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Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

November 27, 2007

RE: CITY OF SALEM
COMPLIANCE EVALUATION INSPECTION
NPDES PERMIT NO. 3PD00027

NOTICE OF VIOLATION

Mayor and Council
City of Salem
231 South Broadway Avenue
Salem, OH 44460

Dear Ladies and Gentlemen:

On August 22, 2007, this writer conducted an inspection of the Salem wastewater treatment plant located at 1600 Pennsylvania Avenue. John Kwolek of this office was present at that time. Mr. Tim Rininger, chief operator was present for the City. This inspection was to evaluate operation and maintenance at the plant and to evaluate compliance with its National Pollutant Discharge Elimination System (NPDES) permit (3PD00027). Based on the inspection and a review of monthly operating reports, the City of Salem is considered to be in significant noncompliance.

On September 19 and 20, 2007, a compliance sampling event of the wastewater treatment plant was conducted by this office. The sampling was conducted by Mr. Robert Davic, and Mr. Dave Stroud of this office. The sample was split with the treatment plant by Mr. Jon Pukalski.

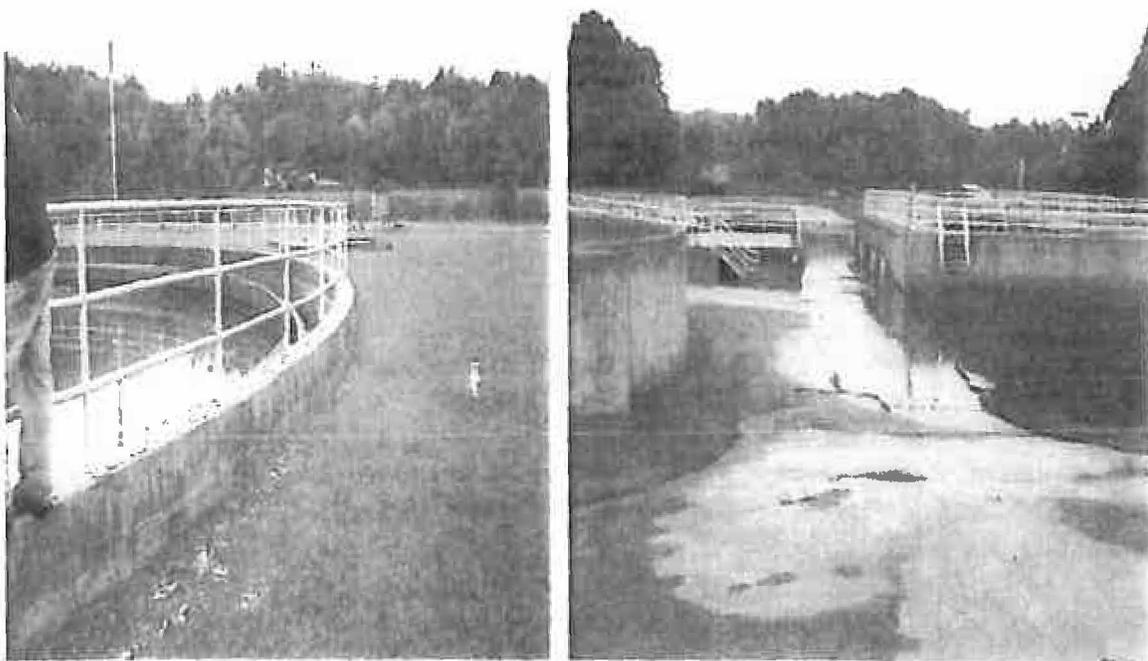
The following is a summary of Agency observations and permit issues:

Wastewater treatment plant inspection

The treatment system includes processes for grit removal, primary settling, roughing filtration, conventional activated sludge treatment, secondary clarification, and chlorination/de-chlorination. An off-line equalization basin is used to divert and store excess wastewater during rain events. Primary sludge is diverted to a two stage anaerobic digestion process and secondary sludge is diverted to a two stage aerobic digestion process. Both primary and secondary sludge is stored in a common sludge holding tank to land application through the approved sludge rules. The design flow of the treatment plant is 4.0 mgd, and the average flow over the last two years is 2.82 mgd. The maximum flow the plant experienced during that time was 6.96 mgd.

During the inspection it was noted that two primary clarifiers on the north side of the administration building were off-line. These are currently redundant units. All remaining units appeared to be in operation.

At the time of the inspection the final clarifiers had some pin floc that was going over the weirs to the stream. The roughing filters appeared to be operating normally as well as the aeration tanks. Inspection of the Middle Fork of Little Beaver Creek revealed high water levels due to a storm event the previous day. It was noted at the time of the inspection there were two overflows at the plant. One occurred at the flow equalization tank and the other at the line between the roughing filters to the secondary tanks.



Overflow of Flow Equalization Tank. Overflow of Roughing Filter effluent.



Sludge from the plant overflow is covering the ground.

At the time of the inspection the City failed to notify Ohio EPA of the unauthorized discharge from the treatment plant. The City also failed to sample the discharge from the two by-passes. This is a violation of your NPDES Permit Part III, 11. This section of the City's permit outlines reporting requirements when this occurs. No sampling of the by-passed raw influent was sampled. Plant staff indicated that this was not a normal sampling day so no sampling was completed. Be advised that any time a portion of the wastewater treatment plants flow is by-passed completely, or around a portion of the treatment units, it must be sampled. The sampling must be done in accordance with your NPDES permit Part III, Item 12, A, B, and C.

During the inspection it was noted that the walls of the anaerobic digesters were buckling. It appears the problems with the roof have allowed rain water behind the brick wall and freezing has damaged them. The structural integrity of the anaerobic digesters must be evaluated and repaired immediately.

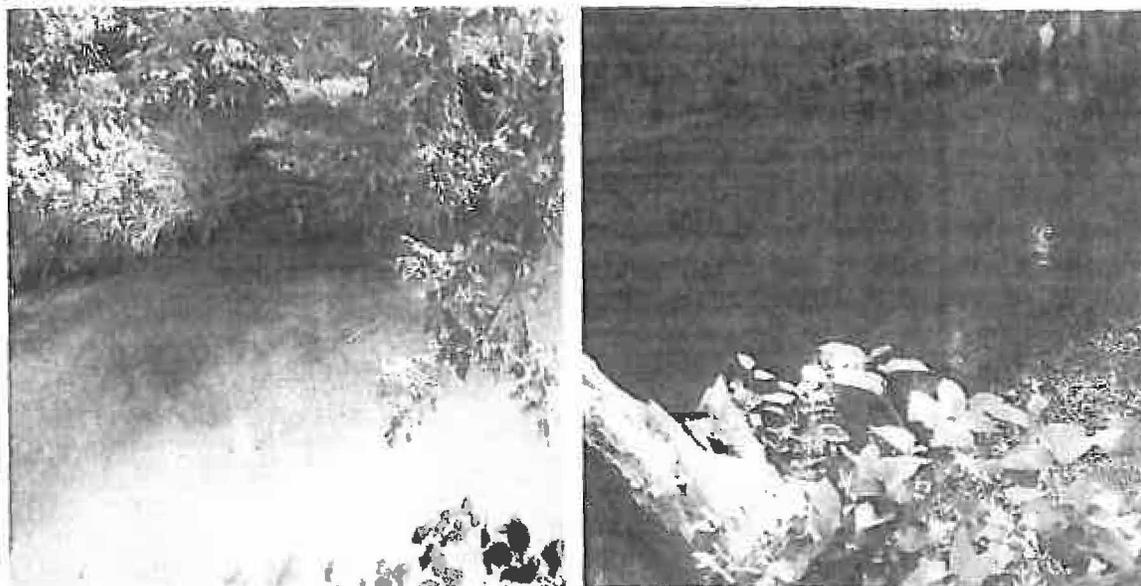
Be advised that these violations are subject to appropriate enforcement action per ORC 6111.99.

In addition to the above violations, a review of the monitoring records for the City between September 1, 2005, and September 31, 2007, was conducted. Identified violations for outfall 001 are listed in attachment 1: City of Salem Violations 9/05-9/07.

Phosphorus Removal System

Most of the phosphorus removal system has been installed. The City of Salem still has not installed a polymer tank or feed pumps. No polymer to aid the removal of phosphorus has ever been added to the wastewater treatment plant. This was a part of the permit-to-install to comply with the City's phosphorus limit. The City attempted to feed various amounts of Alum, however, the NPDES permit limit could not be achieved and currently the City is feeding a small amount of alum for no apparent purpose. Plant personnel confirmed the current feed rate of alum will not be nearly sufficient to comply with the limit. The City is not supplying the necessary chemicals or equipment it felt would be necessary to comply with the phosphorus limit, therefore, this office can only conclude the City is recalcitrant in this limit required by Ohio EPA and U.S. EPA.

During the sampling event with the City it was documented that the ongoing algae problems in stream are still present. The wastewater treatment plant effluent had a phosphorus concentration of 18.8 mg/l (well above the permitted limit of 1.0 mg/l required in the NPDES permit), and an in stream mixing zone of 15.7 mg/l. The Total Phosphorus Total Maximum Daily Limit (TMDL) target for the Middle Fork of Little Beaver Creek in the Salem area is 0.10 mg/l. The 15.7 mg/l in the mix zone of the wastewater treatment plant is well above the desired stream value.



Upstream of plant Effluent is free of algae (left). Downstream in mix zone from wastewater treatment plant has algae growth (right).

Salem is in significant noncompliance with the schedule to attain compliance with final effluent limits. This facility has been in significant noncompliance with its final phosphorus limit since **July, 1, 2005**. While Ohio EPA understands that the City appealed this limit, the courts have granted no relief from compliance with this parameter. This office considers the City in violation since the above referenced date, and the City has not even made a good faith effort to comply with the limit. The renewal limit in the City's next NPDES permit will be in accordance with the "Total Maximum Daily Loads for the Little Beaver Creek Watershed" (approved by U.S. EPA), and reduce this limit even lower (approximately 0.5 mg/l). The TMDLs are established in streams that are not complying with water quality standards. All wastewater treatment plants in this watershed are receiving the appropriate phosphorus limit and several are already complying with the requirements. This office would recommend you conduct the necessary engineering to comply with the limit to mitigate more than two years of effluent violations. More than likely the treatment plant will need tertiary filters to comply with its current and future phosphorus limit.

Mercury Evaluation and Local Limit

This office completed its review of the mercury variance submitted by the City. Mr. Jon Pukalski submitted the revised Antidegradation Addendum as requested by this office on November 15, 2007. The northeast district office of Ohio EPA will be sending down the public notice for the variance the week of November 26. The City should begin their plan to identify, reduce and eliminate mercury sources in the city of Salem. The City has requested through its variance request, a limit of 36 ng/l (0.00054 kg/day) monthly average until it can comply with the 12 ng/l annual average in five years at the end of the renewal permit.

A technical justification for your industrial user local limit for mercury is also due by January 2006. Mr. Matt Hoops of the city of Salem indicated that the work is completed and will be submitted to Ohio EPA's central office. Any changes that are necessary to the industrial user control documents were to have been completed by July 1, 2006. The City must evaluate if the industrial user limit for mercury must be changed to comply with the variance request.

201 Update

Item F of your schedule of compliance required that an evaluation of the City's current planning documents be completed and an updated Facilities Plan be submitted to this office by October 1, 2003. To date this document has not been submitted. The city of Salem is currently in significant noncompliance with failing to submit this document.

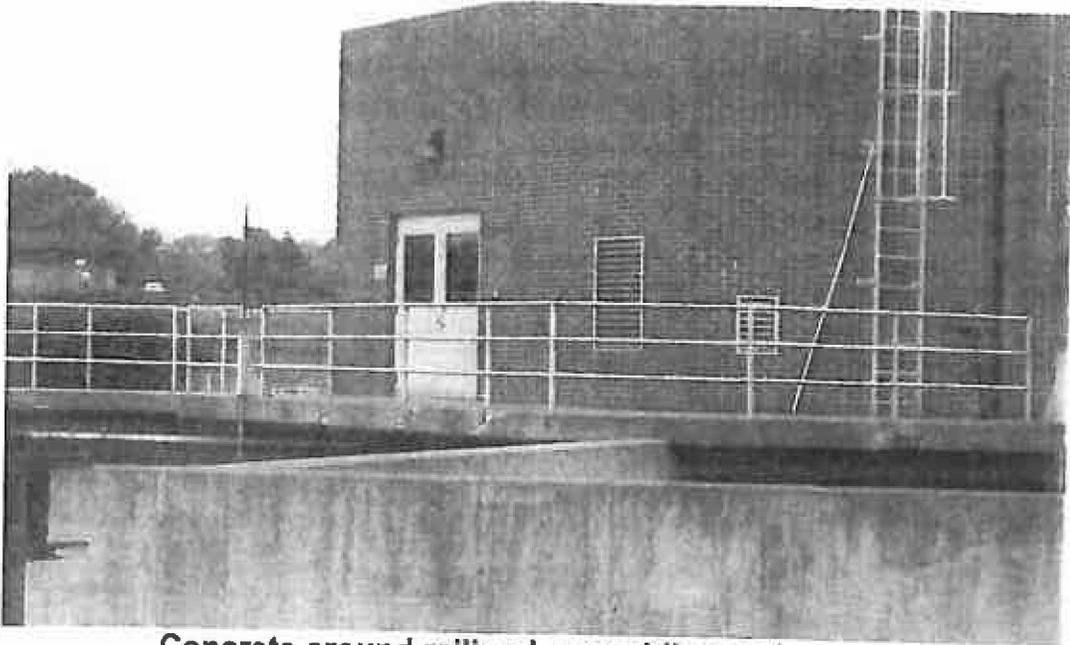
Satellite Sewer Discharge Control Program (SSDCP)

By July 1, 2003, the City was to develop a SSDCP for all communities outside its territorial boundaries. The city of Salem correspondence dated October 11, 2005, indicated that the City does not receive untreated sewage from a satellite community. Therefore, this item is completed.

Plant staffing requirements

There are several areas at the plant where a lack of staff appears to be prohibiting the upkeep of the wastewater treatment plant. Many of the railings have eroding concrete leaving them unstable and unsafe. Other units need repairs to the concrete of the tanks. The digester walls are in need of repair. The fence around the plant has a section missing which would allow the entrance of unauthorized individuals. This would be a safety issue for children entering the plant area where injury or loss of life could occur.

The plant staff typically uses three people on day shift. One superintendent, one lab person, and one operator are utilized throughout the day. The superintendent is normally in charge of administrative work, and the laboratory person is running analysis for the NPDES reporting requirements. This leaves the operator to complete all operation requirements and maintenance repairs. This may not be sufficient for a major wastewater treatment plant. Furthermore, the City utilizes only one person on afternoons and night shift. If there is an emergency or injury no one is available to assist them or rescue them. The City has set in place a call system with the water plant personnel, however, there are several hours where wastewater personnel have no one to communicate with or insure safety. An accidental fall in a tank could result in an injury or loss of life.



Concrete around railing is crumbling and unsafe.



Concrete around railing is crumbling and unsafe.



Section of plant fence is missing. This is a safety hazard.



Concrete of this tank needs replaced. Wiring also needs repaired.

Action Items

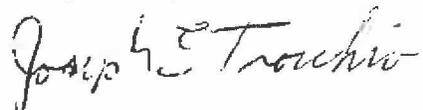
- 1) The City must take all necessary steps to prevent overflows and unauthorized discharges at the wastewater treatment plant. The City must evaluate the need for an Infiltration and Inflow study and all necessary plant improvements to prevent the overflows. The city of Salem has a separate sewer system, therefore, the plant is designed to handle peak flows and no overflows should be occurring. If plant improvements are necessary then a schedule must be submitted to complete them. The City must have a plan in place for sampling and reporting in accordance with their NPDES permit. The sampling must be able to document compliance with, or lack thereof, the requirements outlined in the back of the permit.
- 2) An evaluation of the structural integrity of the anaerobic digester walls must be completed. A schedule for the repair of the walls must be submitted to this office.
- 3) A response to all violations attached to this correspondence must be submitted to this office. The response need only include the violations the City has not previously responded to.
- 4) The city of Salem must comply with the phosphorus limit immediately as required by the final effluent limits outlined in its NPDES permit. Any necessary equipment or chemicals must be installed and implemented immediately. If the plant improvements the City committed to in their permit-to-install fail to meet the permit limits, then the City must make changes in the indirect discharge permits to the City's sewer system to lower the incoming phosphorus concentration. The discharge limits of the industrial users must be lowered sufficiently so that the City's wastewater treatment plant can comply with its NPDES permit limit. The City must also include a schedule for all necessary improvements to comply with the future phosphorus limit of the renewal permit. The improvements may require tertiary treatment and additional sludge handling facilities. The City needs to demonstrate compliance with state design requirements (Recommended Standards for Wastewater Treatment Facilities) for sludge holding, sludge digestion, and all necessary improvements to comply with the NPDES permit.
- 5) A schedule to complete all repairs around the plant must be provided.
- 6) An evaluation of the plant staffing levels in accordance with U.S. EPA guidance documents must be completed.

You are requested to respond in writing by December 12, 2007, explaining the circumstances of the violations, and what actions and time lines the city is taking to achieve compliance. Noncompliance with NPDES permit requirements is subject to further enforcement action.

Mayor and Council
City of Salem
November 27, 2007
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Should you have any comments or questions, feel free to contact me at (330) 963-1193.

Respectfully,



Joseph E. Trocchio
Environmental Engineer
Division of Surface Water

JET/mt

cc: Don Weingart, Utilities Superintendent
Jon A. Pukalski, Plant Manager
Ronald A. Bell, Enforcement Coordinator, Ohio EPA, DSW, NEDO

File: Public/Permit Compliance/City of Salem

CITY OF SALEM EFFLUENT VIOLATIONS: SEPT. 2005 - SEPT. 2007

Permit No	Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
3PD00027*JD	September 2005	Phosphorus, Total (P)	30D Conc	1.0	16.12	9/1/2005
3PD00027*JD	September 2005	Phosphorus, Total (P)	7D Conc	1.5	11.8	9/1/2005
3PD00027*JD	September 2005	Phosphorus, Total (P)	7D Conc	1.5	26.3	9/8/2005
3PD00027*JD	September 2005	Phosphorus, Total (P)	7D Conc	1.5	17.5	9/15/2005
3PD00027*JD	September 2005	Phosphorus, Total (P)	7D Conc	1.5	12.5	9/22/2005
3PD00027*JD	September 2005	Phosphorus, Total (P)	30D Qty	15	136.966	9/1/2005
3PD00027*JD	September 2005	Phosphorus, Total (P)	7D Qty	23	95.0875	9/1/2005
3PD00027*JD	September 2005	Phosphorus, Total (P)	7D Qty	23	196.701	9/8/2005
3PD00027*JD	September 2005	Phosphorus, Total (P)	7D Qty	23	141.814	9/15/2005
3PD00027*JD	September 2005	Phosphorus, Total (P)	7D Qty	23	103.709	9/22/2005
3PD00027*JD	September 2005	Copper, Total Recov.	30D Conc	20	25.	9/1/2005
3PD00027*JD	December 2005	Phosphorus, Total (P)	30D Conc	1.0	10.025	12/1/2005
3PD00027*JD	December 2005	Phosphorus, Total (P)	7D Conc	1.5	15.	12/1/2005
3PD00027*JD	December 2005	Phosphorus, Total (P)	7D Conc	1.5	14.	12/8/2005
3PD00027*JD	December 2005	Phosphorus, Total (P)	7D Conc	1.5	8.3	12/15/2005
3PD00027*JD	December 2005	Phosphorus, Total (P)	7D Conc	1.5	2.8	12/22/2005
3PD00027*JD	December 2005	Phosphorus, Total (P)	30D Qty	15	105.738	12/1/2005
3PD00027*JD	December 2005	Phosphorus, Total (P)	7D Qty	23	176.002	12/1/2005
3PD00027*JD	December 2005	Phosphorus, Total (P)	7D Qty	23	136.343	12/8/2005
3PD00027*JD	December 2005	Phosphorus, Total (P)	7D Qty	23	82.0887	12/15/2005
3PD00027*JD	December 2005	Phosphorus, Total (P)	7D Qty	23	28.5192	12/22/2005
3PD00027*JD	November 2005	Phosphorus, Total (P)	30D Conc	1.0	17.725	11/1/2005
3PD00027*JD	November 2005	Phosphorus, Total (P)	7D Conc	1.5	18.8	11/1/2005
3PD00027*JD	November 2005	Phosphorus, Total (P)	7D Conc	1.5	16.	11/8/2005
3PD00027*JD	November 2005	Phosphorus, Total (P)	7D Conc	1.5	17.3	11/15/2005
3PD00027*JD	November 2005	Phosphorus, Total (P)	7D Conc	1.5	18.8	11/22/2005
3PD00027*JD	November 2005	Phosphorus, Total (P)	30D Qty	15	204.389	11/1/2005
3PD00027*JD	November 2005	Phosphorus, Total (P)	7D Qty	23	216.249	11/1/2005
3PD00027*JD	November 2005	Phosphorus, Total (P)	7D Qty	23	149.038	11/8/2005
3PD00027*JD	November 2005	Phosphorus, Total (P)	7D Qty	23	273.381	11/15/2005
3PD00027*JD	November 2005	Phosphorus, Total (P)	7D Qty	23	178.891	11/22/2005
3PD00027*JD	March 2007	Phosphorus, Total (P)	30D Conc	1.0	4.4	3/1/2007
3PD00027*JD	March 2007	Phosphorus, Total (P)	7D Conc	1.5	4.8	3/8/2007
3PD00027*JD	March 2007	Phosphorus, Total (P)	7D Conc	1.5	4.	3/15/2007
3PD00027*JD	March 2007	Phosphorus, Total (P)	7D Conc	1.5	7.8	3/22/2007
3PD00027*JD	March 2007	Phosphorus, Total (P)	30D Qty	15	68.4874	3/1/2007
3PD00027*JD	March 2007	Phosphorus, Total (P)	7D Qty	23	64.0967	3/8/2007
3PD00027*JD	March 2007	Phosphorus, Total (P)	7D Qty	23	76.4872	3/15/2007
3PD00027*JD	March 2007	Phosphorus, Total (P)	7D Qty	23	118.475	3/22/2007
3PD00027*JD	February 2007	Phosphorus, Total (P)	30D Conc	1.0	8.025	2/1/2007
3PD00027*JD	February 2007	Phosphorus, Total (P)	7D Conc	1.5	9.3	2/1/2007
3PD00027*JD	February 2007	Phosphorus, Total (P)	7D Conc	1.5	9.	2/8/2007
3PD00027*JD	February 2007	Phosphorus, Total (P)	7D Conc	1.5	10.3	2/15/2007
3PD00027*JD	February 2007	Phosphorus, Total (P)	7D Conc	1.5	3.5	2/22/2007
3PD00027*JD	February 2007	Phosphorus, Total (P)	30D Qty	15	90.3946	2/1/2007
3PD00027*JD	February 2007	Phosphorus, Total (P)	7D Qty	23	92.2253	2/1/2007

CITY OF SALEM EFFLUENT VIOLATIONS: SEPT. 2005 - SEPT. 2007

Permit No	Reporting Period	Parameter	Limit Type	Limit	Reported Value #	Violation Date
3PD00027*JD	February 2007	Phosphorus, Total (P)	7D Qty	23	97.3237	2/8/2007
3PD00027*JD	February 2007	Phosphorus, Total (P)	7D Qty	23	124.285	2/15/2007
3PD00027*JD	February 2007	Phosphorus, Total (P)	7D Qty	23	47.7439	2/22/2007
3PD00027*JD	June 2006	Phosphorus, Total (P)	30D Conc	1.0	5.65	6/1/2006
3PD00027*JD	June 2006	Phosphorus, Total (P)	7D Conc	1.5	5.43333	6/1/2006
3PD00027*JD	June 2006	Phosphorus, Total (P)	7D Conc	1.5	4.43333	6/8/2006
3PD00027*JD	June 2006	Phosphorus, Total (P)	7D Conc	1.5	8.9	6/15/2006
3PD00027*JD	June 2006	Phosphorus, Total (P)	7D Conc	1.5	6.7	6/22/2006
3PD00027*JD	June 2006	Phosphorus, Total (P)	30D Qty	15	58.4134	6/1/2006
3PD00027*JD	June 2006	Phosphorus, Total (P)	7D Qty	23	67.9812	6/1/2006
3PD00027*JD	June 2006	Phosphorus, Total (P)	7D Qty	23	38.5898	6/8/2006
3PD00027*JD	June 2006	Phosphorus, Total (P)	7D Qty	23	71.6175	6/15/2006
3PD00027*JD	June 2006	Phosphorus, Total (P)	7D Qty	23	75.9770	6/22/2006
3PD00027*JD	January 2006	Phosphorus, Total (P)	30D Conc	1.0	4.05455	1/1/2006
3PD00027*JD	January 2006	Phosphorus, Total (P)	7D Conc	1.5	4.3	1/1/2006
3PD00027*JD	January 2006	Phosphorus, Total (P)	7D Conc	1.5	7.53333	1/8/2006
3PD00027*JD	January 2006	Phosphorus, Total (P)	7D Conc	1.5	3.46667	1/15/2006
3PD00027*JD	January 2006	Phosphorus, Total (P)	7D Conc	1.5	1.96667	1/22/2006
3PD00027*JD	January 2006	Phosphorus, Total (P)	30D Qty	15	47.9075	1/1/2006
3PD00027*JD	January 2006	Phosphorus, Total (P)	7D Qty	23	63.8325	1/1/2006
3PD00027*JD	January 2006	Phosphorus, Total (P)	7D Qty	23	80.2711	1/8/2006
3PD00027*JD	January 2006	Phosphorus, Total (P)	7D Qty	23	45.2959	1/15/2006
3PD00027*JD	January 2006	Phosphorus, Total (P)	7D Qty	23	24.0453	1/22/2006
3PD00027*JD	January 2006	pH, Minimum	1D Conc	6.5	6.4	1/27/2006
3PD00027*JD	January 2006	pH, Minimum	1D Conc	6.5	6.4	1/28/2006
3PD00027*JD	January 2006	pH, Minimum	1D Conc	6.5	5.7	1/29/2006
3PD00027*JD	January 2006	pH, Minimum	1D Conc	6.5	5.5	1/30/2006
3PD00027*JD	January 2006	pH, Minimum	1D Conc	6.5	5.8	1/31/2006
3PD00027*JD	October 2006	Phosphorus, Total (P)	30D Conc	1.0	12.1	10/1/2006
3PD00027*JD	October 2006	Phosphorus, Total (P)	7D Conc	1.5	12.5	10/1/2006
3PD00027*JD	October 2006	Phosphorus, Total (P)	7D Conc	1.5	16.5	10/8/2006
3PD00027*JD	October 2006	Phosphorus, Total (P)	7D Conc	1.5	14.	10/15/2006
3PD00027*JD	October 2006	Phosphorus, Total (P)	7D Conc	1.5	9.	10/22/2006
3PD00027*JD	October 2006	Phosphorus, Total (P)	30D Qty	15	155.600	10/1/2006
3PD00027*JD	October 2006	Phosphorus, Total (P)	7D Qty	23	129.163	10/1/2006
3PD00027*JD	October 2006	Phosphorus, Total (P)	7D Qty	23	158.192	10/8/2006
3PD00027*JD	October 2006	Phosphorus, Total (P)	7D Qty	23	277.932	10/15/2006
3PD00027*JD	October 2006	Phosphorus, Total (P)	7D Qty	23	101.752	10/22/2006
3PD00027*JD	May 2006	Phosphorus, Total (P)	30D Conc	1.0	2.44615	5/1/2006
3PD00027*JD	May 2006	Phosphorus, Total (P)	7D Conc	1.5	2.03333	5/1/2006
3PD00027*JD	May 2006	Phosphorus, Total (P)	7D Conc	1.5	2.63333	5/8/2006
3PD00027*JD	May 2006	Phosphorus, Total (P)	7D Conc	1.5	2.23333	5/15/2006
3PD00027*JD	May 2006	Phosphorus, Total (P)	7D Conc	1.5	3.	5/22/2006
3PD00027*JD	May 2006	Phosphorus, Total (P)	30D Qty	15	29.0728	5/1/2006
3PD00027*JD	May 2006	Phosphorus, Total (P)	7D Qty	23	27.7417	5/8/2006
3PD00027*JD	May 2006	Phosphorus, Total (P)	7D Qty	23	30.0006	5/15/2006

CITY OF SALEM EFFLUENT VIOLATIONS: SEPT. 2005 - SEPT. 2007

Permit No	Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
3PD00027*JD	May 2006	Phosphorus, Total (P)	7D Qty	23	40.8348	5/22/2006
3PD00027*JD	January 2007	Phosphorus, Total (P)	30D Conc	1.0	4.36	1/1/2007
3PD00027*JD	January 2007	Phosphorus, Total (P)	7D Conc	1.5	3.5	1/1/2007
3PD00027*JD	January 2007	Phosphorus, Total (P)	7D Conc	1.5	2.	1/8/2007
3PD00027*JD	January 2007	Phosphorus, Total (P)	7D Conc	1.5	2.5	1/15/2007
3PD00027*JD	January 2007	Phosphorus, Total (P)	7D Conc	1.5	6.3	1/22/2007
3PD00027*JD	January 2007	Phosphorus, Total (P)	30D Qty	15	62.6052	1/1/2007
3PD00027*JD	January 2007	Phosphorus, Total (P)	7D Qty	23	38.6164	1/1/2007
3PD00027*JD	January 2007	Phosphorus, Total (P)	7D Qty	23	38.1528	1/8/2007
3PD00027*JD	January 2007	Phosphorus, Total (P)	7D Qty	23	55.1379	1/15/2007
3PD00027*JD	January 2007	Phosphorus, Total (P)	7D Qty	23	92.0674	1/22/2007
3PD00027*JD	July 2006	Phosphorus, Total (P)	30D Conc	1.0	6.7	7/1/2006
3PD00027*JD	July 2006	Phosphorus, Total (P)	7D Conc	1.5	5.5	7/1/2006
3PD00027*JD	July 2006	Phosphorus, Total (P)	7D Conc	1.5	8.9	7/8/2006
3PD00027*JD	July 2006	Phosphorus, Total (P)	7D Conc	1.5	6.2	7/15/2006
3PD00027*JD	July 2006	Phosphorus, Total (P)	7D Conc	1.5	6.2	7/22/2006
3PD00027*JD	July 2006	Phosphorus, Total (P)	30D Qty	15	75.3695	7/1/2006
3PD00027*JD	July 2006	Phosphorus, Total (P)	7D Qty	23	78.1697	7/1/2006
3PD00027*JD	July 2006	Phosphorus, Total (P)	7D Qty	23	89.1007	7/8/2006
3PD00027*JD	July 2006	Phosphorus, Total (P)	7D Qty	23	65.1913	7/15/2006
3PD00027*JD	July 2006	Phosphorus, Total (P)	7D Qty	23	69.0164	7/22/2006
3PD00027*JD	November 2006	Phosphorus, Total (P)	30D Conc	1.0	10.025	11/1/2006
3PD00027*JD	November 2006	Phosphorus, Total (P)	7D Conc	1.5	11.3	11/1/2006
3PD00027*JD	November 2006	Phosphorus, Total (P)	7D Conc	1.5	11.	11/8/2006
3PD00027*JD	November 2006	Phosphorus, Total (P)	7D Conc	1.5	9.3	11/15/2006
3PD00027*JD	November 2006	Phosphorus, Total (P)	7D Conc	1.5	8.5	11/22/2006
3PD00027*JD	November 2006	Phosphorus, Total (P)	30D Qty	15	107.500	11/1/2006
3PD00027*JD	November 2006	Phosphorus, Total (P)	7D Qty	23	117.576	11/1/2006
3PD00027*JD	November 2006	Phosphorus, Total (P)	7D Qty	23	121.199	11/8/2006
3PD00027*JD	November 2006	Phosphorus, Total (P)	7D Qty	23	106.516	11/15/2006
3PD00027*JD	November 2006	Phosphorus, Total (P)	7D Qty	23	84.7101	11/22/2006
3PD00027*JD	September 2006	Phosphorus, Total (P)	30D Conc	1.0	11.15	9/1/2006
3PD00027*JD	September 2006	Phosphorus, Total (P)	7D Conc	1.5	9.3	9/1/2006
3PD00027*JD	September 2006	Phosphorus, Total (P)	7D Conc	1.5	13.8	9/8/2006
3PD00027*JD	September 2006	Phosphorus, Total (P)	7D Conc	1.5	9.5	9/15/2006
3PD00027*JD	September 2006	Phosphorus, Total (P)	7D Conc	1.5	12.	9/22/2006
3PD00027*JD	September 2006	Phosphorus, Total (P)	30D Qty	15	113.488	9/1/2006
3PD00027*JD	September 2006	Phosphorus, Total (P)	7D Qty	23	79.4827	9/1/2006
3PD00027*JD	September 2006	Phosphorus, Total (P)	7D Qty	23	136.537	9/8/2006
3PD00027*JD	September 2006	Phosphorus, Total (P)	7D Qty	23	131.424	9/15/2006
3PD00027*JD	September 2006	Phosphorus, Total (P)	7D Qty	23	106.509	9/22/2006
3PD00027*JD	March 2006	Total Suspended Solids	30D Conc	20	26.3846	3/1/2006
3PD00027*JD	March 2006	Total Suspended Solids	7D Conc	30	32.3333	3/8/2006
3PD00027*JD	March 2006	Phosphorus, Total (P)	30D Conc	1.0	7.23077	3/1/2006
3PD00027*JD	March 2006	Phosphorus, Total (P)	7D Conc	1.5	5.73333	3/1/2006
3PD00027*JD	March 2006	Phosphorus, Total (P)	7D Conc	1.5	7.93333	3/8/2006

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3PD00027*JD	March 2006	Phosphorus, Total (P)	7D Conc	1.5	7.	3/15/2006
3PD00027*JD	March 2006	Phosphorus, Total (P)	7D Conc	1.5	7.43333	3/22/2006
3PD00027*JD	March 2006	Phosphorus, Total (P)	30D Qty	15	74.6547	3/1/2006
3PD00027*JD	March 2006	Phosphorus, Total (P)	7D Qty	23	56.1701	3/1/2006
3PD00027*JD	March 2006	Phosphorus, Total (P)	7D Qty	23	89.3083	3/8/2006
3PD00027*JD	March 2006	Phosphorus, Total (P)	7D Qty	23	81.5796	3/15/2006
3PD00027*JD	March 2006	Phosphorus, Total (P)	7D Qty	23	69.3381	3/22/2006
3PD00027*JD	October 2005	Phosphorus, Total (P)	30D Conc	1.0	17.7	10/1/2005
3PD00027*JD	October 2005	Phosphorus, Total (P)	7D Conc	1.5	16.8	10/1/2005
3PD00027*JD	October 2005	Phosphorus, Total (P)	7D Conc	1.5	15.	10/8/2005
3PD00027*JD	October 2005	Phosphorus, Total (P)	7D Conc	1.5	27.	10/15/2005
3PD00027*JD	October 2005	Phosphorus, Total (P)	7D Conc	1.5	12.	10/22/2005
3PD00027*JD	October 2005	Phosphorus, Total (P)	30D Qty	15	182.544	10/1/2005
3PD00027*JD	October 2005	Phosphorus, Total (P)	7D Qty	23	153.628	10/1/2005
3PD00027*JD	October 2005	Phosphorus, Total (P)	7D Qty	23	142.164	10/8/2005
3PD00027*JD	October 2005	Phosphorus, Total (P)	7D Qty	23	225.953	10/15/2005
3PD00027*JD	October 2005	Phosphorus, Total (P)	7D Qty	23	208.432	10/22/2005
3PD00027*JD	April 2006	Phosphorus, Total (P)	30D Conc	1.0	6.34615	4/1/2006
3PD00027*JD	April 2006	Phosphorus, Total (P)	7D Conc	1.5	9.5	4/1/2006
3PD00027*JD	April 2006	Phosphorus, Total (P)	7D Conc	1.5	8.1	4/8/2006
3PD00027*JD	April 2006	Phosphorus, Total (P)	7D Conc	1.5	4.93333	4/15/2006
3PD00027*JD	April 2006	Phosphorus, Total (P)	7D Conc	1.5	4.2	4/22/2006
3PD00027*JD	April 2006	Phosphorus, Total (P)	30D Qty	15	58.7439	4/1/2006
3PD00027*JD	April 2006	Phosphorus, Total (P)	7D Qty	23	83.4632	4/1/2006
3PD00027*JD	April 2006	Phosphorus, Total (P)	7D Qty	23	76.2464	4/8/2006
3PD00027*JD	April 2006	Phosphorus, Total (P)	7D Qty	23	43.1300	4/15/2006
3PD00027*JD	April 2006	Phosphorus, Total (P)	7D Qty	23	44.6020	4/22/2006
3PD00027*JD	February 2006	Total Suspended Solids	30D Conc	20	25.9166	2/1/2006
3PD00027*JD	February 2006	Total Suspended Solids	7D Conc	30	31.	2/15/2006
3PD00027*JD	February 2006	Phosphorus, Total (P)	30D Conc	1.0	3.13333	2/1/2006
3PD00027*JD	February 2006	Phosphorus, Total (P)	7D Conc	1.5	1.9	2/8/2006
3PD00027*JD	February 2006	Phosphorus, Total (P)	7D Conc	1.5	3.73333	2/15/2006
3PD00027*JD	February 2006	Phosphorus, Total (P)	7D Conc	1.5	5.5	2/22/2006
3PD00027*JD	February 2006	Phosphorus, Total (P)	30D Qty	15	32.8286	2/1/2006
3PD00027*JD	February 2006	Phosphorus, Total (P)	7D Qty	23	39.1497	2/15/2006
3PD00027*JD	February 2006	Phosphorus, Total (P)	7D Qty	23	56.4218	2/22/2006
3PD00027*JD	February 2006	pH, Minimum	1D Conc	6.5	6.	2/12/2006
3PD00027*JD	February 2006	pH, Minimum	1D Conc	6.5	5.7	2/13/2006
3PD00027*JD	February 2006	pH, Minimum	1D Conc	6.5	6.4	2/14/2006
3PD00027*JD	February 2006	pH, Minimum	1D Conc	6.5	6.4	2/27/2006
3PD00027*JD	August 2006	Phosphorus, Total (P)	30D Conc	1.0	10.84	8/1/2006
3PD00027*JD	August 2006	Phosphorus, Total (P)	7D Conc	1.5	8.5	8/1/2006
3PD00027*JD	August 2006	Phosphorus, Total (P)	7D Conc	1.5	9.7	8/8/2006
3PD00027*JD	August 2006	Phosphorus, Total (P)	7D Conc	1.5	11.	8/15/2006
3PD00027*JD	August 2006	Phosphorus, Total (P)	7D Conc	1.5	11.2	8/22/2006
3PD00027*JD	August 2006	Phosphorus, Total (P)	30D Qty	15	103.209	8/1/2006

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3PD00027*JD	August 2006	Phosphorus, Total (P)	7D Qty	23	86.6083	8/1/2006
3PD00027*JD	August 2006	Phosphorus, Total (P)	7D Qty	23	92.2268	8/8/2006
3PD00027*JD	August 2006	Phosphorus, Total (P)	7D Qty	23	97.2177	8/15/2006
3PD00027*JD	August 2006	Phosphorus, Total (P)	7D Qty	23	86.0133	8/22/2006
3PD00027*JD	December 2006	Phosphorus, Total (P)	30D Conc	1.0	6.25	12/1/2006
3PD00027*JD	December 2006	Phosphorus, Total (P)	7D Conc	1.5	7.	12/1/2006
3PD00027*JD	December 2006	Phosphorus, Total (P)	7D Conc	1.5	8.	12/8/2006
3PD00027*JD	December 2006	Phosphorus, Total (P)	7D Conc	1.5	6.5	12/15/2006
3PD00027*JD	December 2006	Phosphorus, Total (P)	7D Conc	1.5	3.5	12/22/2006
3PD00027*JD	December 2006	Phosphorus, Total (P)	30D Qty	15	69.3648	12/1/2006
3PD00027*JD	December 2006	Phosphorus, Total (P)	7D Qty	23	73.7885	12/1/2006
3PD00027*JD	December 2006	Phosphorus, Total (P)	7D Qty	23	80.6962	12/8/2006
3PD00027*JD	December 2006	Phosphorus, Total (P)	7D Qty	23	63.0562	12/15/2006
3PD00027*JD	December 2006	Phosphorus, Total (P)	7D Qty	23	59.9184	12/22/2006
3PD00027*JD	April 2007	Phosphorus, Total (P)	30D Conc	1.0	7.625	4/1/2007
3PD00027*JD	April 2007	Phosphorus, Total (P)	7D Conc	1.5	7.5	4/1/2007
3PD00027*JD	April 2007	Phosphorus, Total (P)	7D Conc	1.5	8.5	4/8/2007
3PD00027*JD	April 2007	Phosphorus, Total (P)	7D Conc	1.5	6.	4/15/2007
3PD00027*JD	April 2007	Phosphorus, Total (P)	7D Conc	1.5	8.5	4/22/2007
3PD00027*JD	April 2007	Phosphorus, Total (P)	30D Qty	15	89.7598	4/1/2007
3PD00027*JD	April 2007	Phosphorus, Total (P)	7D Qty	23	98.2207	4/1/2007
3PD00027*JD	April 2007	Phosphorus, Total (P)	7D Qty	23	93.4289	4/8/2007
3PD00027*JD	April 2007	Phosphorus, Total (P)	7D Qty	23	77.1458	4/15/2007
3PD00027*JD	April 2007	Phosphorus, Total (P)	7D Qty	23	90.2438	4/22/2007
3PD00027*JD	June 2007	Total Suspended Solids	7D Conc	30	43.3333	6/8/2007
3PD00027*JD	June 2007	Phosphorus, Total (P)	30D Conc	1.0	11.925	6/1/2007
3PD00027*JD	June 2007	Phosphorus, Total (P)	7D Conc	1.5	7.8	6/1/2007
3PD00027*JD	June 2007	Phosphorus, Total (P)	7D Conc	1.5	14.3	6/8/2007
3PD00027*JD	June 2007	Phosphorus, Total (P)	7D Conc	1.5	11.	6/15/2007
3PD00027*JD	June 2007	Phosphorus, Total (P)	7D Conc	1.5	14.6	6/22/2007
3PD00027*JD	June 2007	Phosphorus, Total (P)	30D Qty	15	119.376	6/1/2007
3PD00027*JD	June 2007	Phosphorus, Total (P)	7D Qty	23	68.6705	6/1/2007
3PD00027*JD	June 2007	Phosphorus, Total (P)	7D Qty	23	141.105	6/8/2007
3PD00027*JD	June 2007	Phosphorus, Total (P)	7D Qty	23	134.772	6/15/2007
3PD00027*JD	June 2007	Phosphorus, Total (P)	7D Qty	23	132.957	6/22/2007
3PD00027*JD	August 2007	Phosphorus, Total (P)	30D Conc	1.0	8.525	8/1/2007
3PD00027*JD	August 2007	Phosphorus, Total (P)	7D Conc	1.5	9.	8/1/2007
3PD00027*JD	August 2007	Phosphorus, Total (P)	7D Conc	1.5	7.8	8/8/2007
3PD00027*JD	August 2007	Phosphorus, Total (P)	7D Conc	1.5	5.	8/15/2007
3PD00027*JD	August 2007	Phosphorus, Total (P)	7D Conc	1.5	12.3	8/22/2007
3PD00027*JD	August 2007	Phosphorus, Total (P)	30D Qty	15	105.282	8/1/2007
3PD00027*JD	August 2007	Phosphorus, Total (P)	7D Qty	23	77.9066	8/1/2007
3PD00027*JD	August 2007	Phosphorus, Total (P)	7D Qty	23	70.7371	8/8/2007
3PD00027*JD	August 2007	Phosphorus, Total (P)	7D Qty	23	131.793	8/15/2007
3PD00027*JD	August 2007	Phosphorus, Total (P)	7D Qty	23	140.690	8/22/2007
3PD00027*JD	August 2007	Copper, Total Recov.	30D Conc	20	25.	8/1/2007

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3PD00027*JD	May 2007	Phosphorus, Total (P)	30D Conc	1.0	9.8	5/1/2007
3PD00027*JD	May 2007	Phosphorus, Total (P)	7D Conc	1.5	3.6	5/1/2007
3PD00027*JD	May 2007	Phosphorus, Total (P)	7D Conc	1.5	14.8	5/8/2007
3PD00027*JD	May 2007	Phosphorus, Total (P)	7D Conc	1.5	11.	5/15/2007
3PD00027*JD	May 2007	Phosphorus, Total (P)	7D Conc	1.5	9.8	5/22/2007
3PD00027*JD	May 2007	Phosphorus, Total (P)	30D Qty	15	96.5903	5/1/2007
3PD00027*JD	May 2007	Phosphorus, Total (P)	7D Qty	23	42.3223	5/1/2007
3PD00027*JD	May 2007	Phosphorus, Total (P)	7D Qty	23	148.391	5/8/2007
3PD00027*JD	May 2007	Phosphorus, Total (P)	7D Qty	23	97.7589	5/15/2007
3PD00027*JD	May 2007	Phosphorus, Total (P)	7D Qty	23	97.8884	5/22/2007
3PD00027*JD	July 2007	Phosphorus, Total (P)	30D Conc	1.0	10.86	7/1/2007
3PD00027*JD	July 2007	Phosphorus, Total (P)	7D Conc	1.5	17.5	7/1/2007
3PD00027*JD	July 2007	Phosphorus, Total (P)	7D Conc	1.5	9.3	7/8/2007
3PD00027*JD	July 2007	Phosphorus, Total (P)	7D Conc	1.5	8.	7/15/2007
3PD00027*JD	July 2007	Phosphorus, Total (P)	7D Conc	1.5	9.5	7/22/2007
3PD00027*JD	July 2007	Phosphorus, Total (P)	30D Qty	15	93.4251	7/1/2007
3PD00027*JD	July 2007	Phosphorus, Total (P)	7D Qty	23	145.325	7/1/2007
3PD00027*JD	July 2007	Phosphorus, Total (P)	7D Qty	23	82.7211	7/8/2007
3PD00027*JD	July 2007	Phosphorus, Total (P)	7D Qty	23	72.3692	7/15/2007
3PD00027*JD	July 2007	Phosphorus, Total (P)	7D Qty	23	81.6235	7/22/2007
3PD00027*JD	September 2007	Phosphorus, Total (P)	30D Conc	1.0	14.975	9/1/2007
3PD00027*JD	September 2007	Phosphorus, Total (P)	7D Conc	1.5	9.3	9/1/2007
3PD00027*JD	September 2007	Phosphorus, Total (P)	7D Conc	1.5	14.8	9/8/2007
3PD00027*JD	September 2007	Phosphorus, Total (P)	7D Conc	1.5	17.8	9/15/2007
3PD00027*JD	September 2007	Phosphorus, Total (P)	7D Conc	1.5	18.	9/22/2007
3PD00027*JD	September 2007	Phosphorus, Total (P)	30D Qty	15	134.651	9/1/2007
3PD00027*JD	September 2007	Phosphorus, Total (P)	7D Qty	23	86.6636	9/1/2007
3PD00027*JD	September 2007	Phosphorus, Total (P)	7D Qty	23	149.119	9/8/2007
3PD00027*JD	September 2007	Phosphorus, Total (P)	7D Qty	23	146.738	9/15/2007
3PD00027*JD	September 2007	Phosphorus, Total (P)	7D Qty	23	156.085	9/22/2007
3PD00027*JD	September 2007	Copper, Total Recovera	30D Conc	20	22.	9/1/2007