random alpha assignment. We declined identifying the haulers by business or trade name out of both privacy and legal concerns. As expected, the size and scale of the individual hauling businesses servicing Greenwich customers varied widely. Some haulers were one or two person operations using a single pumper truck with a holding tank capacity of 1,000 gallons. Other haulers had higher concentrations of Greenwich customers, while others served customers spread throughout the region. Similarly, some haulers operated with more employees using a fleet of pumper trucks of varying tank capacities and enjoyed more business. Of the 11 individual haulers identified, one was excluded from our analyses because it serviced temporary, portable toilets rented for use at outdoor events or construction activities. Also, as was expected, septic hauling disposal activities showed a marked increase during warmer months. A list of the ten individual private haulers, identified by its randomly assigned alpha, along with each one's average, estimated, truck size appears in Table B below.

TABLE B: Fee Activity and Average Estimated Truck Size per Hauler: January 1, 2017 Through June 30, 2017:

Business	Average Truck Size (estimated)	Total Fees Paid (Jan through Jun 2017)
N	1,500	\$ 2,100.00
O	1,500	\$ 1,330.00
M	1,500	\$ 1,960.00
P	1,500	\$ 1,750.00
Y	2,500	\$ 7,700.00
Q	3,500	\$ 19,530.00
K	3,500	\$ 26,810.00
Z	3,500	\$ 5,320.00
X	3,500	\$ 420.00
E	3,500	\$ 2,135.00

The average truck sizes for each hauling business are estimated based on our actual observations, information contained on hauler web sites, and discussion with Plant management and staff. Chart 2, below, is a graphical presentation of the fee activity data presented in Table B.

CHART 2: Total Fees Paid, Reported Per Hauler: January 1, 2017 Through June 30, 2017:



The data in Table B and Chart 2 above reveals that haulers K, Q, Y and Z, with estimated tank sizes ranging between 2,500 to 3,500 gallons, are the most active haulers at the Plant. It also suggests that haulers N, O, M, and P, all with estimated tank sizes of 1,500 gallons and less frequent visits to the Plant, are smaller scale operators. Similarly, we conclude haulers X and E, with estimated tank sizes of 3,500 gallons, are larger scale operators serving a smaller concentration of Greenwich customers.

To this data, we added the number of tickets submitted by each hauler per visit. These results varied widely. Table C, below, calculates the average number of tickets submitted per visit by dividing the total number of tickets submitted by each hauler over the six-month period over the total number of visits.

TABLE C: Average Number of Tickets Submitted per Visit, per Hauler: January 1, 2017 Through June 30, 2017:

Hauler	Average Truck Size (estimated)	Total Fees Paid (Jan through Jun 2017)	Total # of Tickets Submitted	Total # of Visits	Average # of Tickets Submitted per Visit
N	1,500	\$ 2,100.00	60	23	2.6
O	1,500	\$ 1,330.00	38	19	2.0
M	1,500	\$ 1,960.00	56	45	1.2
P	1,500	\$ 1,750.00	50	29	1.7
Y	2,500	\$ 7,700.00	220	108	2.0
Q	3,500	\$ 19,530.00	558	213	2.6
K	3,500	\$ 26,810.00	766	376	2.0
Z	3,500	\$ 5,320.00	152	27	5.6
X	3,500	\$ 420.00	12	7	1.7
E	3,500	\$ 2,135.00	61	9	6.8

We can see from the averages calculated above how the Plant’s honor system is routinely abused by some haulers. For example, Hauler K, across 766 visits, averaged two tickets per visit. The two tickets represent 1,000 gallons of septage disposed on each trip for a total due of \$70. We estimate hauler K operates a 3,500-gallon truck. Therefore, we would expect its average tickets per visit to be higher, representing 1,500 or 2,000 gallons disposed per trip, totaling fees due of \$105 or \$120. We would also expect haulers of similar capacities to have similar ticket averages. However, the ticket averages we calculated among haulers with estimated 3,500 gallon trucks range between 1.7 tickets per visit to 6.8. Indeed, it is our opinion that Hauler E, using 3,500 gallon trucks and reporting average tickets per visit of 6.8, is a far more accurate reflection of actual septage disposal activity taking place at the Plant. Lastly, we surmise that for haulers employing larger trucks, but that report just 1,000 gallons disposed per visit - not even half the capacity of its truck – would be so unprofitable that it could not afford to operate.

To evaluate the revenue impacts from using an honor system, we performed a what-if analysis using highly conservative assumptions. We projected the amount of increased revenue by increasing the tickets submitted per visit by just the four largest, most active septic haulers (Y, Q, K, and X) from January 1, 2017 through June 30, 2017, by one additional ticket. The results appear below, in Table D.

TABLE D: Projected Revenue Increase:

Hauler	Average Truck Size (<i>estimated</i>)	One Additional Ticket Submitted Per Each Visit	Number of Actual Visits (Jan Through June 2017)	New Calculation of Average # of Tickets Submitted per Visit	Corresponding Revenue Increase Over Six Month Period
Y	2,500	330	108	3.1	\$ 11,550.00
Q	3,500	837	213	3.9	\$ 29,295.00
K	3,500	1149	376	3.1	\$ 40,215.00
X	3,500	18	7	2.6	\$ 630.00
<u>Projected Revenue Increase</u>					<u>\$ 81,690.00</u>

Based on the results above, if management were to replace the honor system currently in place at the Plant with one more straightforward, better controlled, and routinely monitored, an increase in revenue of \$81,690 over six-months in could potentially be realized. Again, we reiterate, these numbers were calculated using the conservative assumption of just one additional ticket per visit submitted by just less than half of the haulers. It is reasonable to expect that the actual increase in revenue realized from changing the current process to be much higher.

IV. MANAGEMENT RECOMMENDATIONS:

As stated above in our *Summary Conclusion and Recommendation*, there are many options available to Management for strengthening controls over its current fee collection process. We lack the specialized knowledge and industry expertise to recommend specific, best-practices to Management. Every option comes with unique technical and cost-benefit considerations. These options may range anywhere from security cameras and random on-site employee inspections of daily hauler activity, to policy and fee structure changes, to major capital investments in new equipment and Plant upgrades or retrofits.

In light of the myriad of technical, financial, and logistical complexities, we recommend Management provide us with a detailed response reporting its immediate plans to develop and implement low cost, manual controls to strengthen its monitoring and recording of disposal activity at the Plant. We further ask that Management provide us with an organized, high-level strategy documenting its plans to research and evaluate higher-level controls for use in the long term. Management should provide us with adequate records and reports, whether external or internal, documenting its efforts.

We will continue monitoring septage fee disposal revenues over the coming months and will formally follow-up with Management on its progress within six to ten months of the date of this report. Following our evaluation at that time, we will provide an update to the Audit Committee. As stated earlier, given the current state of controls over collection of fee revenue, we feel immediate implementation of basic manual controls now could potentially yield a measurable increase in revenues while Management develops a more effective and long term strategy.

V. MANAGEMENT RESPONSES:

The audit results are a helpful tool as DPW looks into how to potentially modify septage receiving at the Grass Island Wastewater Treatment Plant (WWTP). Septage is approximately 1%, on a daily average, of the over 3 billion gallons treated annually at the WWTP. Given the physical characteristics of septage, it can be difficult to handle – the solid materials within it tend to bind equipment and make it difficult to meter. Specialized septage receiving equipment is maintenance intensive and is expensive. The WWTP's current simple design that allows septage to drop directly in with the plant's influent flow, allowing it to mix and be diluted by that flow volume, helps reduce the likelihood of septage causing equipment failure. DPW, and the Sewer Division in particular, would like to provide the following comments with respect to audit results:

- Septage area gates / access control: The Sewer Division does have a policy that the septage receiving area gates are to be closed during the second shift, generally at dusk, depending on the season. DPW Sewer Division management will review the policy and remind staff again to be vigilant about closing the gates appropriately given operations. **IMPLEMENTATION: JANUARY 2018.**
- Capital improvements: The Sewer Division began looking into potential improvements to the septage receiving area Summer 2017. It engaged a private consultant firm to conduct a thorough analysis of available options and provide the results in a report. The current draft report already identifies several hurdles involved with potential improvements to septage receiving including:
 - FEMA flood elevations: Given the elevation of the septage receiving area, improvements should be designed above the danger of flooding.
 - Space constraints: The lack of real estate at the septage receiving area complicates design and cost.
 - Flow metering: Given the layout of the area and the nature of septage, flow metering is not a viable option.
 - Cost / benefit: Septage receiving improvements can come with maintenance headaches. For example, certain potential systems require cleaning after each truck discharges – it is not feasible to have plant staff manage this type of option, nor are haulers consistent in providing such service. The Sewer Division is looking carefully at these options, which are costly.
 - Truck queueing / odors: During summer months, septage discharges increase. Any improvements to the septage receiving facility need to look into what impacts, if any, there may be on truck queues created should discharge times take longer. Odor complaints can increase, the adjacent Dog Park parking lot can be impacted, and marina traffic could also potentially be impacted on a short term basis.

The results are in draft form at this time with a final report expected in May 2018. Based on the results the Sewer Division can then determine what option(s) should be evaluated in greater detail for their incorporation in the FY 19/20 capital budget. **IMPLEMENTATION: CURRENT AND ONGOING, TO THE FY 19/20 CIP PROCESS.**

- Cameras: The Sewer Division already has a project underway which will be replacing cameras in the area (prior equipment reached the end of its service life). At this location, cameras function mainly to show a vehicle is at the receiving facility, as they cannot determine septage volume. The plant is not staffed to have someone watching plant cameras throughout the day, so footage serves as a record that can be checked if needed within the timeframe that video is kept. We will determine if there is an effective, non-neighborhood intrusive approach to alerting plant staff that a vehicle is at the septage receiving facility. This might be helpful for the septage receiving process. **IMPLEMENTATION: FALL 2018**

- Policy/procedure refresher: As a first step, that requires no capital investment, the Sewer Division will be revising and updating its septage receiving policy and distributing it to septage haulers using the facility. In addition, WWTP staff will be trained in the update. The update will include items such as:
 - Random audit requirement: Septage haulers will be randomly audited to check their loads, to the extent possible, versus the number of tickets they have provided for said load. This will require the plant to review how to manage such audit without undue interruption of plant duties, as well as how to document findings.
 - Vehicle information: Septage haulers will be asked to provide their vehicle information, including capacity and license plate number/ truck ID, so that information may be used to help the random audit process.
 - Ticket and volume clarity: Septage haulers will again be reminded of how tickets should be provided for volume (e.g. after first 100 gallons above a 500-gallon increment, another ticket required).
 - Address/contact info: Haulers already provide the addresses of those locations they have serviced, and will be reminded again to provide all locations they have pumped out in a given load. This will help track the frequency of pump outs in areas served by septic. **IMPLEMENTATION: FEBRUARY 2018.**

It is our expectation that these policy reminders/ updates can be implemented and then reviewed to determine if they have produced any change in behavior / revenue stream and to incorporate that into the cost / benefit evaluation of potential capital improvements. DPW understands the Town's goal to modernize the process to meet current standards. DPW hopes to continue to work with the Internal Auditor, who has been very helpful to date in reviewing possible improvements to the policy and procedures in place for septage receipt.