

11/27 (3)

**Christine Joyce**

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**From:** Doug Halley  
**Sent:** Monday, November 06, 2006 6:25 PM  
**To:** Don Johnson; John Murray  
**Cc:** Manager Department  
**Subject:** RE: Schools sewer input

I am in the process of writing a memo as Dore requested. I am waiting for feedback from Woodard & Curran regarding recommendations for the school to address. They have promised to give them to me by Wednesday. I think J. D. Head is essential for the meeting but I also believe we need somebody like George Frost who can speak to the commitments the school can make. I will be available for the Selectmen's meeting on the 13th.

-----Original Message-----

**From:** Don Johnson  
**Sent:** Monday, November 06, 2006 6:09 PM  
**To:** Doug Halley; John Murray  
**Cc:** Manager Department  
**Subject:** FW: Schools sewer input

Doug:

Please prepare a recommendation for Thursday's packet in response to Dore's request and take a look at your calendar for next Monday (Nov. 13), we may need you at that Selectmen's meeting. Also note his suggestion that we invite appropriate school staff to that meeting. We need your thoughts/recommendations as to who would be the right person(s) from the schools to invite.

John:

Please check with Walter for permission to place this on the next agenda and handle the inviting.

Don

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**From:** Dore' Hunter  
**Sent:** Saturday, November 04, 2006 12:00 PM  
**To:** Board of Selectmen; Manager Department  
**Subject:** Schools sewer input

Walter & Don,

As I understand the reports in this week's Packet concerning the sewer contamination and the history concerning the pump station serving the central school complex, we have now had four contamination incidents traceable to the central school complex. I don't recall that we have had similar incidents elsewhere in the system, but if we had we should amass those reports as well.

It seems to me this apparent history of contamination incidence is potentially a serious matter that should be fully reviewed, as some systemic solution might be in order. I would therefore suggest that this matter be placed on the Agenda for the next meeting, that staff report further in this regard to us as the Sewer Commissioners about what might be done to reduce the occurrence of this sort of incident, and that the appropriate folks from the school administration be invited to attend and share their comments.

Regards,  
Dore' Hunter  
Selectman, Town of Acton, MA  
Telephone: 978-263-0882

**John Murray**

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**From:** Doug Halley  
**Sent:** Friday, November 03, 2006 1:30 PM  
**To:** John Murray  
**Cc:** Don Johnson  
**Subject:** FW: Summary of events as of 11-3-06

**Attachments:** Data for summary.zip



Data for  
summary.zip (4 MB)

Below please find a summary from Woodard & Curran's operator, Brian Bourque, regarding the illegal discharge into the sewer system on Wednesday. In addition please find attached the back-up information mentioned within the summary. We were very fortunate that Woodard & Curran discovered the discharge and acted on it quickly. We are also fortunate that our treatment system is resilient and quickly came back into compliance. DEP is fully informed and has expressed agreement on the way the discharge was handled. W & C kept Brent and myself informed throughout the process. We have worked directly with J. D. Head to determine the cause. Thus far we don't have enough information to know what the discharge was but we do know it appeared in the treatment plant at approximately noon on Wednesday and it was traced back to the pump station that services the central campus. Only the schools discharge to that pump station.

Since the construction of the sewers we have had four illegal discharges occur. The first one that occurred prior to the opening of the treatment plant appeared to originate at the Twin School during its construction. The second one occurred when a boiler releases antifreeze into a floor drain connected to the system. The third one occurred when a material similar to a floor stripper was discharged. This discharge appears to be similar to the third discharge except it is of a much greater quantity.

As has been recommended in the past the department believes the costs of addressing the illegal discharge should be reimbursed by the schools. However, it is not in the best interest of the Town or the schools to have exceedences that are avoidable. We would recommend that the schools hire a consultant and develop a pre-treatment plant that can address the quality of materials being discharged at the school system.

-----Original Message-----

From: Brian Bourque [mailto:bbourque@woodardcurran.com]  
Sent: Friday, November 03, 2006 12:04 PM  
To: Doug Halley  
Cc: Brent Reagor; Bill Luksha  
Subject: Summary of events as of 11-3-06

Doug,  
Attached is the data from the tests performed on samples taken from the pump stations on the day of the incident. These results are what are pointing us to the school. In this excel sheet, I began a cost tracking sheet to give you a tentative idea of what we are looking at for costs so far. Also the 3 photos taken of the influent showing color changes.

Summary...

Wednesday, November 1, 2006: we noticed a very high level of phosphorus during lab work on the SBR's... Particularly, SBR#1. At this time, the effluent was not affected because it was basically the effluent from Tuesday's SBR batches. We immediately opened the SBR hatches and observed a white liquid mixed in with the activated sludge in SBR#1. Following this, we saw the influent had changed color and we went to sample pump stations to see where it was coming from. We sampled River street, Mass Ave., Charter Road, and Railroad Street to start with. As stated above, this information pointed us in the direction of the school. Because we still had this liquid present in the collection system, we decided to get haulers in to remove as much as we could before it reached the facility. Adjustments

to the aeration blowers and chemical feed systems at the facility were made to begin knocking out these contaminants.

Thursday, November 2, 2006: Lab work continued on the SBR's and effluent to see if other adjustments to the system were needed, or if what we made for adjustments was working. The adjustments proved to be working well, but the amount of contaminants taken in at the facility were just too much for the facility to handle all in one shock load. We had an exceedance of the Total Phosphorus limit of 0.5 mg/L in the effluent. The test result was 0.97 mg/L on the effluent. Based on the results seen in the adjustments made, no further adjustments were made.

Friday, November 3, 2006: Again, lab work was conducted and we have now brought the level of phosphorus back into permit compliance range. Some adjustments to the system were made to get us back towards normal operating chemical doses, blower run times, ect, but we will take it slow and steady to make sure we stay in compliance and do not compromise anything further as a result of this particular incident.

The exceedance was reported to Margo Webber of the Mass DEP by phone on Friday, November 3, 2006.

If you have any questions or require any additional information, please let me know.

Thanks,  
Brian

Pump Station	Total Phos	NH3	pH
1			
4			
5			
6			

**COMMENTS:**

Typical Influent total phosphorus is 8-12 mg/L. The tests performed could measure up to 17.5 mg/L. As stated in the data boxes, total phosphorus was over 17.5 mg/L.

Typical Influent NH3 is 30-60 mg/L. The tests performed could measure up to 60 mg/L. As stated in the data boxes, NH3 was over 60 mg/L.

pH above 8 is a good indicator that something other than domestic wastewater is present.

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