

**INDUSTRIAL PRETREATMENT
PROGRAM**

ANNUAL REPORT

(JULY 1, 2008 - JUNE 30, 2009)

**WEST WARWICK REGIONAL
WASTEWATER TREATMENT FACILITY**



AUGUST 15, 2009

Prepared by



JAMES J. GEREMIA & ASSOCIATES, INC.
CONSULTING ENVIRONMENTAL ENGINEERS & SCIENTISTS

272 West Exchange St., Suite 201, Providence, RI 02903-1061

Phone: (401) 454-7000 • Fax: (401) 454-7415



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JAMES J. GEREMIA & ASSOCIATES, INC.
CONSULTING ENVIRONMENTAL ENGINEERS & SCIENTISTS

SECTION I

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The Town of West Warwick's Regional Wastewater Treatment Facility is located on Pontiac Avenue in the Town of West Warwick. The Facility processes and treats wastewater from the Town of West Warwick plus contributing flows from Warwick, Cranston, Coventry, East Greenwich and West Greenwich. The southeastern-most corner of the Town of Scituate is also within the Facility Planning area, but currently has no buildings connected. The Facility discharges its treated wastewater into the Pawtuxet River, and is regulated by Rhode Island Pollutant Discharge Elimination System Permit No. RI0100153.

The Facility serves the region's domestic and commercial sources, and also provides wastewater treatment for numerous local industrial dischargers. Therefore, in accordance with Federal and State regulations, the Town of West Warwick implements and enforces an Industrial Pretreatment Program. The purpose of the Program (approved by the Federal Environmental Protection Agency on 9 September 1983) is to achieve the three fundamental objectives of the National Pretreatment Program:

- To prevent the introduction of pollutants into the POTW which could interfere with its operation, referred to as inhibition or interference.
- To prevent the pass-through of untreated pollutants which could violate applicable water quality standards or RIPDES effluent limitations, referred to as pass-through.
- To prevent the contamination of POTW sludge which would limit the selected sludge uses or disposal practices.

The purpose of this Annual Report is to review the components of the West Warwick Industrial Pretreatment Program, and to present a summary of the progress which has been made during the period of July 2008 to June 2009.

The contents of this report have been designed in order to meet the requirements of 40CFR403.12(l) and the conditions specified in the Facility's RIPDES Permit. This report is divided into the following sections:

- SECTION 2.0: INDUSTRIAL USER CLASSIFICATION
- SECTION 3.0: MONITORING ACTIVITIES
- SECTION 4.0: ENFORCEMENT ACTIVITIES
- SECTION 5.0: PROGRAM EVALUATION
- SECTION 6.0: ANALYTICAL EVALUATION



SECTION 2

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2.1 INDUSTRIAL USERS

The master list of all industrial users was updated from the latest edition of the Rhode Island Directory of Manufacturers, drive-by visual inspections and observations, Sewer Use Records, Tax Assessor's Records (including all Town license applications), the Town Planning Department, Fire Department Chemical Manifest lists, and the Town Building Inspector's list. The industrial user list also takes into account all industries which are tenants of large mill-type complexes. The master list was established in 1987 in accordance with seven classifications as established by EPA. In general, this year there has been little change in industrial users and an overall decrease in volume from the users. The commercial facilities were highly volatile in ownership but fairly stable in numbers. The overall wastewater volume was depressed from previous years.

The following are the classifications as established by EPA:

- (A) Industries subject to Federal EPA Categorical Standards:
- i. Industries subject to Federal EPA Categorical Standards;
 - ii. Industries discharging toxic substances, prohibited pollutants, but who are not subject to Federal EPA Categorical Standards;
 - iii. Industries discharging or having the potential to discharge compatible conventional (BOD, TSS, pH, oil and grease, fecal coliform) pollutant loads in sufficient quantities to cause West Warwick to violate its RIPDES Permit limits or cause interference or organic overloads at the treatment works;
 - iv. Industries with sanitary or non-toxic discharges using solvents, toxic chemicals and/or hazardous chemicals that could potentially be discharged to the sewers;
 - v. Industries discharging only sanitary wastes and/or non-toxic discharges;
 - vi. Dry industries with no waste discharges to the sewers, using solvents, toxic chemicals and/or hazardous chemicals; and
 - vii. Dry industries with no waste discharges to the sewers.

Industries classified in Categories i, ii and iii are considered significant.

The list of Industrial User Classifications is presented in Table 2-1. All Significant Industrial Users that discharge process wastewater and are permitted by the Program are subject to local limits. Categorical industries are subject to limits that are equal to or more stringent than categorical pretreatment standards.

2.2 REVISIONS TO INDUSTRIAL USER CLASSIFICATION

The 2008-2009 reporting year was one in which little industrial growth transpired.

ABX Air, Inc. - 80 Centre of New England Blvd., Coventry	Closed
Mack Truck - 80 Centre of New England Blvd. Coventry	Closed

2.3 COMMERCIAL LISTING

Table 2-2 indicates establishments which are currently under jurisdiction of the Program's grease trap requirements.

Table 2-3 presents those establishments which shall be focused upon due to their potential to discharge of silver into the collection system. This year, the list separates the photo finishers from the dentist / x- ray users.

Table 2-4 lists all users subject to the grit trap requirements, while Table 2-5 lists users subject to lint trap requirements.

2.4 REVISIONS TO COMMERCIAL LISTING

This year the commercial growth has slowed significantly. The Growth potential is primarily in Coventry including the Centre of New England. Much of the activity for this year involved back filling the existing facilities as businesses close.

The following commercial changes took place:

Centre of New England (CoNE), completed: Coventry Assisted Living (CoNE) Facility, Heritage Inn, and Retail Strip C. The major tenant in the retail strip has not made any progress and may not complete the project. Carmax also has cancelled their plans for a development in the area. Mack Truck, Hertz Rentals and ABS trucking have closed the respective facilities. The commercial condominiums built last year have not been occupied.

Coventry Crossing was completed construction, including: Dunkin Donuts, Wester Bank, CVS Pharmacy, and a retail space.

This year the commercial growth in Warwick is located generally in the area of Route 2 (Bald Hill Road/Quaker Lane). As with the other communities very little net growth was realized.

Changes to the **Grease Trap List** are as follows:

- **Chen's Buffet** (Centre of New England) is pending
- **McDonalds** (1100 Tiogue Avenue, Coventry) is pending
- **Dunkin Donuts** (Coventry Crossing) was completed
- **Rhode Island Heritage Inn of West Greenwich** (Centre of New England) was added
- **Yokohama Steak House** (Cowesett Corners, 300 Quaker Lane, Warwick) was completed
- **Salad Creations** (674 Centre of New England Blvd.) was replaced by **Wicked Good Pizza**.
- **Quiznos** closed (718 Centre of New England Blvd.) - was replaced with **Riccotti's**
- **Captain Nemo's** (101-102 Sandy Bottom, Coventry) is pending
- **Papa Gino's** (1104 Tiogue, Coventry) was completed
- **Coventry Assisted Living Facility** (Centre of New England) was completed
- **Bald Hill Pizzeria** (Bald Hill, Warwick) closed
- **Mak's Deli & Coffee Shop** (1237 Main Street) closed
- **Crowe Bar** (1152 Main St. Coventry) complete their connection in July'09
- **Tim Horton's** (732 Tiogue Ave., Coventry) was completed
- **Tim Horton's** (957 Main St.) closed
- **Tim Horton's** (1 Cowesett) closed
- **Spike's Junk Yard Dogs** (1020 Tiogue Ave., Coventry) closed
- **Antonio's Family Restaurant** 435 Washington St. , Coventry) opened
- **Gauchos do Brazil** opened (444 Quaker Lane, Warwick) - formerly 99 Restaurant - and closed the same year
- **Tutto Italiano Gourmet** is pending (250 Cowesett Ave.) replacing the Riccotti's
- **Tim Hortons** closed two locations - 957 Main St. and 1 Cowesett Ave.
- **Fen's Express** opened replacing Pimento Grill 975 Main St.
- **Matos Bakery Inc.** opened at 1236 Main St.
- **Longshots** opened at 293 Providence Street (replacing Stephanie's)
- **Christos Pizza** (291 Providence St.) closed
- **Gentleman Farmer Restaurant** opened at 845 Providence Street .
- **Mama Rosa Deli** opened at 656 Providence St. (replacing Dear Heart Ice Cream)
- **Town Chef** closed the (131 Washington St.) location and opened at 11 Cruson Dr.
- **Gauchos do Brazil** (444 Quaker Lane) opened December 2008 and closed March 2009
- **Pimento Grill** closed and re-opened as **Fen's Express**
- **Matos Bakery** opened (1236 Main st.)
- **Christos Pizza** (291 Providence St.) closed
- **Long Shots** (293 Providence St.) opened

- **Tutto Italiano** (250 Cowesett St.) replaced Ricotti's
- **Christo's Greek Oven** (250 Cowesett St.) replaced Greek Oven

Changes to the **Photo Processor's List** include:

- **CVS** (Coventry Crossing) was completed
- **Walgreen's** (Tiogue) was completed

Changes to the **Silver List** include:

- **Dr. Coppolelli** (134 Sandy Bottom Road, Coventry) was removed.
- **Dr. Jamie M. Italiane-DeCubellis** (325 S. Main St, Coventry) was complete
- **Dr. Erik George**(121 Sandy Bottom, Coventry) replaced Dr. Boatright
- **Cowesett Chiropractic** was removed as the facility has digital x-ray processing and no other silver use

Changes to the **Grit Trap List** include:

- **Majestic Collision** (51 Aster St.) was added
- **Midland Hyundai** (405 Quaker Lane) closed
- **Tar Box Hyundai** opened at (870 Quaker Lane, Warwick) replacing Big Lots
- **Mack Truck** (80 Centre of New England Blvd.) closed
- **Hertz Equipment Rentals** (140 Centre of New England Blvd.) closed

Changes to the **Lint Trap List** include:

- **RI Heritage Inn of West Greenwich** (637 Centre of New England Blvd.) was completed
- **Horizon Bay Retirement Living** (600 Centre of New England Blvd.) was added
- **Windgate Inn** changed to **Fairfield Suites**.

**TABLE 2-1
TOWN OF WEST WARWICK
INDUSTRIAL USER CLASSIFICATION**

Industry	Street Address	City/Town/State	Classification
CAL Chemical	592 Arnold Rd.	Coventry, RI	v
Colonial Machine & Tool	5 Salvus Ave.	Coventry, RI	v
Arlington R.V. Supercenter	99 Telmore Road	Warwick, RI	v
Grimes Box Company	112 Telmore Rd.	Warwick, RI	v
Warwick Ice Cream	743 Bald Hill Rd.	Warwick, RI	iii
G-Tech	West Greenwich Industrial Park	West Greenwich, RI	v
KMC, Inc.	20 Technology Way	West Greenwich, RI	v
Irrimunex of RI a/k/a Amgen, Inc.	40 Technology Way	West Greenwich, RI	iii
Advanced Interconnects	5 Energy Way	West Warwick, RI	v
American Power Conversion	1600 Division Rd.	West Warwick, RI	v
Amtrol, Inc.	1400 Division Rd.	West Warwick, RI	iii
AOA Machine	1372 Main St.	West Warwick, RI	v
Astro-Med, Inc.	East Greenwich Ave.	West Warwick, RI	v
Chase Machine Co., Inc.	324 Washington St.	West Warwick, RI	v
Clyde Press	1387 Main St.	West Warwick, RI	v
Corbro Manufacturing	100 Pulaski St.	West Warwick, RI	v
Cox Cable	9 James Murphy Highway	West Warwick, RI	v
Cramik Corp.	183 Washington St.	West Warwick, RI	v
Crompton Woodworking	108 Pond St.	West Warwick, RI	v
Culligan Water Conditioning	149 James Murphy Highway	West Warwick, RI	v
Custom Craft, Inc.	48 Maple Ave.	West Warwick, RI	v
Deery Tool and Engineering, Inc.	1654 Main St.	West Warwick, RI	vi
F. DiZoglio & Sons	111 Energy Way	West Warwick, RI	v
Dryvit Systems, Inc.	One Energy Way	West Warwick, RI	v

**TABLE 2-1
TOWN OF WEST WARWICK
INDUSTRIAL USER CLASSIFICATION**

Industry	Street Address	City/Town/State	Classification
L. Gadoury Oil	226 Washington St.	West Warwick, RI	v
Gaspee Enterprises, Inc.	245 Quaker Lane	West Warwick, RI	v
Graphic Press	17 Providence St.	West Warwick, RI	v
Guild Tool & Eng. Co.	20 Pike St.	West Warwick, RI	v
Kent County Daily News	1353 Main St.	West Warwick, RI	v
K.G.C., Inc.	245 Quaker Lane	West Warwick, RI	vii
KLM Company	28 Aster St.	West Warwick, RI	v
Lincoln Energy Corp.	195 James Murphy Hwy.	West Warwick, RI	v
Lumetta, Inc.	69 Aster St.	West Warwick, RI	v
Mereco Technologies	1505 Main St.	West Warwick, RI	v
New England Union Co.	Hay St.	West Warwick, RI	v
Original Bradford Soap Works	200 Providence St.	West Warwick, RI	iii
Paul Arpin Van Lines	99 James Murphy Hwy.	West Warwick, RI	v
Quality Thermoforming	25 James Murphy Hwy.	West Warwick, RI	v
Riverpoint Lace	825 Main Street	West Warwick, RI	iii
R.I. Label Works	14 Clyde Ave.	West Warwick, RI	v
Snow Findings	14 Sheldon St.	West Warwick, RI	v
Standard Mill Machinery	1370 Main St.	West Warwick, RI	v
West Warwick Screw Products Co., Inc.	15 Factory St.	West Warwick, RI	v

TABLE 2-2
GREASE INTERCEPTOR LIST

COMPANY NAME	STREET#	STREET	TOWN/CITY	Owner	Owner Address	Status
CroweBar	1152	Main Street	Coventry, RI	BC Property LLC	1152 Main St. Coventry, RI 02816	ACTIVE
Charlie's Place	33	Sandy Bottom Road	Coventry, RI 02816	George Melanis	15 Sandy Bottom Road, Coventry, RI 02816	ACTIVE
Horizon Bay Retirement Living	600	Centre of New England Blvd	Coventry, RI 02816	Coventry Care group	5307 East Mocking Bird Lane, suite 1010 Dallas Texas	ACTIVE
WAL-MART Super center	650	Centre of New England Blvd	Coventry, RI 02816	Wal Mart Stores, Inc	2001 SE10th St., Bentonville, AR 72716	ACTIVE
Wicked Good Pizza	674	Centre of New England Blvd	Coventry, RI 02816	Commerce Park Realty	207 Quaker Lane	ACTIVE
Honey Dew Donuts	710	Centre of New England Blvd	Coventry, RI 02816	Commerce Park Realty	207 Quaker Lane	ACTIVE
Cilantro Grille	712	Centre of New England Blvd	Coventry, RI 02816	Commerce Park Realty	207 Quaker Lane	ACTIVE
Riccotti's	718	Centre of New England Blvd	Coventry, RI 02816	Commerce Park Realty	207 Quaker Lane	ACTIVE
BJ's WHOLESALE CLUB	790	Centre of New England Blvd	Coventry, RI 02816	BJ's WHOLESALE CLUB	COMMERCE PARK ASSOCIATES 5 LLC	ACTIVE
APPLEBEE'S	830	Centre of New England Blvd	Coventry, RI 02816	APPLEBEE'S, C/O COMMERCE PARK ASSOC 7 LLC	207 QUAKER LN 3RD FLOOR, WEST WARWICK RI 02893	ACTIVE
River View Nursing Home	546	Main St.	Coventry, RI 02816	RIVERVIEW NURSING HOME	546 MAIN STREET, COVENTRY RI 02816	ACTIVE
Harris Bar and Grill	666	Main Street	Coventry, RI 02816	MELANIS VASILIOS	705 MAIN STREET LEHIGH REALTY/BRIAN SHERMAN, 860 WATERMAN AVE, EAST PROVIDENCE RI 02914	ACTIVE
WENDY'S	2311	New London TPK	Coventry, RI 02816	CCF, LLC - DBA: WENDY'S		ACTIVE
A-1 Pizza & Restaurant	1600	Nooseneck Hill Road	Coventry, RI 02816	COUNTRY PIZZA, C/O VSH REALTY INC. ATTN: A/P V0605	777 DEDHAM ST, CANTON MA 02021-1484	ACTIVE
Half Moon	1650	Nooseneck Hill Road	Coventry, RI 02816	Boston Neck Realty Corp		ACTIVE
Mealworks	1600	1600 Nooseneck Hill Road	Coventry, RI 02816	MEALWORKS, C/O VSH REALTY INC - A/P V0605	777 DEDHAM ST, CANTON MA 02021-1484	ACTIVE
Charlie's Place	33	Sandy Bottom Road	Coventry, RI 02816	Haramos Realty LLC	15 Sandy Bottom Rd., Coventry, RI 02816	ACTIVE
Captain Nemo's	101	Sandy Bottom Road	Coventry, RI 02816			Pending
Tim Hortons NE Inc.	732	Tiogoue Ave.	Coventry, RI 02816	Tim Hortons NE Inc.	74 Nooseneck Hill Road, West Greenwich, RI 02817	ACTIVE
Borrelli's Pastry Shop	765	Tiogoue Ave.	Coventry, RI 02816	BORRELLI ALEXANDER P & BORRELLI JUNE M	765 TIOGUE AVE, COVENTRY RI 02816	ACTIVE
Newport Creamery	781	Tiogoue Ave.	Coventry, RI 02816	Renaissance Developmaent Corp.	35 Sockanosset Crossroads Cranston, RI 02920	Active
Taco Bell	784	Tiogoue Ave.	Coventry, RI 02816	L/M TACO RI INC., ATTN: MARY, ACCOUNTS PAYABLE	45 WALPOLE ST, SUITE 6, NORWOOD MA 02062	ACTIVE
Cumberland Farms/Britay's Deli and Catering	789	Tiogoue Ave.	Coventry, RI 02816	Cumberland Farms	777 Dedham Street, Canton MA 02021-1411	Active
DUNKIN DONUTS	800	Tiogoue Ave.	Coventry, RI 02816	John and Delorres Henderson	25 Greenhill Way , East Greenwich RI 02818	Active
Tom's Market	821	Tiogoue Ave.	Coventry, RI 02816	Thomas DeAngelis	36 River Run East Greenwich, RI02818	Pending
Kentucky Fried Chicken	824	Tiogoue Ave.	Coventry, RI 02816	Nerard Inc.	118 Comstock Ave, Providence , RI 02903	ACTIVE

**TABLE 2-2
GREASE INTERCEPTOR LIST**

COMPANY NAME	STREET#	STREET	TOWN/CITY	Owner	Owner Address	Status
Stop & Shop Store 720	900	Tiogoue Ave.	Coventry, RI 02816	PURITY SUPREME/STOP & SHOP 10-720. C/O CHURCHILL & BANKS PROPERTIES	167 POINT ST, PROVIDENCE RI 02903	ACTIVE
Café Gianna	915	Tiogoue Ave.	Coventry, RI 02816	Simas Properties LLC	165 Lakehurst Av Coventry RI 02816	ACTIVE
Gellinas Ice Cream	975	Tiogoue Ave.	Coventry, RI 02816	Michael Lysikatos	4 butternut Dr. ,Coventry, RI 02816	ACTIVE
Ronzio Pizza & Subs	1032	Tiogoue Ave.	Coventry, RI 02816	TIOGUE AVENUE ASSOCIATES	C/O GJS management 858 Washington Street, Dedham ,MA 02026	ACTIVE
Papa Gino's	1104	Tiogoue Ave.	Coventry, RI 02816	Papa Gino's Inc.	600 PROVIDENCE HWY, DEDHAM MA 02026-6848	ACTIVE
China Star	1020 1028	Tiogoue Ave.	Coventry, RI 02816	TIOGUE AVENUE ASSOCIATES	C/O GJS management 858 Washington Street, Dedham ,MA 02026	ACTIVE
Rebello's	470	Washington Street	Coventry, RI 02816	Caroline & Ron Schopac	147 Gough Avenue, Coventry RI	ACTIVE
Pagliarini's Restaurant	637	Washington Street	Coventry, RI 02816	Nelmor Realty	1375 Warwick Avenue, Warwick, RI	ACTIVE
Haven Health Center of Coventry	10	Woodland Drive	Coventry, RI 02816	COVENTRY HEALTH CENTER/BROOKSIDE VILLA	ATTN: CAROL A. MANCINI, 10 WOODLAND DR, COVENTRY RI 02816-6715	ACTIVE
Antonio's Family Restaurant	435	Washington Street	Coventry, RI 02816-6081	Tim Hortons NE Inc.	874 Sinclair Road, Oakville, ON L6CK 2Y1	active
Cold Stone Creamery	1000	Division Street	East Greenwich, RI 02818	E & A PORTFOLIO LIMITED PARTNERSHIP,	1901 MAIN ST SUITE 900, COLUMBIA SC 29201	ACTIVE
Dave's Marketplace	1000	Division Street	East Greenwich, RI 02818	E & A PORTFOLIO LIMITED PARTNERSHIP,	1901 MAIN ST SUITE 900, COLUMBIA SC 29201	ACTIVE
MCDONALDS	1000	Division Street	East Greenwich, RI 02818	E & A PORTFOLIO LIMITED PARTNERSHIP,	1901 MAIN ST SUITE 900, COLUMBIA SC 29201	ACTIVE
CHINA BUFFET	1000	Division Street	East Greenwich, RI 02818	E & A PORTFOLIO LIMITED PARTNERSHIP,	1901 MAIN ST SUITE 900, COLUMBIA SC 29201	ACTIVE
OUTBACK STEAKHOUSE	1000	Division Street	East Greenwich, RI 02818	E & A PORTFOLIO LIMITED PARTNERSHIP,	1901 MAIN ST SUITE 900, COLUMBIA SC 29201	ACTIVE
PANERA BREAD	1000	Division Street	East Greenwich, RI 02818	E & A PORTFOLIO LIMITED PARTNERSHIP,	1901 MAIN ST SUITE 900, COLUMBIA SC 29201	ACTIVE
RUBY TUESDAY	1000	Division Street	East Greenwich, RI 02818	E & A PORTFOLIO LIMITED PARTNERSHIP,	1901 MAIN ST SUITE 900, COLUMBIA SC 29201	ACTIVE
Dave's Commissary	1000	Division Street	East Greenwich, RI 02818	E & A PORTFOLIO LIMITED PARTNERSHIP,	1901 MAIN ST SUITE 900, COLUMBIA SC 29201	Active
Dunkin Donuts	699	Bald Hill Road	Warwick , RI 02886	EPSTEIN RHODE ISLAND LLC	6 STATE STREET	ACTIVE
Warwick Ice Cream	743	Bald Hill Road	Warwick , RI 02886	BUCCI THOMAS	743 BALD HILL ROAD	ACTIVE
Dunkin Donuts	895	Bald Hill Road	Warwick , RI 02886	Pierce Properties	75 Lambert Lind Hwy, Warwick , RI 028860	active
Bob's Furniture	1500	Bald Hill Road	Warwick , RI 02886	Charter Warwick	8441 Cooper Creek Blvd., University Park FL 34201	ACTIVE
Shaw's Supermarkets	1500	Bald Hill Road	Warwick , RI 02886	SHAWMUT BANK CONNECTICUT TRUSTEE	C/O K-MART CORP - BURR WOLFF, PO BOX 22799, HOUSTON TX 77227-2799	ACTIVE
Boston Market Warwick	1500	Bald Hill Road	Warwick , RI 02886	SHAWMUT BANK CONNECTICUT TRUSTEE	C/O K-MART CORP - BURR WOLFF, PO BOX 22799, HOUSTON TX 77227-2799	ACTIVE
Friday's	989	Centerville Road	Warwick , RI 02886	CARLSON RESTAURANTS, SITE#171	C/O FACILITY IQ -MS 1168, PO BOX 2440, SPOKANE WA 99210-2440	ACTIVE
Ferns and Flowers	1094	Centerville Road	Warwick , RI 02886	GERARD, ALINE C. & GERALD J.	C/O 1200 MAIN STREET	ACTIVE

TABLE 2-2
GREASE INTERCEPTOR LIST

COMPANY NAME	STREET#	STREET	TOWN/CITY	Owner	Owner Address	Status
1149	1149	Division Street	Warwick , RI 02886	J.T Development Group	1149 DIVISION ST	ACTIVE
Dunkin Donuts	1239	Division Street	Warwick , RI 02886	KINGSTOWN ROAD ASSOCIATES	DUNKIN DONUTS/ATTN: J CATALFAMO, 251 SMITH ST Providence , RI 02903	ACTIVE
VALLEY COUNTRY CLUB	251	New London Ave.	Warwick , RI 02886	SIXTY INC, C/O VALLEY COUNTRY CLUB	251 NEW LONDON AVE, WARWICK RI 02886	ACTIVE
Hony Dew Dounuts	345	Providence St.	Warwick , RI 02886	HONY DEW DONUTS, C/O WHITNEY GROUP INC.	ATTN: ALEX KAUFMAN, VP, PO BOX 1384, PROVIDENCE RI 02901	ACTIVE
Pizza Hut	10	Quaker Lane	Warwick , RI 02886	A.V. LAND & BUILDING ENTERPRISES LLC	55 TOWNLINE ROAD, SUITE 102, WETHERSFIELD CT 06109	ACTIVE
Coffee Plus KENT COUNTY COURT HOUSE	200	Quaker Lane	Warwick , RI 02886	KENT COUNTY COURT HOUSE, STATE OF RI FACILITIES & OPERATIONS	ATTN: JULIE GOOD, 250 BENEFIT STREET, RM. 418	ACTIVE
Cinnamon Cafe	300	Quaker Lane	Warwick , RI 02886	AC COWESETT PURCHASER c/o AMCAP INC	1281 EAST MAIN ST STE 200	ACTIVE
STOP & SHOP	300	Quaker Lane	Warwick , RI 02886	AC COWESETT PURCHASER c/o AMCAP INC	1281 EAST MAIN ST STE 200	ACTIVE
Applebee's Neighborhood Grill & Bar	300	Quaker Lane	Warwick , RI 02886	AC COWESETT PURCHASER c/o AMCAP INC	1281 EAST MAIN ST STE 200	ACTIVE
D'Angelo Sandwich Shop	300	Quaker Lane	Warwick , RI 02886	AC COWESETT PURCHASER c/o AMCAP INC	1281 EAST MAIN ST STE 200	ACTIVE
Yokohama Steak House	300	Quaker Lane	Warwick , RI 02886	AC COWESETT PURCHASER c/o AMCAP INC	1281 EAST MAIN ST STE 200	Active
Denny's	444	Quaker Lane	Warwick , RI 02886	QUAKER REAL ESTATE ENTERPRISES, LLC	2790 SOUTH COUNTY TRAIL, EAST GREENWICH RI 02818	ACTIVE
METLIFE	700	Quaker Lane	Warwick , RI 02886	METLIFE, ATTN: DAVID CHEN, ONE METLIFE PLAZA - AREA 5C	2701 QUEENS PLAZA NORTH, LONG ISLAND CITY NY 11101	ACTIVE
Wendy's Restaurant	926	Quaker Lane	Warwick , RI 02886	BALD HILL FOODS INC. C/O ROBERT D. WIECK, ESQ.	101 DYER STREET, PROVIDENCE RI 02903	ACTIVE
Showcase Cinemas	1200	Quaker Lane	Warwick , RI 02886	NAIRI INC, ATTN: ACCOUNTS PAYABLE, 200 ELM ST, DEDHAM MA 02026	200 ELM ST, DEDHAM MA 02026	ACTIVE
Texas Roadhouse	1200	Quaker Lane	Warwick , RI 02886	Texas Roadhouse of Warwick, LLC	6040 Dutchmans Lane, Louisville , KY 40205	ACTIVE
Classic Deli	24 C	Quaker Lane	Warwick , RI 02886	LITTERIO PROPERTIES INC	38 LOCKHART AVE	ACTIVE
Denny's Dinner	795	Centre of New England Blvd	West Greenwich, RI 02917	CKL Diners , LLC	COMMERCE PARK REALTY LLC, 207 QUAKER LN, WEST WARWICK RI 02893	ACTIVE
Cracker Barrel Store 452	825	Centre of New England Blvd	West Greenwich, RI 02917	CRACKER BARREL STORE 452, ATTN: ACCOUNTS PAYABLE	P.O. BOX 787	ACTIVE
Rhode Island Heritage Inn of West Greenwich		Centre of New England Blvd	West Greenwich, RI 02917	Rhode Island Heritage Inn of West Greenwich	1201 PAGE DRIVE , FARGE ND 58103	ACTIVE
Immunex RI	40	Technology Way	West Greenwich, RI 02917	IMMUNEX OF RHODE ISLAND, ATTN: STEVE BRYANT	40 TECHNOLOGY WAY, WEST GREENWICH RI 02817	ACTIVE
G-TECH	55	Technology Way	West Greenwich, RI 02917	G-TECH/WG I, ATTN: RICK ELLIS	55 TECHNOLOGY WAY, WEST GREENWICH RI 02817-1717	ACTIVE
West Valley Inn Main	4	Blossom St.	West Warwick, RI 02893	TARA FOOD SERVICES INC	4 BLOSSOM ST	ACTIVE
West Valley Inn Triple Crown	4	Blossom St.	West Warwick, RI 02893	TARA FOOD SERVICES INC	4 BLOSSOM ST	ACTIVE
Portuguese-American Sport Club	12	Bridge Street	West Warwick, RI 02893	PORTUGUESE-AMERICAN SPORT CLUB	12 BRIDGE ST	ACTIVE
Maisie Quinn Elementary School	1	Brown Street	West Warwick, RI 02893	West Warwick Public Schools	10 Harris Avenue, West Warwick, RI02893	ACTIVE

**TABLE 2-2
GREASE INTERCEPTOR LIST**

COMPANY NAME	STREET#	STREET	TOWN/CITY	Owner	Owner Address	Status
On the Roch's	1593 1595	Centerville Road	West Warwick, RI 02893	ROCH, JEROME D	1595 CENTREVILLE RD, WARWICK RI 02886-4251	ACTIVE
West Warwick Elks #1697	60	Clyde St.	West Warwick, RI 02893	W WARWICK LODGE NO 1697 OF ELKS OF THE U S A	60 CLYDE ST	ACTIVE
Vasil's Pizza	2	Country Drive	West Warwick, RI 02893	CASTELLI ALBERT S & CASTELLI ANN M TE	81 HARDIG ROAD,WARWICK RI 02886	ACTIVE
Pop's Place & His Son's Pub Inc.	115	Cowesett Ave.	West Warwick, RI 02893	POP'S PLACE & HIS SON'S PUB INC	115 COWESETT AVENUE	ACTIVE
Cowesett Inn	226	Cowesett Ave.	West Warwick, RI 02893	COWESETT INN INC	226 COWESETT AVE	ACTIVE
Cristos Greek Oven	250	Cowesett Ave.	West Warwick, RI 02893	RESERVOIR REALTY COMPANY INC	141 POWER ROAD, PAWTUCKET, RI 02860	ACTIVE
Tutto Italiano	250	Cowesett Ave.	West Warwick, RI 02893	RESERVOIR REALTY COMPANY INC	141 POWER ROAD, PAWTUCKET, RI 02860	ACTIVE
Galaxies II	255	Cowesett Ave.	West Warwick, RI 02893	RUSSO ANTHONY P	384 KING ROAD	ACTIVE
Ivy Garden	272	Cowesett Ave.	West Warwick, RI 02893	Garden Estates,LLC	19 Forest Lane, East Greenwich, ro 02818	ACTIVE
Dunkin Donuts	275	Cowesett Ave.	West Warwick, RI 02893	HENDERSON REALTY CO	C/O DUNKIN DONUTS, 275 COWESETT AVENUE	ACTIVE
Nick's New York System	280	Cowesett Ave.	West Warwick, RI 02893	V S H REALTY INC., C/O CUMBERLAND FRMS INC R	777 DEDHAM STREET V0174	ACTIVE
Subway	289	Cowesett Ave.	West Warwick, RI 02893	U S A REALTY INC	293 COWESETT AVE S/1, WEST WARWICK RI 02893	ACTIVE
Silver Crystal	289	Cowesett Ave.	West Warwick, RI 02893	U S A REALTY INC	293 COWESETT AVE S/1, WEST WARWICK RI 02893	ACTIVE
Cowesett Pizza	308	Cowesett Ave.	West Warwick, RI 02893			ACTIVE
The Town Chef	11	Curson Street	West Warwick, RI 02893	Peter Xynellis	21 Drawbridge Drive,West Warwick, RI 02893	ACTIVE
Amtrol, Inc.	1400	Division Rd.	West Warwick, RI 02893	AMTROL INC.	1400 Division Road	ACTIVE
Met Life, Eures Dining Services	1600	Division Rd.	West Warwick, RI 02893	W W W REALTY ASSOCIATES, C/O NY URBAN LLC	ATTN DIANE PULLANO, 225 WEST 34TH ST SUITE 2100	ACTIVE
Papa Gino's	700	East Greenwich Ave.	West Warwick, RI 02893	QUAKER VALLEY MALL ASSOCIATES C/O OF USA	600 PROVIDENCE HWY, DEDHAM MA 02026-6848	ACTIVE
West Warwick Senior Citizens Center Inc	20	Factory St.	West Warwick, RI 02893	WEST WARWICK SRS BLDG FUND INC	8 FACTORY ST	ACTIVE
Greenbush Elementary School	127	Greenbush Road	West Warwick, RI 02893	West Warwick Public Schools	10 Harris Avenue, West Warwick, RI02893	ACTIVE
Crompton Veterans Organization	37	Hepburn St.	West Warwick, RI 02893	CROMPTON VETERANS ORGANIZATION WORLD WAR II	37 HEPBURN ST	ACTIVE
Cox communication	9	James p. Murphy Hgwy	West Warwick, RI 02893	COX COMMUNICATIONS	11 COMSTOCK PARKWAY, CRANSTON RI 02921	ACTIVE
Tee's Tavern (EAGLE QUEST GOLF DOME)	1	Keyes Way	West Warwick, RI 02893	RHODE ISLAND INDUSTRIAL FACILITIES CORP	C/O EAGLE QUEST GOLF DOME, 1 KEYES WAY	ACTIVE
West View Health Care	239	Legris Ave.	West Warwick, RI 02893	QUAKER ASSOCIATES, C/O P.F.C. COPORATION	C/O WEST VIEW HEALTH CARE, 239 LEGRIS AVENUE	ACTIVE
Emilio's Bakery Inc.	287	Legris Ave.	West Warwick, RI 02893	V S H REALTY INC., C/O CUMBERLAND FRMS INC R	777 DEDHAM STREET V0532	ACTIVE
Sabatino's Italian Deli	287	Legris Ave.	West Warwick, RI 02893	CUMBERLAND FARMS INC AS TRUSTEE OF THE DJS CORP REALTY	777 DEDHAM STREET V0532	Active

**TABLE 2-2
GREASE INTERCEPTOR LIST**

COMPANY NAME	STREET#	STREET	TOWN/CITY	Owner	Owner Address	Status
Bill's Place	707	Main St.	West Warwick, RI 02893	MELANIS VASILIOS (Bill)	705 MAIN STREET	ACTIVE
Bamboo House	710	Main St.	West Warwick, RI 02893	VSH REALTY INC C/O CUMBERLAND FRMS INC ATTN: A/P V0605	777 DEDHAM STREET V0479	ACTIVE
Jessie II	712	Main St.	West Warwick, RI 02893	VSH REALTY INC C/O CUMBERLAND FRMS INC ATTN: A/P V0605	777 DEDHAM STREET V0479	ACTIVE
Phenix Sportsmens Club	715	Main St.	West Warwick, RI 02893	PHENIX SPORTMENS CLUB	715 MAIN STREET	ACTIVE
Eagle's	826	Main St.	West Warwick, RI 02893	WARWICK AERIE NO 1313 FRATERNAL ORDER OF EAGLES	826 MAIN STREET	ACTIVE
Sweet November Bakery	913	Main St.	West Warwick, RI 02893	BSK ENTERPRISE INC	P O BOX 1131	ACTIVE
Subway	923	Main St.	West Warwick, RI 02893	JOHN RIGGINS	1420 MAIN STREET, COVENTRY RI 02816	ACTIVE
Diggy's Ice Cream	925	Main St.	West Warwick, RI 02893	JOHN RIGGINS	1420 MAIN STREET, COVENTRY RI 02816	ACTIVE
Papa's Place	943	Main St.	West Warwick, RI 02893	Joe Kossi	11 Lakewood Dr, Johnston, RI 02919	ACTIVE
Dunkin Donuts	970	Main St.	West Warwick, RI 02893	970 MAIN STREET REALTY LLC	970 MAIN STREET	ACTIVE
Fen's Express	975	Main St.	West Warwick, RI 02893	Ed Fanigan	981 A MAIN STREET, WEST WARWICK, RI 02893	ACTIVE
Domino's Pizza	977	Main St.	West Warwick, RI 02893	FLANAGAN EDWARD P	14 PETERS LANE	ACTIVE
Ronzio Pizza & Subs	1013	Main St.	West Warwick, RI 02893	Harutun Auakyan	22 Briar Hill Drive, Cranston, RI 02921	ACTIVE
Club Fortenac/Touch of Class Catering	1143	Main St.	West Warwick, RI 02893	CLUB FRONTENAC INC	1143 MAIN ST	ACTIVE
K's Comer	1191	Main St.	West Warwick, RI 02893	MAI TAI INVESTMENTS INC	122 APPLE TREE LANE	ACTIVE
D'Angelo Sandwich Shop	1199	Main St.	West Warwick, RI 02893	JONASA REALTY INC	1231 MAIN STREET	ACTIVE
Matos Bakery Inc.	1236	Main St.	West Warwick, RI 02893	Marco Matos	23 Chestnut St. Cumberland RI 02864	ACTIVE
Ferucci's New York System	1250	Main St.	West Warwick, RI 02893	O BRIEN ROBIN	33 WEST WARWICK AVENUE	ACTIVE
A J's Restaurant	1365	Main St.	West Warwick, RI 02893	BROWN ARTHUR	183 GREENBUSH ROAD	ACTIVE
Roch's Market	1475	Main St.	West Warwick, RI 02893	Ting Chan	1475 MAIN ST.	ACTIVE
Famous Pizza	1738	Main St.	West Warwick, RI 02893	FAMOUS PIZZA INC	1738 MAIN ST	ACTIVE
A Taste Of China	1745	Main St.	West Warwick, RI 02893	MUTUAL PROPERTIES NEW LONDON LLC/RHODE ISLAND LIMITED LIABILITY CO	ONE JAMES P MURPHY HWY	ACTIVE
Honey Dew Donuts	1745	Main St.	West Warwick, RI 02893	MUTUAL PROPERTIES NEW LONDON LLC/RHODE ISLAND LIMITED LIABILITY CO	ONE JAMES P MURPHY HWY	ACTIVE
Paul's Kitchen	1745	Main St.	West Warwick, RI 02893	MUTUAL PROPERTIES NEW LONDON LLC/RHODE ISLAND LIMITED LIABILITY CO	ONE JAMES P MURPHY HWY	ACTIVE
Joann's Bakery	27	Pike Street	West Warwick, RI 02893	FURTADO DANIEL & JOANN FURTADO JT	34 GOUGH AVENUE	ACTIVE
Phenix Square Restaurant	9	Pleasant St.	West Warwick, RI 02893	LUCAS ALAN P	90 HAWTHORNE STREET	ACTIVE

**TABLE 2-2
GREASE INTERCEPTOR LIST**

COMPANY NAME	STREET#	STREET	TOWN/CITY	Owner	Owner Address	Status
Jerry's Supermarket	25	Providence St.	West Warwick, RI 02893	JERRYS SUPER MARKET INC. C/O BRS REAL ESTATE	22 COVENTRY SHOPPERS PARK	ACTIVE
Mr. Taco	49	Providence St.	West Warwick, RI 02893	BLAIN DAVID D ET UX, BLAIN KAY E TE	140 WAKEFIELD STREET	ACTIVE
House of Wu	52	Providence St.	West Warwick, RI 02893	WU GEORGE Y & MAY PING WU TRUSTEES, WU LIVING TRUST	52 PROVIDENCE ST	ACTIVE
Dunkin Dounts	283	Providence St.	West Warwick, RI 02893	LACROIX ROY A & NANCY E TE	1988 PHENIX AVENUE	ACTIVE
Longshots	293	Providence St.	West Warwick, RI 02893	Henry Johnston	3 Lantern Lane West Roxbury, MA 02132	ACTIVE
Westcott House of Pizza	346	Providence St.	West Warwick, RI 02893	AMERADA HESS CORPORATION	One Hess Plaza, Woodbridge, NJ 07095 ATT John Rockwell	ACTIVE
Fu Ming Chinese Restaurant	350	Providence St.	West Warwick, RI 02893	AMERADA HESS CORPORATION	One Hess Plaza, Woodbridge, NJ 07095 ATT John Rockwell	ACTIVE
San Vivaldo's	570	Providence St.	West Warwick, RI 02893	BIGAZZI ALFIERO	580 PROVIDENCE STREET	ACTIVE
Gentleman Farmer Restaurant	845	Providence St.	West Warwick, RI 02893	845 Providence Street L.L.C.	31 Graystone Street, Warwick, RI 02886	ACTIVE
Mama Rosa Deli	656	Providence Street	West Warwick, RI 02893	Jeffrey T. Butler	2121 Elmwood Ave. Warwick, RI 02888	active
Doreen's Place	35	Quaker Lane	West Warwick, RI 02893	UNIVERSAL TRUCK & EQUIPMENT LEASING INC	C/O MINER REALTY & WESTCOTT DEVELOPMENT, 207 QUAKER LN FL3	ACTIVE
KFC of America	305	Quaker Lane	West Warwick, RI 02893	JOES SERVICE STATION	A R I CORPORATION, 88 WOODCOVE DRIVE	ACTIVE
Quaker valley Mall/ Pinelli's Café	701	Quaker Lane	West Warwick, RI 02893	QVM LLC. C/O STONE TOWER PROPERTIES	545 S MAIN STREET	ACTIVE
Quaker Valley Mall/Little chop sticks	719	Quaker Lane	West Warwick, RI 02893	QVM LLC. C/O STONE TOWER PROPERTIES	545 S MAIN STREET	ACTIVE
Aloha Pizza	126	Robert St.	West Warwick, RI 02893	ZBIGNIEW c/o ALOHA PIZZA	126 ROBERT STREET	ACTIVE
West Warwick Country Club	335	Wakefield Street	West Warwick, RI 02893	FOREWEST GROUP LLC	450 WAKEFIELD STREET	ACTIVE
Wakefield Heights Elementary School	505	Wakefield Street	West Warwick, RI 02893	TOWN OF WEST WARWICK	1170 MAIN STREET	ACTIVE
Hong Kong Restaurant	77	Washington Street	West Warwick, RI 02893	SIT KWOK KIN & JIAN HUA SIT TE	1516 FRENCHTOWN ROAD	ACTIVE
L A Cafe	245	Washington Street	West Warwick, RI 02893	ANZEVINO REALTY LLC	245 WASHINGTON STREET	ACTIVE
Café Jericho	257	Washington Street	West Warwick, RI 02893	FORCIER LILLIAN & RAYMOND O FORCIER	66 SAGAMORE ST, WARWICK RI 02886	ACTIVE
West Warwick Senior Center		Washington Street	West Warwick, RI 02893	West Warwick Dept. of Human Services		ACTIVE
West Warwick High School	1	Webster Knight Drive	West Warwick, RI 02893	TOWN OF WEST WARWICK	1170 MAIN STREET	ACTIVE
Kingston Pizza	72	West Warwick Ave.	West Warwick, RI 02893	Robert Donahue	65 Maple Valley Road, Coventry RI 02816	ACTIVE
Sub Way	88	West Warwick Ave.	West Warwick, RI 02893	LOMBARDI DOMENIC REALTY		ACTIVE
Dunkin Donuts	88	West Warwick Ave.	West Warwick, RI 02893	LOMBARDI DOMENIC REALTY	ATTN: DUNKIN DONUTS, PO BOX 456, WEST WARWICK RI 02893	ACTIVE

TABLE 2-3
SILVER USERS

Parcel ID	Account No.	#	Location	User	Owner
241-0034-1-000	WA-2182-00-SW	1775	BALD HILL ROAD	Aspen Dental Associates	GREEN PLAZA CONDO ASSOCIATION, ATTN: CAROL ENNIS
005-0007-0-000	13-1084-40-SW	11	BANK ST	Raymond V. McConnell DDS	MCCONNELL RAYMOND V & MARILYNN TE
250-0005-0-000	WA-2190-00-SW	1121	CENTREVILLE RD	COLETTI, ALFRED J	COLETTI, ALFRED J
028-0274-0-000	01-0589-00-SW	336	COWESETT AVE	Antony Tilelli DDS	APPOLONIA ERMA J TRUSTEE OF
004-0083-0-000	18-0638-00-SW	1071	MAIN ST	Dr. Robert Reynolds DDS	REYNOLDS ROBERT C & CATHARINE RITTER TE
		1219	Main Street	Thundermist Health Assoc. Inc.	Thundermist Health Assoc. Inc.
006-0086-0-000	07-0404-10-SW	1425	MAIN ST	Dr. Andrew Gazerro DDS	CRIS AN LLC
004-0081-0-000	01-0613-00-SW	1079	MAIN STREET	Dr. Albert Arcand, DDS	ARCAND MANAGEMENT LLC
241-0028-0-000	WA-2166-00-SW	80	QUAKER LANE	Robert Mier DDS	WARWICK INVESTORS I PARTNERSHIP
028-0544-0-000	13-1956-00-SW	247 251	QUAKER LANE	Wayne Mollohoan DMD	MOLLOHAN BURTON S ET UX
029-0390-0-000	03-1123-00-SW	693 725	QUAKER LANE	Greenwich Valley Veterinary	C/O STONE TOWER PROPERTIES
		121	Sandy Bottom Road	Erik GeorgeDMD	Erik GeorgeDMD
010-0448-0-000	07-0840-00-SW	64	TIOGUE AVE	Richard Barkin DDS	GIUSTI MARGARET
825-0245-0-000	CV-8066-00-SW	916-920	TIOGUE AVE	Tiogoue Veterinary Clinic	ZAHORA RICHARD K REVOCABLE TRUST
253-0005-0-000	WA-2301-00-SW	1090	TOLLGATE RD	LURY, FREDERICK S DR	LURY, FREDERICK S DR
253-0010-0-000	33-0110-06-SW	1120	TOLLGATE RD	Santiago Estelita A DMD	RPB Properties
		325	Main Street	Dr. Jamie M Italiane-DeCubellis	Luca Reality

**TABLE 2-4
GRIT TRAP LIST**

Parcel ID	#	Location	User	Owner	Owner Address	Status
	51	ASTER STREET	Majestic Collision	JSLAM Realty	509 QUAKER LANE	ACTIVE
	857	BALD HILL RD	Bald Hill Car Wash	MARACAP LLC	1615 PONTIAC AVE.,CRANSTON	ACTIVE
260-0010-0-000	1035	BALD HILL RD	Bald Hill Dodge, Chrysler & Kia Inc	BALD HILL REALTY CO	1035 BALD HILL ROAD	ACTIVE
255-0030-0-000	1390	BALD HILL RD	Scub-a- Dub	R & D REALTY DBA SCRUB-A-DUB	172 WORCESTER RD	ACTIVE
249-0014-0-000	1515	BALD HILL RD	Inskip Motors	INSKIP, UAG WEST BAY AM LLC	1515 BALD HILL ROAD	ACTIVE
	650	CENTRE OF NE BLVD	WAL-MART Super center	Wal Mart Stores,Inc	2001 SE10th St., Bentonville, AR	ACTIVE
CV-8181-00-SW	700	CENTRE OF NE BLVD	Home Depot	ROADEPOT & KEYSERTON c/o HOME DEPOT USA	PO BOX 105842	ACTIVE
249-0003-0-000	1075	CENTREVILLE RD	Inskip Motors	CAR WAR LLC CAPITAL AUTOMOTIVE	8270 GREENSBORO DRIVE #9	ACTIVE
013-0552-0-000	128	COWESETT AVENUE	Sunoco Sevice Center	CARLUM VINCENT H ET UX	C/O SUN CO INC	ACTIVE
	242	COWESETT AVENUE	Cowesett Car Wash	N N GEORGE REALITY INC.		ACTIVE
029-0415-0-000	265	COWESETT AVENUE	Ultra Carwash	DIMENSION ASSOCIATES INC	265 COWESETT AVENUE	ACTIVE
028-0396-0-000	294	COWESETT AVENUE	Shell Food Mart	ABAA INVESTMENTS LLC	195 JAMES P MURPHY HIGHW	ACTIVE
012-0331-0-000	99	JAMES P MURPHY HIGHW	Paul Aspin	RHODE ISLAND INDUSTRIAL FACILITIES CORP	C/O ARPIN ASSOCIATES	ACTIVE
018-0118-0-000	938	MAIN STREET	Euro Motor Car	MAGLIOLI ENRICO & MAGLIOLI FILOMENA &	MAGLIOLI ANTONIO JT	ACTIVE
004-0419-0-000	1039	MAIN STREET	Lamb Motor Co.	LAMB MOTOR CO INC	1039 MAIN STREET	ACTIVE
017-0041-0-000	1086	MAIN STREET	Metropolitan Gas Station	ZAMPA LENA SOLE TRUSTEE	1086 MAIN ST	ACTIVE
009-0098-0-000	1657	MAIN STREET	Scotti's Auto Body Inc Ca	LIMA ABEL L	411 COWESETT ROAD	ACTIVE
010-0103-0-000	1780	MAIN STREET	Texaco	BEGOS FRANK JR & BEGOS ALVIRA & BEGOS BONNIE CO-TRUSTEES OF THE ALVIRA	BEGOS REVOC TRUST	ACTIVE
829-0078-0-000	1612	NOOSENECK HILL RD	Starbright Carwash	BOSTON NECK REALTY CORP, C/O JOHN ASSALONE	1A LIENA ROSE WAY	ACTIVE
017-0015-0-000	20	PROVIDENCE STREET	Atlas Auto Body & Radiator Works	CACCHIOTTI RALPH A JR &	THOMAS A SPARKS	ACTIVE
017-0028-0-000	31	PROVIDENCE STREET	Inskip Collision Center	INSKIP COLLISION CENTER, UAG WEST BAY AM LLC	1515 BALD HILL ROAD	ACTIVE
035-0010-0-000	334	PROVIDENCE STREET	Barber's Auto Sales & Body Works	FOLGO REALTY LLC	334 PROVIDENCE ST	ACTIVE
039-0213-0-000	929	PROVIDENCE STREET	Brookfield Sevice Station	SILVA PAUL & ADELAIDE	271 COUNTRY VIEW DR	ACTIVE
		PROVIDENCE STREET	Royal Mills at Riverpoint (Ace Dye)	Strlver Brother Eccles & Rouse	Rissing Sun's mill	ACTIVE
029-0041-0-000	375	QUAKER LANE	Pep Boys	PEP BOYS MANNY MOE & JACK OF DELAWARE, ATTN: TAX DEPT	P.O. BOX 5720	ACTIVE
029-0019-0-000	509	QUAKER LANE	Majestic Motors	MAJESTIC MOTORS INC	BOX 230 509 QUAKER LANE	ACTIVE
029-0390-0-000	525	QUAKER LANE	Fiore Pontiac-gmc Truck/ Fiore Volkswagen	FIORE INVESTMENT CORPORATION	A RI CORP	ACTIVE
028-0551-0-000	697	QUAKER LANE	Jenning Bros.	QVM LLC	C/O STONE TOWER PROPERTY	ACTIVE
226-0013-0-000	870	QUAKER LANE	Tar Box Hyundai	CENTURY PROPERTIES, C/O MARK SJOBERG	200 CENTREVILLE RD	ACTIVE
03-0658-70-SW	885	QUAKER LANE	Inskip Motors	CAR WAR LLC CAPITAL AUTOMOTIVE	8270 GREENSBORO DRIVE #9	ACTIVE
226-0003-0-000	966	QUAKER LANE	Arlington R.V. Supercenter Inc	SLS REALTY	966 QUAKER LN	ACTIVE
215-0030-0-000	1190	QUAKER LANE	Shell Carwash	COLBEA ENTERPRISES LLC	2050 PLAINFIELD PIKE	ACTIVE

TABLE 2-5
LINT TRAP USER LIST

Parcel ID	Account No.	#	Location	User	Owner	Owner Address
807-0006-0-000	CV-8162-10-SW	850	CENTRE OF NE BLVD	Hampton Inn	COVENTRY LODGING ASSOCIATES, LLC, DBA HAMPTON INN COVENTRY	8441 COOPER CREEK BLVD
030-0032-0-000	05-0222-50-SW	1200	DIVISION ROAD	Extended Stay	ESA RHODE ISLAND INC., C/O BREESA PROPERTIES LLC	C/O BLACKSTONE REAL EST ACQ IV
030-0083-0-000	18-0657-20-SW	14	JAMES P MURPHY HIGHW	Fairfield Suites	KENT HOTEL ASSOCIATES LP	ONE CITIZENS PLAZA SUITE 810
030-0092-0-000	11-0295-20-SW	10	KEYES WAY	Comfort Suites	NEHARUCHI LLC	DBA COMFORT SUITES
004-0214-0-000	18-0355-00-SW	1015	MAIN STREET	Ray's Polyclean	RAYS POLYCLEAN CENTERS INC	1015 MAIN STREET
009-0072-0-000	13-1148-50-SW	1705	MAIN STREET	Laundry Basket	MCDONOUGH CATHERINE L TRUSTEE OF THE CATHERINE L MCDONOUGH	48 SURF AVENUE
002-0581-0-000	12-2179-00-SW	755	MAIN STREET	Hudson's Dry Cleaners & Laundromat Inc	LEVY BARRY ET UX LEVY DOROTHY JT	755 MAIN STREET
029-0137-0-000	01-0084-00-SW	22	MONTEREY DRIVE	Kansaf's One Stop Laundry & Dry Cleaning	AGGARWAL GIRDHARILAL H & AGGARWAL GAYATRI	119 JOHNSON BLVD
828-0078-0-000	CV-8076-00-SW	1612	NOOSENECK HILL RD	Star bright Laundry	BOSTON NECK REALTY CORP, ATTN: ASCO GROUP	1A LIENA ROSE WAY
036-0076-0-000	02-1177-75-SW	560	PROVIDENCE STREET	Thorpes Laundromat	BOCHNER RONALD S & BOCHNER MEREDITH A TE	49 CREST DR, CRANSTON
029-0390-0-000	03-1123-00-SW	693	QUAKER LANE	Superb Cleaners	QVM LLC	C/O STONE TOWER PROPERTIES
240-0001-0-000	WA-2140-00-SW	300	QUAKER LN WARWICK	Deluxe Cleaners	AC COWESETT PURCHASER LLC, C/O AMCAP INC.	1281 EAST MAIN STREET, SUITE 200
006-0172-0-000	03-1258-40-SW	126	ROBERT STREET	Artic Laundromat	MITURA ELIZBIETA & MITURA ZBIGNIEW TE	291 PULASKI STREET, COVENTRY
010-0181-0-000	18-1496-70-SW	71	TIOGUE AVENUE	Cleanery	MITURA DIANE E & MITURA KRZYSZTOF JT	9 MAPLEWOOD DRIVE, COVENTRY
273-0001-0-000	WA-2838-00-SW	245	WEST NATICK RD	Extended Stay	BREESA PROP, LLC C/O BLACKSTONE REAL ESTATE ACQUISITION IV, L.L.C.	P.O. BOX 2440
007-0266-0-000	12-2418-01-SW	88	WEST WARWICK AVENUE	Riz Laundromat	LOMBARDI DOMENIC REALTY, ATTN: LAUNDRY	PO BOX 456
		4	Universal Blvd	Fairfield Suites	SHIVIA NEHAL REALTY	12 WALDEN LANE, N ATTLEBORO, MA 02760
		637	CENTRE OF NE BLVD	RI Heritage Inn of West Greenwich	RI Heritage Inn of West Greenwich	1201 PAGE DRIVE, FARGE ND 58103
		600	CENTRE OF NE BLVD	HORIZON BAY RETIREMENT LIVING	Coventry Care Group, LLC	5307 Mockingbird Lane Dallas, TX 75206



SECTION 3

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The monitoring of industries located within the West Warwick sewer service region is conducted using several different methods. The purpose of this section is to elaborate on these various methods.

SELF-MONITORING

Industries which are classified as Class i, ii, iii are required to self-monitor their production wastewater and report results to the Industrial Pretreatment Program. The self-monitoring is done on a quarterly basis.

ANNUAL SIU INSPECTIONS

The West Warwick Industrial Pretreatment Program conducts yearly inspections of all Significant Industrial Users (SIUs) located within the service area, as specified by 40CFR403.12(B)(2)(v). Annual inspections are conducted in accordance with the guidance manual entitled Industrial User Inspection and Sampling Manual for POTW's, Environmental Protection Agency, April 1994.

In addition to the annual inspections, the Industrial Pretreatment Program also conducts random surprise inspections, or visits, to any industrial facility (SIU or otherwise) it deems necessary. In general, each SIU is randomly (unannounced) visited in order to discuss pretreatment events, problems, or even a brief tour of the facility in order to assure continued compliance with pretreatment requirements, or simply just to express an interest in the company. Such visits are not deemed as official inspections, as no standard checklist is followed, and the reason for said visit may vary based upon the time of year and type of industry. Such visits may also be in response to problems existing at the Treatment Facility or in the collection system. Such visits may be conducted at the largest industrial user in the region, or at the smallest commercial facility. Under most conditions, these "miscellaneous inspections" are conducted randomly, and are documented by inter-office memorandums. Should the situation or circumstance warrant documentation in the form of a letter, or in extreme cases an enforcement action and permit issuance by the Program, then the inspection is documented in the appropriate format.

PERIODIC NON-SIU INSPECTIONS

It has been a longstanding policy of the Program to express a "hands on" interest to all commercial and industrial users of the service area. In 2008 and 2009, the Program continued the unannounced visits to many users, especially restaurants, with regards to grease interceptor requirements, and gas stations for oil/water separators. The increase in inspections led to a higher level of enforcement action taken.

2008 - 2009 INSPECTIONS

All of the Significant Industrial Users were given Annual SIU Inspections and sampled (where applicable) by the Program, as demonstrated in Table 3-1. During the reporting year, all SIUs were inspected. For the industries that have a 24 hour discharge, the samples were collected the following day. In all cases, the testing coincided with the inspection.

TABLE 3-1 SIU INSPECTION CHECKLIST			
Industry	Permit No.	Date Inspected	Date tested
Amtrol	WW-033	12/3/08	12/4/08
Bradford Soap Works	WW-008	11/4/08	11/5/08
Immunex of Rhode Island (Amgen)	WW-020	9/30/08	10/1/08
Warwick Ice Cream	W-01	11/24/08	11/24/08
Riverpoint Lace	WW-007	9/23/08	9/23/08



SECTION 4

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The purpose of this section is to review permitting and enforcement activities of the West Warwick Industrial Pretreatment Facility over the previous reporting year.

4.1 PERMITTING

The Industrial Pretreatment Program currently permits five (5) Significant Industrial Users. Of these Users, none are categorical, none discharge prohibited pollutants, five (5) discharge conventional pollutants, and no Significant Users have the potential of discharging pollutants into the collection system. Each permit issued to a User that discharges production wastewater into the collection system contains, at a minimum, the following requirements:

- (A) Statement of duration (in no case more than five years);
- (B) Statement of non-transferability without, at a minimum, prior notification to the POTW and provision of a copy of the existing control mechanism to the new owner or operator;
- (C) Effluent limits based on applicable general pretreatment standards in 40CFR403 categorical pretreatment standards, local limits, and State and local law;
- (D) Quarterly self-monitoring, sampling, reporting, notification and record keeping requirements, including an identification of pollutants to be monitored, sampling location, sampling frequency, and sample type, based on the applicable general pretreatment standards in part 403, categorical pretreatment standards, local limits, and State and local law;
- (E) Statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements, and any applicable compliance schedule;
- (F) Fact Sheet
- (G) Graphic delineation of sample location, if applicable.

In summary, the permits issued by the Program are in accordance with 40CFR403.8(f)(iii).

Last year, a Local Limits Derivation was submitted to the Rhode Island Department of Environmental Management. The recommendations in the report were approved and adopted. Briefly, the changes were

to the local limits were changed based on the most current operational data to increase the permitted limits of Biological Oxygen Demand (BOD) from 1,230 mg/l to 2,000 mg/l. Total Suspended Solids (TSS) also increased from 1,087 mg/l to 2,000 mg/l. Silver increased from 0.080 mg/l to 0.240 mg/l. Iron and Sulfide were removed from the local limits based on the evaluations.

The requirements for the Pretreatment Streamlining Rule were also adopted last year. All permits were modified to reflect the requirements.

The Permit for Riverpoint Lace was modified to reflect the local limits and streamlining changes (regulatory changes). In addition, the personnel changes were incorporated. The previous permit included a compliance schedule in which all of the tasks had been completed. The schedule was removed from the current permit.

The Permit for Immunex of Rhode Island (Amgen) also was modified to incorporate the regulatory changes and personnel changes. In addition, Production A was decommissioned and removed from the permit.

Original Bradford Soap Works' permit was modified to reflect the regulatory changes and personnel changes. The monitoring requirements for certain pollutants which had a long history of compliance were reduced from twice per quarter to once per quarter. The pollutants include metals, cyanide, O&G and phenol.

Warwick Ice Cream was also issued a new permit. The permit was modified to reflect the regulatory changes.

The permit for Amtrol was not due for renewal this year and had been modified to reflect the regulatory changes last year.

All SIU Wastewater Discharge Permits are issued (or re-issued) by the Industrial Pretreatment Program under the review of the Superintendent of the West Warwick Regional Wastewater Treatment Facility. Permits are written under the supervision of the Superintendent and are issued directly to the SIU, who has the option of requesting a hearing should they wish to contest a portion of the permit.

4.2 PERMITTING ACTIONS

TABLE 4 -1 SIU PERMIT CHECKLIST						
Industry	Permit No.	Date Issued	Expiration Date	New Permit Issued	Type	New Permit Expires
Amtrol	WW-033	Feb. 23, 2007	Feb. 28, 2008	Feb 27, 2008	Renewal	Feb. 28, 2010
Bradford Soap Works	WW-008	Mar 23, 2007	Mar 31, 2009	Mar 26, 2009	Renewal	Mar 31, 2011
Immunex of RI (Amgen)	WW-020	June 25, 2007	June 30, 2009	Sept. 3,2008	Renewal	Mar. 31, 2010
Riverpoint Lace	WW-007	March 4, 2008	Feb. 28, 2009	Feb. 20,2009	Revision	Feb. 28, 2011
Warwick Ice Cream	W-01	Feb. 23, 2007	Feb. 28, 2009	Feb. 20,2009	Renewal	Feb. 28, 2011

4.3 PERMIT BREAKDOWN

The following is a summary of the classifications of each SIU serviced by the Regional Facility:

CATEGORICAL INDUSTRIES

Currently, there are no industries served by the Program which are classified as an EPA Categorical Industry.

INDUSTRIES DISCHARGING TOXIC OR PROHIBITED POLLUTANTS

Currently, there are no industries served by the Program which are classified as discharging toxic or prohibited pollutants.

SIGNIFICANT NON-CATEGORICAL INDUSTRIES

Currently, the Town of West Warwick has listed five (5) significant, non-categorical industries. A brief descriptive summary of these industries is presented in Table 4-2.

TABLE 4 - 2 NON CATEGORICAL SIU DESCRIPTION	
Immunex of Rhode Island, a subsidiary of Amgen, Inc. Pharmaceutical (not covered under 40 CFR 439) SIC: 3433 "A" Flow: discontinued "B" Flow: 69,041 GPD	Warwick Ice Cream Ice Cream Maker SIC: 2024 Flow: 2,650 GPD
Original Bradford Soap Works Soap Manufacturer SIC: 2841 Flow: 6,365 GPD	Riverpoint Lace Works Dyeing of Lace SIC: 2292 Flow: 65,604 GPD
Amtrol, Inc. Metal Tank Manufacturer SIC: 3433 Flow 3,538 GPD	

POTENTIAL DISCHARGERS

Both Cal Chemical and Dryvit Systems have "zero" process discharge. The Users are considered non-significant, but are issued a permit and required to submit certification (twice per year) that no process waste is discharged. The industries may in future elect to discharge. These Users are not included in the report, as they are categorized as non-significant. The reason for the reporting is related to billing purposes.

PROPOSED DISCHARGERS

Rhodes Pharmaceuticals has submitted an Industrial Waste Questionnaire. The industry is a categorical user covered under 40 CFR 439.37 Subpart C (Chemical Synthesis). This industry is expected to connect to the collection system in the 3rd quarter of 2009

Clariant Corporation has also expressed interest in connecting to the West Warwick system. Clariant has not submitted sufficient information to determine a classification. The expansive facility may be divided into Industrial /Commercial / Condominium space.

COMPLETE SIU SUMMARY

Table 4-3 has been prepared in order to provide a quick but accurate representation of the permitted industrial users previously discussed. This table gives a unique perspective not only to the size of the industry, but also to the volume of pollutants (both conventional and metals). As can be seen, two of the dischargers contribute large (over 30,000 GPD) quantities of wastewater, one of which include high organic concentrations. A review of the metal results reveals no serious metal contributions.

TABLE 4-3

TOWN OF WEST WARWICK
WATER POLLUTION CONTROL FACILITY

AMTROL, INC.
1400 DIVISION ROAD, PO BOX 1008
WEST WARWICK, RI, 02893
CONTACT: ROBERT PERROTTI

PERMIT NUMBER: WW-033
PHONE: 884-6300
FAX: 885-2567

INDUSTRIAL DISCHARGER WASTEWATER CHARACTERISTICS

*DENOTES TRIAL RUN DATA
BLUE TYPEFACE INDICATES "LESS THAN" VALUE
GREEN TYPEFACE INDICATES SAMPLING BY PRETREATMENT PROGRAM

	3,050														QUARTERLY							
	LIMITS:	2,000	2,000	N.A.	100	20	700	800	150	1	1,000	240	600	190	FLOW	pH	pH	pH	pH	1,000	PHENOL	T.NITRO
	(gpd)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(gals.)					(ug/l)	(mg/l)	(mg/l)
9/9/2008	3,609	1,600	46	5400	14	4	5	15	40	0.5	10	20	190	20	348,370	8.8	9.0	9.1	8.9	450	179.7	21
9/10/2008	3,271	1,700	150	3600	100	4	8	120	40	0.5	17	20	672			8.5	8.5	8.3	8.5	119.8	35	
12/4/2008	5,380	680	300	8900	57	2	16	200	46	0.5	24	2	1400	10		8.3	8	7.8	7.8	1800	210.0	18
12/9/2008	2,184	420	49	2300	4	2	5	30	40	0.6	10	20	228	10		9.3	9.3	9.3	9.3	340	72.3	28
12/10/2008	4,715	45	57	2300	3	4	5	49	40	0.9	10	20	526		316,578	9.4	9.4	9.4	9.4		71.2	15
12/17/2008													468									
12/18/2008													157									
12/19/2008													313									
3/4/2009	4,419	5,500	170	21000	34	4	6	229	40	0.5	18	20	116	50		8.7	8.7	8.7	8.7	700	255.0	13
3/5/2009	2,641	1,600	77	16000	7	4	5	78	40	0.5	14	20	135			9.0	9.0	9.0	9.0	254.0	3.8	
3/18/2009		2,200																				
3/19/2009		1,700																				
3/20/2009		3,100																				
3/26/2009		3,700																				
3/27/2009		2,000																				
3/31/2009		2,600													229,924							
4/23/2009		5,300																				
4/24/2009	4,487	2,900																				
4/27/2009		4,500																				
4/28/2009	6,319	2,700																				
4/29/2009		1,400																				
4/30/2009	3,994	1,600																				
5/18/2009	4,027	1,700																				
5/19/2009	2,306	1,400																				
5/20/2009	2,515	1,100																				
5/21/2009	1,924	1,400																				
6/16/2009	2,408	2,000	57	5400	17	4	5	75	40	0.5	11	20	216	10		9.0	9.0	9.0	9.0	890	100.0	410
6/17/2009	2,414	1,600	91	15000	100	4	9	229	40	0.5	23	20	149	10	237,142	9.0	9.0	9.0	9.0	470	180.0	110
Average	4,455	851	106	3,093	161	8	33	376	67	1	31	11	456	31	3,649,758	8.1	8.0	8.0	8.0	238	106.8	99
Average '08-'09	3,538	2,178	111	8,878	37	4	7	114	41	1	15	18	381	18	283,004	8.9	8.9	8.8	8.8	775	160.2	73

TABLE 4-3

TOWN OF WEST WARWICK
WATER POLLUTION CONTROL FACILITY

JUNE 2009

IMMUNEX RHODE ISLAND (a.k.a. AMGEN)
WEST GREENWICH TECHNOLOGY PARK
40 TECHNOLOGY WAY
WEST GREENWICH, RI 02817

CONTACT: Drew Peters
PERMIT NUMBER WW-020
PHONE: (401) 392-8781
FAX: 392-3796

INDUSTRIAL DISCHARGER WASTEWATER CHARACTERISTICS
PRODUCTION "B"

BLUE TYPE INDICATES "LESS THAN " VALUES.

GREEN TYPE INDICATES PRETREATMENT PROGRAM INSPECTION SAMPLE.

	LIMITS:	1,230	1,087	N.A.	100	20	700	700	1	150	1,000	80	600	190	QUARTERLY	6.0 to 10.0	1000			
	FLOW	BOD	TSS	COD	O&G	CADMIUM	CHROM.	COPPER	MERCURY	LEAD	NICKEL	SILVER	ZINC	CYANIDE	FLOW	pH	pH	PHENOL	PHOSHORUS	T. NITRO
	(gpd)	(mg/l)	(mg/l)	(mg/l)		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	(gals.)	S.U.	S.U.	ug/l		
9/4/2008	84,304	27	44	273	5	10	20	345	0.5	50	50	10	72	50		7.5	7.4	100	186	170
9/5/2008	53,680	25	112	257											6,808,800				156	139
10/1/2008	51,104	27	230	250	5	1	2	240	0.2	1	2	1	53	10		7.8	7.5	30	200	232
10/1/2008	51,104	25	207	291	5	10	20	362	0.5	50	50	10	109	50		7.6	7.5	100	160	174
12/2/2008	45,280	47	310	342	5	10	20	26	0.5	20	50	10	227	50		7.8	7.5	100	142	276
12/3/2008	77,640	68	327	331	5	10	20								6,317,773	7.8	7.8	100	145	265
3/3/2009	99,264	13	146	262	5	10	20	21	0.5	20	50	10	61	50		7.2	7.5	100	220	124
3/4/2009	73,656	12	149	224											4,628,344				191	119
6/2/2009	73,016	27	315	401	6	10	20	117	0.5	20	50	10	115	50		7.6	7.8	100	197	322
6/3/2009	81,360	36	325	606											7,157,264				199	260
AVERAGE	87,548	601	79	1,306	6	9	20	90	0.5	43	32	10	74	44	7,117,253	8.7	8.8	88	206	225
Average '08-'09	69,041	31	217	324	5	9	17	185	0.5	27	42	9	106	43	6,228,045	7.6	7.6	90	184	228

TABLE 4-3

TOWN OF WEST WARWICK
WATER POLLUTION CONTROL FACILITY

ORIGINAL BRADFORD SOAP WORKS
PO BOX 1001, 200 PROVIDENCE STREET
WEST WARWICK, R.I. 02893
CONTACT: CHRISTIAN JEDSON, DIRECTOR OF ENGINEERING

PERMIT NUMBER: WW-008
PHONE: 821-2144
FAX: 821-5960
381-6276

INDUSTRIAL DISCHARGER WASTEWATER CHARACTERISTICS

BLUE TYPEFACE INDICATES "LESS THAN" VALUE

GREEN TYPEFACE INDICATES SAMPLING BY PRETREATMENT PROGRAM

YELLOW INDICATES THE PARAMETER EXCEED THE PERMIT LIMIT

	LIMITS:	1,230	1,087	N.A.	20	700	800	150	1	1,000	80	600	190	QUARTERLY					100	1000		
	FLOW (gpd)	BOD (mg/l)	TSS (mg/l)	COD (mg/l)	CADMIUM (µg/l)	CHROM. (µg/l)	COPPER (µg/l)	LEAD (µg/l)	MERCURY (µg/l)	NICKEL (µg/l)	SILVER (µg/l)	ZINC (µg/l)	CYANIDE (µg/l)	FLOW (gals.)	pH	pH 6.0-10s.u.	pH	pH	O&G (mg/l)	PHENOL ug/l	T.NITRO (mg/l)	PHOS (mg/l)
9/3/2008	5,856	25	7	55	5	5	10	40	0.5	10	20	20	10		9.9	9.6	9.9	9.9	2.8	10	2.1	1.6
9/4/2008	6,761	33	7.5	59	5	5	76	40	0.5	10	20	10	10	439,663	9.9	9.8	9.8	9.8	5.8	10	2.8	3
11/5/2008	6,491	10	27	160	1	1.4	30	1.2	0.2	1.2	1	11	10		9.1	9.7	9.7	7.8	2.3	30	1.32	0.69
12/16/2008	9,875	2	3.3	27	5	5	53	40	0.5	10	20	100	10		9.3	9.6	9.6	9.8	1.5	30	2.1	2.3
12/17/2008	7,570	16	36	20	5	5	56	40	0.5	10	20	100	10	614,675	9.5	9.9	9.7	9.8	2.1	40	2.2	2.1
3/4/2009	6,220	54	32	93	5	5	92	40	0.5	10	20	20	10		8.4	9.3	9.3	9.2	4.7	30	19.2	1.4
3/5/2009	6,000	24	41	52	5	5	109	43	0.5	10	20	100	10	567,108	8.6	8.9	8.8	9.0	2.1	20	2.2	2.3
6/4/2009	4,558	24	70	49	4	5	92	40	0.5	10	20	100	10		9.1	8.6	8.4	8.5	4.4	10	1.6	2.5
6/5/2009	3,955	24	38	60	4	5	24	40	0.5	10	20	100	10	376,407	8.6	8.6	8.9	7.9	2.4	20	1.5	0.5
Average	21,991	2,212	166	4,267	5	27	263	33	0.4	42	11	219	10	1,815,682	7.8	7.8	7.9	7.8	23	35	2.6	1.5
Average '08	6,365	24	29	64	4	5	60	36	0.5	9	18	62	10	499,463	9.2	9.3	9.3	9.1	3	22	3.9	1.8

TABLE 4-3

TOWN OF WEST WARWICK
WATER POLLUTION CONTROL FACILITY

RIVERPOINT LACE WORKS
825 MAIN STREET, PO BOX 231
WEST WARWICK, RI, 02893
CONTACT:
SIGNATORY Peter Palmisciano

PERMIT NUMBER :WW-007
PHONE: 821-2070
FAX: 821-0390

INDUSTRIAL DISCHARGER WASTEWATER CHARACTERISTICS

NOTE: BLUE TYPE INDICATES "LESS THAN" VALUE.
NOTE: GREEN TYPE INDICATES SAMPLE TAKEN BY TOWN.

	LIMITS:	1,230	1,087	N.A.	20	700	800	150	1	1,000	80	600	190	QUARTERLY					1000	100		
	FLOW	BOD	TSS	COD	CADMIUM	CHROM.	COPPER	LEAD	MERCURY	NICKEL	SILVER	ZINC	CYANIDE	FLOW	pH	pH	pH	pH	PHENOL	O&G	T.NITRO	PHOS
	(gpd)	(mg/l)	(mg/l)	(mg/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(gals.)					(ug/l)	(mg/l)		
9/23/2008	97,940	230	72	1200	1	140	19	9.9	0.2	2.1	1	150	10						200	8.7	22.4	0.24
9/8/2008	65,076	165	20	585	5	56	20	20	0.5	50	10	144	50	6,129,390	5.6	6.4	5.97	6.3	160	56	31.9	0.9
9/9/2008	90,373	172	29	566	5	59	20	20	0.5	50	10	157			7.2	6.7	7.5	7.3				
10/29/2008	68,000														6.3	9.6	7.4	6.5				
10/30/2008	68,000														6.5	9.4	7.8	6.9				
12/8/2008	53,390	86	8	295	5	20	20	20	0.5	50	10	81	50		7.0	6.9	7.0	7.2	100	53	15.2	0.5
12/9/2008	42,850	77	5	261	5	20	20	20	0.5	50	10	50		4,560,893	6.8	6.6	6.6	6.7				
3/9/2009	52,860	16	16	140	5	20	20	20	0.5	50	10	59	50		6.8	6.9	6.9	6.9	100	27	6.0	0.1
3/10/2009	69,880	15	8	74	5	20	20	20	0.5	50	10	50			6.8	6.8	6.8	6.9				
6/3/2009	56,370	110	64	485	5	20	20	20	0.5	50	10	60	100	4,933,770	6.5	2.0	6.4	6.5	100	32	18.1	1.5
6/4/2009	56,900	115	52	490	5	20	20	20	0.5	50	10	103			6.4	6.4	8.7	8.9				
AVERAGE	53,723	173	61	792	6	132	64	56	0.4	33	9	298	29	3,124,400	6.9	7.0	7.0	7.0	235	31	20.3	2
Average '08-'09	65,604	110	30	455	5	42	20	19	0	45	9	95	52	5,208,018	6.8	6.6	7.2	7.1	132	35	18.7	1

TABLE 4-3

TOWN OF WEST WARWICK
WATER POLLUTION CONTROL FACILITY

WARWICK ICE CREAM
743 BALD HILL ROAD
WARWICK, RI 02886
CONTACT: TOM OR JERRY BUCCI, PRES.

PERMIT NUMBER: W-01
PHONE: 821-8403
FAX: 821-8404

INDUSTRIAL DISCHARGER WASTEWATER CHARACTERISTICS

NOTE: BLUE TYPEFACE INDICATES "LESS THAN" VALUE
NOTE: GREEN TYPEFACE INDICATES TOWN SAMPLE

DATE	LIMIT:	2,000	1,087	N.A.	100	6-10 ssu	6-10s.u	6-10s.u	6-10s.u	QUARTERLY	20	700	800	150		1,000	80	600	190	1000	PHOSPHORUS	T. NITRO	
	FLOW	BOD	TSS	COD	O&G	pH	pH	pH	pH	FLOW	CADMIUM	CHROM.	COPPER	LEAD	MERCURY	NICKEL	SILVER	ZINC	CYANIDE	PHENOL			
	(gpd)	(mg/l)	(mg/l)	(mg/l)	(mg/l)					GALS.	(µg/l)	(µg/l)	(µg/l)	(µg/l)		(µg/l)	(µg/l)	(µg/l)	(µg/l)				
9/8/2008	2,097	649	41	1060	93	7.13	7.17	6.63	6.75													13.0	9.22
9/9/2008	1,666	4610	234	6800	53	7.08	7.18	10.8	10.6	119,983												23.2	16.6
10/23/2008		553				7.63	7.49																
11/24/2008	1,750	600	170	1000	10	7.7	7.8	7.66	6.93		2		23	2	0.2	2	2	52	10	71		8.8	17.0
12/8/2008	2,844	508	104	1020	12	7.28	7.17	6.69	6.55													10.1	12.1
12/9/2008	2,887	206	25	370	147	8.75	8.96	9.39	9.69	149,624												4.5	1.82
3/11/2009	3,493	507	92	995	232	7.28	7.2	9.48	9.64														
3/12/2009	2,282	221	32	400	99	9.48	9.64	9.81	9.74	172,717												2.4	13.3
5/22/2009					280																		
6/17/2009	4,054	329	56	518	46	7.21	7.48	9.23	9.41													7.7	1.8
6/18/2009	2,406	697	78	1460	119	7.74	7.96	7.61	7.83	303,022													
Average	1,635	1,581	360	2,556	116	6.8	6.9	7.2	7.2	159,558	4	16	69	33	0	19	9	228	10	212		9.5	15
Average '08-'09	2,650	853	111	1,514	109	7.7	7.8	8.6	8.6	186,336	2		23	2	0	2	2	52	10	71		10	10

4.4 ENFORCEMENT ACTION SUMMARY

UNRESOLVED ISSUES

Due to the timing of self-monitoring reports and the issuance of the Annual Report, some enforcement issues presented in last year's report were not completely resolved. The purpose of this section is to present those enforcement actions which were in progress at that time, and to verify that they have been resolved.

Riverpoint Lace Works self-monitoring report for the 2nd quarter of 2009 showed the pH on at least one occasion was below the permitted limit. The company has developed a compliance plan to alert management of an excursion so that steps can be taken to mitigate or discontinue the discharge. The user has installed alarms and will re-test in July.

ENFORCEMENT 2008 - 2009

The past reporting year was one in which compliance was generally achieved by permitted facilities. Overall, compliance with local industrial limitations for metals and cyanide were accomplished. Listed below are the official enforcement actions taken by the IPP. Not included are letters issued by the IPP to resolve simple matters or obtain information. A Notice of Violation is denoted by "**NOV**". A Notice of Violation that is considered significant, as defined by 40CFR403.8(F)(2), is denoted by "**SNOV**".

During this permitting year, a Local Limits Derivation was submitted which showed the Treatment Plant had sufficient capacity to allow for higher levels of BOD, TSS and Silver than previously calculated, and Iron and Sulfides were no longer pollutant of concern. The information was submitted to the RIDEM for approval. During this period, some discretion was shown on violations which involved these parameters.

Amtrol

The annual inspection sample results showed levels of Zinc and Phenol which were above the permitted level. The company was contacted and conducted five (5) additional tests for the month of March 2009 for BOD. The averages of the results were below the permitted limit and no formal action was taken.

The Self-monitoring Report (SMR) submitted for the 1st quarter 2009 showed the company exceeded the permit limit for Biological Oxygen Demand (BOD). An NOV was issued requiring the company to re-test in April.

The company also provided information that a consultant had been actively working on the issue.

The SMR for April also showed the BOD had exceeded the permit limit. The company continued to have a consultant actively study the issue to resolve the problem. The last two results were within the permit limits.

An SNOV was issued based on the technical review criteria. The User was required to re-test in May and submit a compliance plan /summary .

The results for May were all within the permit limits and the user returned to compliance.

Immunex Rhode Island

The company had no enforcement action.

Original Bradford Soap Works

The company had no enforcement action.

Riverpoint Lace Works

The SMR for the 3rd Quarter 2008 showed the user to be out of compliance for pH. On two occasions, the results showed the pH to be below the permitted level. In addition, the results of the annual inspection taken during the same period also showed a result below the permitted value. The company had previously been issued a compliance schedule which required the installation of a pH controller/recorder by July 31, 2008. An SNOV was issued October 17, 2008 for the pH being below the permitted value, failure to report the violation within 24 hours, and failure to report the completion of a milestone activity (the installation of a pH control system). The company was required to re-test in October and submit a revised compliance schedule.

The company installed the pH controller/ recorder and re-tested in October. The results were within the permit limits.

The SMR submitted to the 2nd quarter 2009 also showed a pH value that was below the permitted level. A review on the situation with the User indicated the employees had been poorly trained and did not react to the pH alarm. The system may have simply run out of caustic and the chemical was not replaced. An NOV was issued on July 16, 2009 which required the company to re-test, develop a training and mitigation plan and submit a \$100.00 administrative penalty.

Warwick Ice Cream

The SMR for the 3rd quarter 2008 showed the user had exceeded the permit limits for BOD and pH. In addition, the User failed to provide notification within twenty four hours.

An NOV was issued October 20, 2008 which required the user to re-test in October. The results of the re-test indicated compliance.

The SMR submitted for the 1st quarter 2009 showed the company exceeded the permit limit for the parameter of Oil & Grease (O&G). In addition, the company failed to report the violation within 24 hours. An NOV was issued on April 29, 2009 which required the company to re-test in May.

The SMR for May again showed the company exceeded the permit limit for the parameter of O&G. The violation was considered significant based on the Technical Review Criteria (TRC).

An SNOV was issued on June 16, 2009 which required the company to re-test for two days in June and submit compliance plan and a \$100.00 administrative penalty.

The company submitted a summary of the completed steps for compliance and the administrative penalty. The results for June were within the permitted level and the company returned to compliance.

PRETREATMENT ANNUAL REPORT SUMMARY AND SNC NOTICE

The Pretreatment Annual Report Summary (PARS) is presented as Appendix A. Following the PARS is the legal ad for the list of users in Significant Noncompliance. This ad is to be published during the last week of September 2009 in order to coordinate its publishing with the reporting year as defined by the Annual Report (July 1, 2008 to June 30, 2009). This schedule was established years ago and was found to be practical in its timing. Therefore, the Program has opted to continue this trend. The ad actually published in September 2008 is also attached.

4.5 NOTIFICATION OF SUBSTANTIAL CHANGE IN VOLUME OR CHARACTER OF POLLUTANTS

Immunex Rhode Island: Immunex projects a small decline in the volume of wastewater in the next year. Process B was the only process unit this year as Process A was decommissioned at the end of last year.

Amtrol: Wastewater volume sharply declined in 2009 mainly due to the decline in construction. The wastewater volume for the next year are expected to remain depressed.

Rhodes Pharmaceuticals and Clariant Corporation have the potential of connecting to the system next year. At the end of the permitting year, these companies were seeking capacity from the Coventry allotment.

4.6 REPORTING

Amtrol

Reporting Period	Due Date	Date Received	Type of Violation
July-Sept 2008	October 15, 2008	October 7, 2008	
October-December 2008	January 15, 2009	January 13, 2008	
January-March 2009	April 15, 2009	April 14, 2008	BOD
April 2009	May 15, 2009	May 14, 2009	BOD
May 2009	June 15, 2009	June 12, 2009	
April-June 2009	July 15, 2009	July 13, 2009	

Immunex of Rhode Island

Reporting Period	Due Date	Date Received	Type of Violation
July-September 2008	October 15, 2008	October 14, 2008 electronic October 16, 2008 hard copy	
October-December 2008	January 15, 2009	January 12, 2009	
January-March 2009	April 15, 2009	April 14, 2009 electronic April 16, 2009 hard copy	
April-June 2009	July 15, 2009	July 15, 2009	

Original Bradford Soap Works

Reporting Period	Due Date	Date Received	Type of Violation
July-September 2008	October 15, 2008	October 3, 2008	
October-December 2008	January 15, 2009	January 9, 2009	
January-March 2009	April 15, 2009	April 6, 2009	
April-June 2009	July 15, 2009	July 13, 2009	

Riverpoint Lace Works

Reporting Period	Due Date	Date Received	Type of Violation
July-September 2008	October 15, 2008	October 14, 2008	pH, 24 notice, milestone activity
October 2008	November 15, 2008	October 31, 2008	
October-December 2008	January 15, 2009	January 15, 2009 Fax copy January 20, 2009 hard copy	
January-March 2008	April 15, 2008	April 15, 2008	
April-June 2008	July 15, 2008	July 15, 2008	pH

Warwick Ice Cream

Reporting Period	Due Date	Date Received	Type of Violation
July-September 2008	October 15, 2008	October 14, 2008	BOD, pH, 24 hour notice
October 2008	November 15, 2008	November 7, 2008 fax November 14, 2008 hard copy	
October-December 2008	January 15, 2009	January 12, 2008	
January-March 2009	April 15, 2009	April 15, 2009 fax April 16, 2009 hard copy	O&G 24 hour notice
May 2009	June 15, 2009	June 15, 2009	O&G
April -June 2008	July 15, 2008	July 14, 2008	



SECTION 5

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The purpose of this section is to discuss events which have transpired concerning both the Industrial Pretreatment Program and the West Warwick Treatment Facility, in general, over the past reporting year.

5.1 ACHIEVEMENTS

The reporting year of 2008-2009 was one in which many significant accomplishments were achieved. Below is a brief synopsis of those achievements.

Sewer Subcommittee

The Sewer Subcommittee continued its practice to meet monthly throughout the year and to resolve a variety of sewer and pretreatment related issues. The largest benefit of the Subcommittee is that it requires the participation of two Town Councilors and the Town Manager, the highest ranking officials in Town. The regional counterparts are also invited to attend. Their involvement allows decisions to be rendered quickly and with authority.

The Subcommittee, as well as the Sewer Commission (a/k/a The West Warwick Town Council, the highest governing body of the Town), has taken an active interest in the management of the Treatment Facility. Plant performance, compost re-use, personnel matters, operating budget and pretreatment compliance are all issues with which these committees are involved. The monthly meetings between plant personnel (Director of Administration, Superintendent, and Pretreatment Program) and Subcommittee allow for a free discussion of all sewer-related problems, resulting in the formulation of solutions endorsed by the Town Council members. This approach has resulted in a direct accountability of the various aspects in running the facility, and has enabled quick resolutions to be undertaken when necessary.

Tertiary Treatment

The 2005 addition of the Biological Aeration Filters (BAF) for nutrient removal has allowed the Treatment Facility to achieve dramatically higher effluent quality than was projected prior to the equipment. The BAF system has met all of the permit parameters for Total Nitrogen and Phosphorus. The Treatment Plant continues to meet the stringent limits for nutrient removal. The added benefit from this system is the almost complete removal of ammonia. The removal efficiency for the conventional pollutants (BOD and TSS) have been above 97% for the past four years. A new permit was issued December 1, 2008 which will require even more stringent limits for phosphorus, total nitrogen and ammonia. In addition, copper was added as a pollutant of concern. The limits for phosphorous were beyond the achievable limits for the equipment

installed during the last upgrade and the limit was contested. An intermit limit was agreed to allow for engineering and construction of additional process equipment. The permit limit, based on the 2000 permit, can be found in Table 5-1 and the final limits for the 2008 permit can be found in Table 5-2.

Intermunicipal Agreements

The Intermunicipal Agreements have been reviewed for conformance with applicable Industrial Pretreatment regulations. The Town is currently updating the agreements for matters not related to pretreatment.

Collection System Growth

The majority of growth in the system comes from the Town of Coventry. The Town of Coventry completed a new interceptor starting on Hopkins Hill Road and connecting to the gravity line and ending at Tiogue Avenue last year. The collection system in the Town continues to expand.

One major project regarding infiltration and inflow (I/I) was completed last year: Agawam Inverted Siphon. The area of Juniper Pond, including Juniper Road, Waterville Road and Marco Drive, were inspected. No significant infiltration was found in the area.

Inspections

The Industrial Pretreatment Program continued to enforce the Town's grease interceptor requirements regarding proper maintenance and cleaning. As in past years, a main goal of the Program is to provide a present and ongoing relationship with all users in the sewer district. The Program typically performed unscheduled inspections, and in some cases, re-visited establishments to remind all users of their obligations under the Ordinance.

5.2 PROGRAM EFFECTIVENESS

Chapter 6.0 contains a full presentation of the Treatment Plant in graphic form. A review of this data shows that the removal of conventional pollutants has been very successful. Metal concentrations of the effluent is generally not a concern due to the specific industries in the service area. Overall, the Plant's RIPDES compliance has, again, been very good.

The Enforcement Response Program has proven to be adequate to effectively reduce Significant Noncompliance. The number of significant non-compliance decreased this year. This is a result of more

**TABLE 5-1
WWTF PERMIT LIMITS**

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u> <u>Quantity - lbs./day</u>		
	<u>Avg. Monthly</u>	<u>Max. Daily</u>	<u>Avg. Monthly *(Minimum)</u>
Flow	10.5 MGD	- - -	
BOD ₅ (Nov 1 - May 31)	2,267 lb/day	4,379 lb/day	30 mg/l
CBOD ₅ (June 1 - June 30 & Oct. 1 - Oct. 31) (July 1 - Sept. 30)	1,314 lb/day	1,751 lb/day	15 mg/l
	876 lb/day	1,314 lb/day	10 mg/l
BOD ₅ - % Removal (Nov. 1 - May 31)			85%
CBOD ₅ - % Removal (June 1 - October 31)			85%
TSS (Nov. 1 - May 31) (June 1 - June 20 & Oct. 1 - Oct. 31) (July 1 - Sept. 30)	2,627 lb/day	4,379 lb/day	30 mg/l
	2,189 lb/day	2,627 lb/day	25 mg/l
	1,751 lb/day	2,627 lb/day	20 mg/l
TSS - % Removal			85%
Fecal Coliform			<u>200 MPN</u> 100 ml
Total Residual Chlorine (TRC)			20 µg/l
pH		(9.0 ssu)	(6.0 ssu)*
Dissolved Oxygen (June 1 - Oct. 31)			(6.0 mg/l)
Phosphorus, Total (Dec. 1 - April 30) (May 1 - Nov. 30)			- - - mg/l
			1.0 mg/l
Ammonia, Total (as N) (Nov. 1 - April 30) (May 1 - May 31) (June 1 - June 30 & Oct. 1 - Oct. 31) (July 1 - Sept. 30)			15.3 mg/l
			6.7 mg/l
			3.0 mg/l
			2.0 mg/l
Nitrogen, Total (TKN + Nitrate + Nitrite, as N) (Nov. 1 - May 31) (June 1 - June 30 & Oct. 1 - Oct. 31) (July 1 - Sept. 30) [Flow < 8.4 MGD] (July 1 - Sept. 30) [Flow ≥ 8.4 MGD]	- - - lb/d		- - - mg/l
	701 lb/d		12.0 mg/l
	701 lb/d		10.0 mg/l
			8.0 mg/l
Lead, Total			0.34 µg/l ¹
Zinc, Total			127 µg/l
Cyanide			7.5 µg/l ¹
Cadmium, Total			1.0 µg/l ¹
Bis (2-Ethylhexyl) Phthalate			17.3 µg/l

¹ The limit at which compliance/noncompliance determinations will be based is the Quantitative Limit which is defined as 20.0 µg/l for Cyanide, 2.0 µg/l for cadmium, and 10.0 µg/l for lead. These values may be reduced by permit modifications as EPA and the State approve more sensitive methods.

**TABLE 5-2
WWTF PERMIT LIMITS
Effective December 1, 2008**

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u> <u>Quantity - lbs./day</u>		
	<u>Avg. Monthly</u>	<u>Max. Daily</u>	<u>Avg. Monthly</u> <u>*(Minimum)</u>
Flow	10.5 MGD	---	
BOD ₅ (Nov 1 - May 31)	2,267 lb/day	4,379 lb/day	30 mg/l
CBOD ₅ (June 1 - June 30 & Oct. 1 - Oct. 31) (July 1 - Sept. 30)	1,314 lb/day	1,751 lb/day	15 mg/l
	876 lb/day	1,314 lb/day	10 mg/l
BOD ₅ - % Removal (Nov. 1 - May 31)			85%
CBOD ₅ - % Removal (June 1 - October 31)			85%
TSS (Nov. 1 - May 31) (June 1 - June 20 & Oct. 1 - Oct. 31) (July 1 - Sept. 30)	2,627 lb/day	4,379 lb/day	30 mg/l
	2,189 lb/day	2,627 lb/day	25 mg/l
	1,751 lb/day	2,627 lb/day	20 mg/l
TSS - % Removal			85%
Fecal Coliform			<u>200 MPN</u> 100 ml
pH		(9.0 ssu)	(6.0 ssu)*
Dissolved Oxygen (June 1 - Oct. 31)			(6.0 mg/l)
Phosphorus, Total (Nov. 1 - March 31) (April 1 - Oct. 31)			4.2 mg/l
			1.0 mg/l
Ammonia, Total (as N) (Nov. 1 - April 30) (May 1 - May 31) (June 1 - Oct. 31)			14.2 mg/l
			5.4 mg/l
			2.0 mg/l
Nitrogen, Total (TKN + Nitrate + Nitrite, as N) (Nov. 1 - April 30) (May 1 - Oct. 31)	---		--- mg/l
	701 lb/d		8.0 mg/l
Lead, Total			0.34 µg/l ¹
Zinc, Total			127 µg/l
Copper, Total			40 µg/l
Cyanide			7.5 µg/l ¹
Cadmium, Total			1.0 µg/l ¹

¹ The limit at which compliance/noncompliance determinations will be based is the Quantitative Limit which is defined as 20.0 µg/l for Cyanide, 2.0 µg/l for cadmium, and 10.0 µg/l for lead. These values may be reduced by permit modifications as EPA and the State approve more sensitive methods.

stringent enforcement and increased monitoring for non-compliant Users. The use of Consent Orders and Compliance Schedules have proved effective.

5.3 LOCAL LIMITS EVALUATION

A Local Limits Derivation was approved last year. The new limits became effective February 27, 2008. The local limits are intended to be dynamic and the Program continually tracks and monitors the effects of changes in volumes and characteristics of the influent.

5.4 SUFFICIENCY OF PROGRAM FUNDING AND STAFFING LEVELS

The West Warwick Sewer Commission provided for adequate funding of the Pretreatment Program. The following shows the fees collected for last year from permitting:

<u>Type of Permit</u>	<u>Quantity</u>	<u>Amount</u>
Significant Industrial User Permits	5	\$30,000.00
Grease Interceptor Permit Fees	133	\$53,200.00
Grit Traps	38	\$ 9,500.00
Photo Finishing	10	\$ 2,000.00
Silver Users	18	\$ 1,800.00
Lint Traps	17	\$ 3,400.00

This year, the rates were re-evaluated for the permit fees. The fees were increased to provide for the projected Program requirements.

In addition to the above list, a new category was added: Privately Owned Wastewater Treatment Facilities. The Program has, in the past, monitored the maintenance of privately owned pumps stations, force mains and collection systems for areas that are known problems. This year, formal regulations were adopted detailing the requirements for operation of Privately Owned Wastewater Treatment Facilities. The fees adopted will offset the cost of the required oversight. Currently, fifteen (15) private wastewater treatment facilities (collection systems) have been identified.

The implementation of the Pretreatment Program is contracted to James J. Geremia and Associates, Inc. The full resources of the firm are available to the Program as required. In addition to the Pretreatment Coordinator and the related clerical staff, engineering and technical support are provided. The West

Warwick Sewer Commission provides for funding for the Program based entirely on permit fees. All analytical work is conducted by a third party certified laboratory. The staffing and funding is adequate to fully implement the Pretreatment Program.

5.5 INTERFERENCE AND PASS-THROUGH

This year, the Treatment Facility did not experience any known interference or pass-through. The Program continues to investigate any incident in which may affect the treatment process.

5.6 PUBLIC PARTICIPATION

As usual, the Program has made efforts to keep its industries and the public aware of issues involving pretreatment and the Wastewater Treatment Facility. The Town's website (www.westwarwickri.org) has proven to be an effective way of communicating with the users. The Town's Sewer Use Ordinance and Standard Sanitary Sewer Requirements, and many of the forms and applications, are available on the Town's website.

5.7 ADDITIONAL PROGRAM RESOURCES

West Warwick uses a Supervisory Control and Data Acquisition System (SCADA) to monitor its collection system. The system is valuable in locating the source of problems. The pump stations are equipped with flow pH and temperature sensors. The data is continuously gathered and can be plotted to locate abnormalities. The system has been particularly useful in locating infiltration.



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6.1 POLLUTANT ANALYSES

This reporting year saw the Treatment Facility continue to achieve a remarkably high level of efficiency and pollutant removal. Under the guidance of the Town's Treatment Facility staff, the facility met parameters set for a Tertiary Plant.

The limits for the metals were easily achieved. The low concentration of metals in the influent is a distinct advantage in meeting the effluent limits and producing Class A compost.

In general, the limits for BOD/CBOD and TSS were easily met. Since the Biological Aerated Filters (BAF) were placed on line in May 2005, the system has consistently outperformed the levels of BOD/CBOD required. The removal efficiency for the parameters were above 97% for this year. The data is presented in Figures 6-4 through 6-10.

The flow to the Treatment Plant averaged 6.30 MGD. The flow shows a very slight increase over the five year average (6.07). The Growth in the last few years has been offset by reductions in infiltration/ inflow and conservation programs. The flow is expected to stay relatively flat next year

Table 6-1A shows the BOD loading to be stable over the time frame. Figure 6-8 gives a five year prospective with greater detail which shows the influent of both BOD and CBOD to be trending lower. The reason for this trend is believed to be two of the significant industries in the service area have installed equipment to treat the BOD/CBOD at their respective sites. Table 6-1B shows the average influent to be 33% of design capacity and the effluent was 17% of the allowable discharge limit, suggesting a higher removal efficiency than calculated in design.

The Treatment Plant improvements allowed for the reduction of nitrogen and phosphorous. Figure 6-25 shows that the average monthly concentration of ammonia was 0.45 mg/l compared to 10.1 mg/l for the period prior to the nutrient removal (2004), or a 96% reduction. Figures 6-26 through 6-28 show the constituent of nitrogen, and Figure 6-29 shows the dramatic improvement in effluent total nitrogen during the "season" (June -October). The total nitrogen for the "season" for 2004 averaged 25.3 mg/l compared with the concentration of 5.8 for the 2009 season, or 77% reduction.

Figure 6-30 similarly shows the reduction in phosphorus. The 2004 season averaged 5.02 mg/l compared with the concentration of 0.68 mg/l for the 2009 season, or an 86% reduction for phosphorus. The new

permit will require a maximum phosphorus level of 0.1 mg/l. In order to achieve this level of removal, another significant upgrade to the Treatment Facility will be required.

The following graphs (Figures) are provided to show the operational data of the Treatment Plant:

- 6-1 Average & Peak Daily Flows (July 2008 to June 2009)
- 6-2 Average - Monthly Flow vs. Monthly Limit (July 2004 to June 2009)
- 6-3 Average - Daily and Monthly Flow vs. Monthly Limit (July 2008 to June 2009)
- 6-4 BOD & CBOD Monthly vs. Limits (July 2004 to June 2009)
- 6-5 BOD & CBOD Monthly vs. Limits (July 2008 to June 2009)
- 6-6 BOD/CBOD vs. Weekly Limits (July 2008 to June 2009)
- 6-7 BOD & CBOD Effluent Daily Limits (July 2008 to June 2009)
- 6-8 BOD & CBOD vs. Limit Average Monthly Mass Loading (July 2004 to June 2009)
- 6-9 BOD & CBOD vs. Limit Average Monthly Pounds/Day Effluent (July 2008 to June 2009)
- 6-10 BOD & CBOD vs. Limit Daily Maximum Pounds/Day (July 2008 to June 2009)
- 6-11 TSS Monthly vs. Limits (July 2004 to June 2009)
- 6-12 TSS Monthly vs. Limits (July 2008 to June 2009)
- 6-13 TSS Weekly vs. Limits (July 2008 to June 2009)
- 6-14 TSS Effluent Daily Limits (July 2008 to June 2009)
- 6-15 TSS vs. Limit Monthly Average Pounds per Day (July 2004 to June 2009)
- 6-16 TSS vs. Limit Daily Maximum Pounds/Day (July 2008 to June 2009)
- 6-17 Effluent and Influent Cadmium Monthly Average (July 2008 to June 2009)
- 6-18 Effluent & Influent Lead Monthly Average (July 2008 to June 2009)
- 6-19 Effluent & Influent Cyanide Monthly Average (July 2008 to June 2009)
- 6-20 Effluent & Influent Zinc Monthly Average (July 2008 to June 2009)
- 6-21 Average Daily Flows vs. RAS (July 2008 to June 2009)
- 6-22 MLSS Results (July 2008 to June 2009)
- 6-23 Primary Sludge Results (July 2008 to June 2009)
- 6-24 Secondary Sludge Results (July 2008 to June 2009)
- 6-25 Effluent Ammonia Average Monthly (July 2004 to June 2009)
- 6-26 Effluent TKN Monthly Average (July 2008 to June 2009)
- 6-27 Effluent Nitrate Monthly Average (July 2008 to June 2009)
- 6-28 Effluent Nitrite Monthly Average (July 2008 to June 2009)
- 6-29 Effluent Total Nitrogen Monthly Average (July 2004 to June 2009)
- 6-30 Effluent Phosphorous Monthly Average (July 2004 to June 2009)
- 6-31 BIS-2 Phthalate Monthly Average (July 2008 to June 2009)
- 6-32 Sludge Volume Index (July 2008 to June 2009)
- 6-33 Fecal Monthly Geo Mean (July 2008 to June 2009)

During the course of the reporting year, the Pretreatment Program organized data in order to observe the behavior of the many characteristics which affect the operations of the Treatment Facility. As standard procedure, the Pretreatment Program organizes data and graphs once each month, coinciding with the submittal of the Facility's RIPDES Discharge Monitoring Report and "State Sheet". This allows both the Program and Facility staff to track and observe how these parameters interact and impact plant operations.

6.2 SLUDGE/COMPOST

Analytical testing of Treatment Facility sludge, compost and wood ash bulking agent is commonplace, and was conducted quarterly over the past year. The analytical results for compost are presented in Appendix C. A review of these results indicates that the compost process has operated most efficiently. The presence of metals and other constituents in the compost are below Federal standards.

6.3 LOCAL LIMITS MONITORING

In order to develop local limits, additional parameters are sampled on a quarterly basis. The results of this testing is summarized in the following Tables:

- 6-1A Summary of Local Limits Sampling for BOD
- 6-1B Summary of BOD Loading and Removal
- 6-2A Summary of Local Limits Sampling for TSS
- 6-2B Summary of TSS Loading and Removal
- 6-3 Summary of Local Limits Sampling for Oil and Grease
- 6-4 Summary of Local Limits Sampling for TPH
- 6-5 Summary of Local Limits Sampling for Phenol
- 6-6 Summary of Local Limits Sampling for Arsenic
- 6-7 Summary of Local Limits Sampling for Cadmium
- 6-8 Summary of Local Limits Sampling for Cyanide
- 6-9 Summary of Local Limits Sampling for Chromium
- 6-10 Summary of Local Limits Sampling for Copper
- 6-11 Summary of Local Limits Sampling for Iron
- 6-12A Summary of Local Limits Sampling for Lead
- 6-12B Summary of Lead Loading and Removal
- 6-13 Summary of Local Limits Sampling for Mercury
- 6-14 Summary of Local Limits Sampling for Nickel
- 6-15 Summary of Local Limits Sampling for Silver
- 6-16A Summary of Local Limits Sampling for Zinc
- 6-16B Summary of Zinc Loading and Removal

- 6-17 Summary of Local Limits Sampling for Nitrogen
- 6-18 Summary of Local Limits Sampling for Phosphorus

6.4 BIOASSAY DATA

In 2008-2009, the Treatment Facility sampled its wastewater on a quarterly basis. The data has previously been submitted and has not been included in this report.

TABLE 6-1A

SUMMARY OF LOCAL LIMITS SAMPLING FOR BOD

BOD REMOVAL

BLUE INDICATES LESS THAN DETECTION LIMIT

Date	Flow mgd	Influent mg/l	Primary mg/l	Removal %	Secondary mg/l	Removal %	BAF mg/l	Removal %	Effluent mg/l	Removal %	TOTAL Removal %	Domestic mg/l	Mass in Pounds						
													Influent	Primary	Secondary	BAF	Effluent		
2/28/2002	4.62																		
6/18/2002	5.43	87	77	11%	9	89%			8	6%	91%			3,940	3,487	385			362
9/29/2002	4.31	140	130	7%	12	91%			8	33%	94%			5,032	4,673	431			288
11/7/2002	4.84	99	180	-82%	39	78%			14	64%	86%	280		3,996	7,266	1,574			565
3/11/2003	7.14	100	130	-30%	14	89%			20	-43%	80%			5,955	7,741	834			1,191
5/20/2003	6.12	80	140	-75%	6	96%			4	33%	95%			4,083	7,146	306			204
8/20/2003	5.75	170	150	12%	17	89%			8	53%	95%	260		8,152	7,193	815			384
11/4/2003	6.28	170	180	-6%	8	96%			4	50%	98%			8,904	9,428	419			210
2/25/2004	5.04	160	170	-6%	9	95%			9	0%	94%			6,725	7,146	378			378
5/19/2004	5.96	84	72	14%	24	67%			20	17%	76%			4,175	3,579	1,193			994
8/25/2004	4.82	120	110	8%	9	92%			6.3	30%	95%			4,824	4,422	362			253
10/27/2004	5.44	150	160	-7%	13	92%			3	77%	98%	270		6,805	7,259	590			136
2/16/2005	9.71	130	75	42%	9	88%	9.2	0%	3	67%	98%			10,528	6,074	745	745		243
5/18/2005	6.13	110	62	44%	10	84%	2	80%	2		98%			5,624	3,170	511	102		102
8/16/2005	5.79	230	180	22%	2	99%	2		3.3	-65%	99%	520		11,106	8,692	97	97		159
11/15/2005	5.69	93	57	39%	9	84%	2	78%	2		98%			4,413	2,705	441	95		95
2/3/2006	6.12	140	90	36%	20	78%	2.6	87%	2	23%	99%			7,146	4,594	1,021	133		102
5/10/2006	5.24	230	110	52%	30	73%	4	87%	4		98%			10,051	4,807	1,311	175		175
9/20/2006	5.07	190	150	21%	10	93%	7.6	24%	3.5	54%	98%	620		8,034	6,343	423	321		148
11/29/2006	9.05	86	34	60%	10	71%	2	80%	2		98%			6,491	2,566	755	151		151
2/14/2007	7.14	130	93	28%	11	88%	5.7	48%	2.7	53%	98%			7,741	5,538	655	339		161
5/9/2007	4.32	99	68	31%	21	69%	8.7	59%	6.5	25%	93%			3,567	2,450	757	313		234
8/21/2007	4.06	270	100	63%	33	67%	8.5	74%	5.6	34%	98%	490		9,142	3,386	1,117	288		190
10/31/2007	5.85	150	100	33%	23	77%	4.4	81%	4.1	7%	97%			7,318	4,879	1,122	215		200
2/5/2008	6.22	90	68	24%	10	86%	2	80%	2		98%			4,669	3,527	508	104		104
5/13/2008	6.00	130	77	41%	13	83%	4.7	64%	4.1	13%	97%			6,505	3,853	651	235		205
8/20/2008	4.76	180	110	39%	26	76%	2.9	89%	2.8	3%	98%	390		7,146	4,367	1,032	115		111
11/5/2008	4.90	130	83	36%	7	92%	3.4	50%	2.1	38%	98%			5,313	3,392	278	139		86
2/25/2009	6.85	110	66	40%	11	83%	4.3	61%	3.3	23%	97%			6,281	3,768	628	246		188
6/3/2009	5.12	170	73	57%	6	92%	3.2	44%	2.4	25%	99%			7,259	3,117	243	137		102
AVE		139	107	19%	14	85%	4.4	64%	5.6	26%	95%	404		6,584	5,054	675	219		266
AVE '08-'09		148	83	43%	12	86%	3.5	61%	2.7	22%	98%	390		6,500	3,661	545	159		122

TABLE 6-1B
TOWN OF WEST WARWICK
WATER POLLUTION CONTROL FACILITY
SUMMARY OF BOD LOADING AND REMOVAL

BOD CONCENTRATION						
MONTH	MONTH AVG FLOW	BOD OR CBOD INFLUENT		BOD OR CBOD EFFLUENT		BOD OR CBOD REMOVAL
		DAY. MAX.	30 DAY AVG.	DAY. MAX.	30 DAY AVG.	
	MGD	mg/l	mg/l	mg/l	mg/l	%
Jul-08	4.2	320	187	8	3.6	98
Aug-08	4.6	200	162	2	3.6	98
Sep-08	6.0	200	130	2	3.2	98
Oct-08	5.9	230	121	5	2.7	98
Nov-08	5.7	190	148	4	2.6	98
Dec-08	8.7	210	110	4.0	2.3	98
Jan-09	6.8	280	135	4	2.9	98
Feb-09	6.4	180	126	5	3.5	97
Mar-09	6.6	260	133	7.8	4.2	97
Apr-09	8.7	160	118	12	7.9	93
May-09	6.7	180	137	17	6.9	95
Jun-09	5.3	200	154	19	6.9	96
AVERAGE	6.3	218	138	8	4	97

BOD MASS								
MONTH/YEAR	BOD INFLUENT		BOD EFFLUENT		CBOD INFLUENT		CBOD EFFLUENT	
	AVE LBS	MAX LBS	AVE LBS	MAX LBS	AVE LBS	MAX LBS	AVE LBS	MAX LBS
	LBS/D	LBS/D	LBS/D	LBS/D	LBS/D	LBS/D	LBS/D	LBS/D
Jul-08					6,431	12,720	125	308
Aug-08					6,168	7,226	94	145
Sep-08					6,219	11,369	112	223
Oct-08					9,359	5,822	129	208
Nov-08	6,983	8,808	120	201				
Dec-08	7,326	11,362	162	309				
Jan-09	7,294	13,328	162	281				
Feb-09	6,666	8,937	270	188				
Mar-09	7,332	13,546	234	432				
Apr-09	7,820	10,395	541	953				
May-09	7,440	9,090	1,104	398				
Jun-09					6,705	9,204	300	844
AVERAGE	7,266	10,781	370	394	6,977	9,268	152	346
% DESIGN LOAD	33%	49%	14%	9%	32%	42%	17%	26%
MASS AVAILABLE	14,627	11,112			14,916	12,625		

Design load 21,893 LBS/D Effluent limit based on permit lowest permit value

Date	AVE. FLOW (mgd)	BOD					REMOVAL
		influent	primary effl	sec eff	BAF eff	effluent	
	MGD	mg/l	mg/l	mg/l	mg/l	mg/l	%
8/20/2008	4.76	180	110	26	2.9	2.8	98%
11/5/2008	4.90	130	83	7	3.4	2.1	98%
2/25/2009	6.85	110	66	11	4.3	3.3	97%
6/3/2009	5.12	170	73	6	3.2	2.4	99%
AVERAGE	5.41	148	83	12	3	3	98%

BLUE INDICATES LESS THAN DETECTION LIMIT

TABLE 6-2A
SUMMARY OF LOCAL LIMITS SAMPLING FOR TSS

TSS REMOVAL

BLUE INDICATES LESS THAN DETECTION LIMIT

Date	Flow mgd	Influent mg/l	Primary mg/l	Removal %	Secondary mg/l	Removal %	BAF mg/l	Removal %	Effluent mg/l	Removal %	TOTAL Removal %	Domestic mg/l	Mass in Pounds						
													Influent	Primary	Secondary	BAF	Effluent		
2/28/2002	4.62																		
6/18/2002	5.43	110	53	52%	8.5	84%			6.0	29%	95%		4,981	2,400	385			272	
9/29/2002	4.31	110	61	45%	4.3	93%			3.0	30%	97%		3,954	2,193	155			108	
11/7/2002	4.84	110	63	43%	14.0	78%			9.3	34%	92%	180	4,440	2,543	565			375	
3/11/2003	7.14	94	51	46%	4.3	92%			3.3	23%	96%		5,597	3,037	256			197	
5/20/2003	6.12	100	65	35%	4.0	94%			2.7	33%	97%		5,104	3,318	204			138	
8/20/2003	5.75	130	57	56%	2.0	96%			2.0	0%	98%	220	6,234	2,733	96			96	
11/4/2003	6.28	130	66	49%	4.7	93%			3.0	36%	98%		6,809	3,457	246			157	
2/25/2004	5.04	120	56	53%	4.7	92%			6.3	-34%	95%		5,044	2,354	198			265	
5/19/2004	5.96	83	50	40%	19.0	62%			24	-26%	71%		4,126	2,485	944			1,193	
8/25/2004	4.82	110	63	43%	6.5	90%			5.7	12%	95%	220	4,422	2,533	261			229	
10/27/2004	5.44	86	50	42%	3.3	93%			2.3	30%	97%		3,902	2,268	150			104	
2/16/2005	9.71	94	50	47%	2.7	95%	2.3	15%	2.3	0%	98%		7,612	4,049	219	186		186	
5/18/2005	6.13	120	58	52%	5.0	91%	2	60%	2.7	-35%	98%		6,135	2,965	256	102		138	
8/16/2005	5.79	220	97	56%	6.3	94%	3.0	52%	3.3	-10%	99%	470	10,623	4,684	304	145		159	
11/15/2005	5.69	94	54	43%	11.0	80%	2	82%	2		98%		4,461	2,563	522	95		95	
2/3/2006	6.12	140	50	64%	3.7	93%	2	46%	2		99%		7,146	2,552	189	102		102	
5/10/2006	5.24	160	64	60%	8.0	88%	3.0	63%	7.0	-133%	96%		6,992	2,797	350	131		306	
9/20/2006	5.07	160	41	74%	4.0	90%	7.0	-75%	5.0	29%	97%		6,765	1,734	169	296		211	
11/29/2006	9.05	89	45	49%	15.0	67%	6.0	60%	3.0	50%	97%	880	6,717	3,396	1,132	453		226	
2/14/2007	7.14	96	79	18%	10.0	87%	3.0	70%	3.0	0%	97%		5,717	4,704	595	179		179	
5/9/2007	4.32	110	67	39%	7.0	90%	9.0	-29%	14.0	-56%	87%		3,963	2,414	252	324		504	
8/21/2007	4.06	230	61	73%	14.0	77%	12.0	14%	5.0	58%	98%	460	7,788	2,065	474	406		169	
10/31/2007	5.85	170	15	91%	12.0	20%	11.0	8%	5.0	55%	97%		8,294	732	585	537		244	
2/5/2008	6.22	130	71	45%	16.0	77%	9.0	44%	7.0	22%	95%		6,744	3,683	830	467		363	
5/13/2008	6.00	160	50	69%	3.0	94%	7.0	-133%	5.0	29%	97%		8,006	2,502	150	350		250	
8/20/2008	4.76	130	58	55%	9.0	84%	1	89%	3.0	-200%	98%	250	5,161	2,303	357	40		119	
11/5/2008	4.90	100	47	53%	5.0	89%	1	80%	8.0	-700%	92%		4,087	1,921	204	41		327	
2/25/2009	6.85	78	44	44%	7.0	84%	1	86%	4.0	-300%	95%		4,454	2,512	400	57		228	
6/3/2009	5.12	130	49	62%	4.0	92%	2.0	50%	3.0	-50%	98%				171	85		128	
AVE	5.79	124	56	52%	8	85%	4.6	32%	5.2	-40%	95%	383	5,903	2,746	366	222		244	
AVE '08-'09	5.41	110	50	54%	6	87%	1.3	76%	4.5	-313%	96%	250	4,567	2,245	283	56		201	

TABLE 6-2B
TOWN OF WEST WARWICK
WATER POLLUTION CONTROL FACILITY
SUMMARY OF TSS LOADING AND REMOVAL

TSS CONCENTRATION					
MONTH	TSS INFLUENT		TSS EFFLUENT		TSS
	DAY. MAX.	30 DAY AVG.	DAY. MAX.	30 DAY AVG.	% REMOVAL
	mg/l	mg/l	mg/l	mg/l	%
Jul-08	380	198	13.0	5.5	97
Aug-08	190	152	11.0	3.2	98
Sep-08	280	139	8.0	3.2	98
Oct-08	170	127	12.0	3.3	97
Nov-08	210	143	9.0	2.4	98
Dec-08	140	86	15.0	3.0	97
Jan-09	170	108	7.0	3.6	97
Feb-09	130	98	6.0	2.3	98
Mar-09	200	109	11.0	3.4	97
Apr-09	140	105	11.0	3.9	96
May-09	180	123	9.0	3.4	97
Jun-09	420	151	5.8	5.3	98
AVERAGE	218	128	10	4	97

TSS MASS					
MONTH	TSS INFLUENT		TSS EFFLUENT		TSS
	30 DAY AVG.	DAY. MAX.	30 DAY AVG.	DAY. MAX.	REMOVAL
	LBS/D	LBS/D	LBS/D	LBS/D	%
Jul-08	6,898	15,592	190	399	97%
Aug-08	5,728	7,036	121	386	98%
Sep-08	6,558	12,965	151	408	98%
Oct-08	6,285	8,468	166	677	97%
Nov-08	9,869	6,769	114	438	99%
Dec-08	5,715	8,684	195	1,010	97%
Jan-09	6,838	12,170	280	707	96%
Feb-09	5,237	6,743	123	338	98%
Mar-09	6,000	10,190	186	596	97%
Apr-09	7,013	10,395	254	628	96%
May-09	6,712	8,738	190	616	97%
Jun-09	6,635	19,444	120	463	98%
AVERAGE	6,624	10,599	174	556	97%
% DESIGN LOAD	30%	48%	10%	21%	
MASS AVAILABLE	15,269	11,294			

Design load 21,893 LBS/D

Date	AVE. FLOW (mgd)	TSS influent	mg/l primary effi	sec eff	BAF eff	effluent	REMOVAL
	MGD	mg/l	mg/l	mg/l	mg/l	mg/l	%
8/20/2008	4.76	130	58	9	1	3	98%
11/5/2008	4.90	100	47	5	1	8	92%
2/25/2009	6.85	78	44	7	1	4	95%
6/3/2009	5.12	130	49	4	2	3	98%
AVERAGE	5.41	110	50	6	1	5	96%

**TABLE 6-3
SUMMARY OF LOCAL LIMITS SAMPLING FOR OIL AND GREASE**

O&G REMOVAL

BLUE INDICATES LESS THAN DETECTION LIMIT

Date	Flow mgd	Influent mg/l	Primary mg/l	Removal %	Secondary mg/l	Removal %	BAF mg/l	Removal %	Effluent mg/l	Removal %	TOTAL	Domestic mg/l	Influent	Primary	Secondary	BAF	Effluent	
											Removal %							Mass in Pounds
2/28/2002	4.62	25	18	28%					0.8		97%	13.6						
6/18/2002	5.43	23	24	-4%	0.5	98%			0.5	0%	98%		1,042	1,087	23			23
9/29/2002	4.31	32	29	9%	0.7	98%			0.5	29%	98%		1,150	1,042	25			18
11/7/2002	4.84	19	32	-68%	0.9	97%			1.6	-78%	92%	25.0	767	1,292	36			65
3/11/2003	7.14	10	23	-130%	3.0	87%			0.7	77%	93%		595	1,370	179			42
5/20/2003	6.12	26	17	35%	0.5	97%			1.7	-240%	93%		1,327	868	26			87
8/20/2003	5.75	21	12	43%	0.5	96%			2.8	-460%	87%	22.0	1,007	575	24			134
11/4/2003	6.28	14	14	0%	0.5	96%			1.9	-280%	86%		733	733	26			100
2/25/2004	5.04	22	20	9%	3.8	81%			0.1	98%	100%		925	841	160			3
5/19/2004	5.96	18	15	17%	2.6	83%			2.3	12%	87%		895	746	129			114
8/25/2004	4.82	20	19	5%	1.0	95%			0.5	50%	98%	17.0	804	764	40			20
10/27/2004	5.44	21	15	29%	1.0	93%			1.4	-40%	93%		953	681	45			64
2/16/2005	9.71	13	8	35%	0.6	93%	1.4	-133%	1.4	0%	89%		1,053	680	49	113		113
5/18/2005	6.13	26	8	70%	1.4	82%	5.5	-293%	1.1	80%	96%		1,329	394	72	281		56
8/16/2005	5.79	14	7	51%	0.6	91%	0.5	17%	0.5	17%	96%	11.0	676	328	29	24		24
11/15/2005	5.69	14	6	61%	0.5	91%	0.5	0%	0.7	-40%	95%		664	261	24	24		33
2/3/2006	6.12	12	10	17%	1.7	83%	0.5	71%	0.6	-20%	95%		612	510	87	26		31
5/10/2006	5.24	36	21	42%	2.6	88%	2	23%	2		94%		1,573	918	114	87		87
9/20/2006	5.07	31	17	45%	2	88%	1	50%	1		97%	83	1,311	719	85	42		42
11/29/2006	9.05	9	4	55%	1	74%	2	-100%	1	50%	88%		649	294	75	151		75
2/14/2007	7.14	24	22	8%	2	91%	2	0%	2		92%		1,429	1,310	119	119		119
5/9/2007	4.32	13	13	0%	1.6	88%	1	38%	2		85%		468	468	58	36		72
8/21/2007	4.06	39	15	62%	3.1	79%	1	68%	1.1	-10%	97%	60	1,321	508	105	34		37
10/31/2007	5.85	34	18	47%	2.8	84%	2.4	14%	1.3	46%	96%		1,659	878	137	117		63
2/5/2008	6.22	19	13	32%	1	91%	1	8%	2		89%		986	674	62	57		104
5/13/2008	6.00	27	2	93%	1	50%	2		1.1	45%	96%		1,351	100	50	100		55
8/20/2008	4.76	33	18	45%	2	89%	1		1.0		97%	71	1,310	715	79	40		40
11/5/2008	4.90	28	9	69%	1	89%	1		1		96%		1,144	360	41	41		41
2/25/2009	6.85	28	10	64%	1.3	87%	2		2		93%		1,599	571	74	114		114
6/3/2009	5.12	20	9	55%	1	89%	2		2		90%		854	384	43	85		85
AVE	5.79	22	15	27%	1.5	88%	1.6	-18%	1.3	-36%	93%	38	1,041	692	69	83	64	
AVE '08-'09	5.41	27	11	58%	1.3	88%	1.5		1.5		94%	71	1,227	507	59	70	70	

TABLE 6-4
SUMMARY OF LOCAL LIMITS SAMPLING FOR TPH

TPH REMOVAL

BLUE INDICATES LESS THAN DETECTION LIMIT

Date	Flow mgd	Influent mg/l	Primary mg/l	Removal %	Secondary mg/l	Removal %	BAF mg/l	Removal %	Effluent mg/l	Removal %	TOTAL Removal %	Domestic mg/l	Mass in Pounds				
													Influent	Primary	Secondary	BAF	Effluent
2/28/2002	4.62	2.2	1.3	41%					0.80		64%	1.8	85	50			31
6/18/2002	5.43	3.5	3.9	-11%	0.5	87%			0.5		86%		159	177	23		23
9/29/2002	4.31	2.6	1.4	46%	0.5	64%			0.5		81%		93	50	18		18
11/7/2002	4.84	4.7	4.3	9%	0.5	88%			0.5		89%	2.2	190	174	20		20
3/11/2003	7.14	0.5	0.5		0.5				0.5				30	30	30		30
5/20/2003	6.12	0.5	0.5		0.5				0.5				26	26	26		26
8/20/2003	5.75	5.5	3.6	35%	0.5	86%			0.5		91%	2.2	264	173	24		24
11/4/2003	6.28	2.9	2.1	28%	0.5	76%			0.5		83%		152	110	26		26
2/25/2004	5.04	2.4	2.8	-17%	0.5	82%			0.5		79%		101	118	21		21
5/19/2004	5.96	2.5	2.5	0%	0.5	80%			0.5		80%		124	124	25		25
8/25/2004	4.82	9.2	7.9	14%	0.5	94%			0.5		95%		370	318	20		20
10/27/2004	5.44	2.1	1.6	24%	0.5	69%			0.5		76%		95	73	23		23
2/16/2005	9.71	1.8	0.5	72%	0.5		0.5		0.5		72%		146	40	40	40	40
5/18/2005	6.13	0.5	0.5		0.5		2.0	-300%	0.5				26	26	26	102	26
8/16/2005	5.79	0.5	3.6		0.5	86%	0.5		0.5			0.5	24	174	24	24	24
11/15/2005	5.69	0.5	0.5		0.5		0.5		0.5				24	24	24	24	24
2/3/2006	6.12	2.3	0.5	78%	0.8	-60%	0.5	38%	1.1		52%		117	26	41	26	56
5/10/2006	5.24	5.5	6.7	-22%	2	70%	2		2		64%		240	293	87	87	87
9/20/2006	5.07	3.8	4.4	-16%	2	55%	2		1		74%	2	161	186	85	85	42
11/29/2006	9.05	2	1	50%	1	0%	1		1		50%		151	75	75	75	75
2/14/2007	7.14	5.0	7.2	-44%	1	86%	1		1		80%		298	429	60	60	60
5/9/2007	4.32	2.3	2.8	-22%	2	29%	1	50%	1		57%		83	101	72	36	36
8/21/2007	4.06	3.3	2	39%	1	50%	1		1		70%	3.3	112	68	34	34	34
10/31/2007	5.85	3	3.7	-12%	1	73%	1		1		70%		161	181	49	49	49
2/5/2008	6.22	3	3	0%	1	67%	1		2		39%		171	171	57	57	104
5/13/2008	6.00	5	5	0%	1	80%	1		1		80%		250	250	50	50	50
8/20/2008	4.76	19.0	9.0	53%	1	89%	1		1		95%	37.0	754	357	40	40	40
11/5/2008	4.90	5	11.0	-120%	1.3	88%	1	23%	1.1		78%		204	450	53	41	45
2/25/2009	6.85	5.5	3.7	33%	1	73%	1		1		82%		314	211	57	57	57
6/3/2009	5.12	5.5	5	9%	2	60%	2		3		55%		235	214	85	85	85
AVE	5.79	4	3	11%	0.9	65%	1.1	-47%	0.9		74%	7	172	156	42	54	39
AVE '08-'09	5.41	9	7	-6%	1.3	78%	1.3	23%	1.4		77%	37	377	308	59	56	47

TABLE 6-5
SUMMARY OF LOCAL LIMITS SAMPLING FOR PHENOL

PHENOL REMOVALS

BLUE INDICATES LESS THAN DETECTION LIMIT

Date	Flow mgd	Influent mg/l	Primary mg/l	Removal %	Secondary mg/l	Removal %	BAF mg/l	Removal %	Effluent mg/l	Removal %	TOTAL Removal %	Domestic mg/l	Mass in Pounds					
													Influent	Primary	Secondary	BAF	Effluent	
2/28/2002	4.62	0.01	0.05		0.01	80%			0.01				0.39	1.93				0.39
6/18/2002	5.43	0.04	0.03	25%	0.01	67%			0.01	0%	75%		1.81	1.36	0.45			0.45
9/29/2002	4.31												0.00	0.00	0.00			0.00
11/7/2002	4.84	0.04	0.04	0%	0.01	75%			0.01		75%		1.61	1.61	0.40			0.40
3/11/2003	7.14	0.03	0.04	-33%	0.02	50%			0.01	50%	67%		1.79	2.38	1.19			0.60
5/20/2003	6.12	0.04	0.04	0%	0.01	75%			0.01		75%		2.04	2.04	0.51			0.51
8/20/2003	5.75	0.03	0.02	33%	0.01	50%			0.01		67%		1.44	0.96	0.48			0.48
11/4/2003	6.28	0.04	0.03	25%	0.01	67%			0.01		75%		2.10	1.57	0.52			0.52
2/25/2004	5.04	0.03	0.03	0%	0.01	67%			0.01		67%		1.26	1.26	0.42			0.42
5/19/2004	5.96	0.02	0.02	0%	0.01	50%			0.01		50%		0.99	0.99	0.50			0.50
8/25/2004	4.82	0.03	0.03	0%	0.01	67%			0.01		67%		1.21	1.21	0.40			0.40
10/27/2004	5.44	0.03	0.03	0%	0.01	67%			0.01		67%		1.36	1.36	0.45			0.45
2/16/2005	9.71	0.02	0.02	0%	0.01	50%	0.01		0.01		50%		1.62	1.62	0.81	0.81		0.81
5/18/2005	6.13	0.04	0.03	25%	0.01	67%	0.01		0.01		75%		2.04	1.53	0.51	0.51		0.51
8/16/2005	5.79	0.04	0.03	25%	0.01	67%	0.01		0.01		75%		1.93	1.45	0.48	0.48		0.48
11/15/2005	5.69	0.04	0.04	0%	0.01	75%	0.01		0.01		75%		1.90	1.90	0.47	0.47		0.47
2/3/2006	6.12	0.02	0.02	0%	0.01	50%	0.01		0.01		50%		1.02	1.02	0.51	0.51		0.51
5/10/2006	5.24	0.20	0.19	5%	0.03	84%	0.03		0.03		85%		8.74	8.30	1.31	1.31		1.31
9/20/2006	5.07	0.29	0.14	52%	0.03	79%	0.03		0.03		89%		12.26	5.92	1.27	1.27		1.31
11/29/2006	9.05	0.27	0.42	-56%	0.03	93%	0.06		0.07	-140%	73%		20.38	31.70	2.26	4.15		5.43
2/14/2007	7.14	0.03	0.10	-203%	0.03	69%	0.01		0.03	-3%			1.91	5.78	1.79	0.36		1.85
5/9/2007	4.32	0.38	0.21	45%	0.10	52%	0.07	34%	0.10	5%	75%		13.69	7.57	3.60	2.38		3.42
8/21/2007	4.06	0.46	0.12	74%	0.06	52%	0.13	-124%	0.04	34%	92%	0.22	15.58	4.06	1.96	4.40		1.29
10/31/2007	5.85	0.52	0.16	69%	0.11	31%	0.26	-136%	0.15	-36%	71%		25.37	7.81	5.37	12.69		7.32
2/5/2008	6.22	0.04	0.10	-137%	0.09	8%	0.04	51%	0.07	20%	-73%		2.13	5.03	4.62	2.28		3.68
5/13/2008	6.00	0.62	0.62	0%	0.38	39%	0.05	88%	0.22	42%	65%		31.02	31.02	19.02	2.30		11.01
8/20/2008	4.76	0.13	0.68	-423%	0.26	62%	0.19	27%	0.16	38%	-23%	0.58	5.16	26.99	10.32	7.54		6.35
11/5/2008	4.90	0.15	0.10	36%	0.05	53%	0.09	-91%	0.05	-7%	68%		6.13	3.92	1.84	3.51		1.96
2/25/2009	6.85	0.03	0.03	0%	0.03		0.03		0.03				1.71	1.71	1.71	1.71		1.71
6/3/2009	5.12	0.03	0.03	3%	0.03		0.03		0.03		3%		1.32	1.28	1.28	1.28		1.28
AVE	5.79	0.13	0.12	-16%	0.05	61%	0.06	-22%	0.04	0%	59%	0.40	5.66	5.51	2.22	2.67		1.86
AVE '08-'09	5.41	0.09	0.21	-96%	0.09	57%	0.08	-32%	0.07	16%	16%	0.58	3.58	8.48	3.79	3.51		2.83

**TABLE 6-6
SUMMARY OF LOCAL LIMITS SAMPLING FOR ARSENIC**

ARSENIC REMOVALS

BLUE INDICATES LESS THAN DETECTION LIMIT

Date	Flow mgd	Influent	Primary	Removal	Secondary	Removal	BAF	Removal	Effluent	Removal	TOTAL Removal	Domestic	Influent	Primary	Secondary	BAF	Effluent
		µg/l	µg/l	%	µg/l	%	µg/l	%	µg/l	%	µg/l	µg/l	µg/l	Mass in Pounds			
2/28/2002	4.62	5	5		5				5			5	0.19	0.19	0.19		0.19
6/18/2002	5.43	5	5		5				5				0.23	0.23	0.23		0.23
9/29/2002	4.31	5	5		5				5				0.18	0.18	0.18		0.18
11/7/2002	4.84	5	5		5				5			5	0.20	0.20	0.20		0.20
3/11/2003	7.14	5	5		5				5				0.30	0.30	0.30		0.30
5/20/2003	6.12	5	5		5				5				0.26	0.26	0.26		0.26
8/20/2003	5.75	5	5		5				5			5	0.24	0.24	0.24		0.24
11/4/2003	6.28	5	5		5				5				0.26	0.26	0.26		0.26
2/25/2004	5.04	5	5		5				5				0.21	0.21	0.21		0.21
5/19/2004	5.96	5	5		5				5				0.25	0.25	0.25		0.25
8/25/2004	4.82	5	5		5				5			5	0.20	0.20	0.20		0.20
10/27/2004	5.44	5	5		5				5				0.23	0.23	0.23		0.23
2/16/2005	9.71	5	5		5		5		5				0.40	0.40	0.40	0.40	0.40
5/18/2005	6.13	5	5		5		5		5				0.26	0.26	0.26	0.26	0.26
8/16/2005	5.79	5	5		5		5		5			5	0.24	0.24	0.24	0.24	0.24
11/15/2005	5.69	5	5		5		5		5				0.24	0.24	0.24	0.24	0.24
2/3/2006	6.12	5	5		5		5		5				0.26	0.26	0.26	0.26	0.26
5/10/2006	5.24	5	5		5		5		5				0.22	0.22	0.22	0.22	0.22
9/20/2006	5.07	5	5		5		5		5			5	0.21	0.21	0.21	0.21	0.21
11/29/2006	9.05	5	5		5		5		5				0.38	0.38	0.38	0.38	0.38
2/14/2007	7.14	5	5		5		5		5				0.30	0.30	0.30	0.30	0.30
5/9/2007	4.32	5	5		5		5		5				0.18	0.18	0.18	0.18	0.18
8/21/2007	4.06	5	5		5		5		5			5	0.17	0.17	0.17	0.17	0.17
10/31/2007	5.85	5	5		5		5		5				0.24	0.24	0.24	0.24	0.24
2/5/2008	6.22	5	5		5		5		5				0.26	0.26	0.26	0.26	0.26
5/13/2008	6.00	5	5		5		5		5				0.25	0.25	0.25	0.25	0.25
8/20/2008	4.76	5	5		5		5		5			5	0.20	0.20	0.20	0.20	0.20
11/5/2008	4.90	5	5		5		5		5				0.20	0.20	0.20	0.20	0.20
2/25/2009	6.85	5	5		5		5		5				0.29	0.29	0.29	0.29	0.29
6/3/2009	5.12	4	4		4		4		4				0.17	0.17	0.17	0.17	0.17
AVE	5.79	5	5		5.0		4.9		5.0			5	0.24	0.24	0.24	0.25	0.24
AVE '08-'09	5.41	5	5		4.8		4.8		4.8			5	0.21	0.21	0.21	0.21	0.21

**TABLE 6-7
SUMMARY OF LOCAL LIMITS SAMPLING FOR CADMIUM**

CADMIUM REMOVALS

BLUE INDICATES LESS THAN DETECTION LIMIT

Date	Flow mgd	Influent µg/l	Primary µg/l	Removal %	Secondary µg/l	Removal %	BAF µg/l	Removal %	Effluent µg/l	Removal %	TOTAL Removal %	Domestic µg/l	Mass in Pounds				
													Influent	Primary	Secondary	BAF	Effluent
2/28/2002	4.62	0.5	1.4						0.5			2.4	0.02	0.05	0.00		0.02
6/18/2002	5.43	0.5	0.5		0.5				0.5				0.02	0.02	0.02		0.02
9/29/2002	4.31	2	0.5	75%	0.5				0.5		75%		0.07	0.02	0.02		0.02
11/7/2002	4.84	0.5	0.5		0.5				0.5			0.5	0.02	0.02	0.02		0.02
3/11/2003	7.14	0.5	0.5		0.5				0.5				0.03	0.03	0.03		0.03
5/20/2003	6.12	0.5	0.5		0.5				0.5				0.03	0.03	0.03		0.03
8/20/2003	5.75	0.5	0.5		0.5				0.5			0.5	0.02	0.02	0.02		0.02
11/4/2003	6.28	0.5	0.5		1.4				2.7				0.03	0.03	0.07		0.14
2/25/2004	5.04	0.5	0.5		0.5				0.5				0.02	0.02	0.02		0.02
5/19/2004	5.96	0.5	0.5		0.5				0.5				0.02	0.02	0.02		0.02
8/25/2004	4.82	0.5	0.5		0.5				0.5			0.5	0.02	0.02	0.02		0.02
10/27/2004	5.44	0.5	0.5		0.5				0.5				0.02	0.02	0.02		0.02
2/16/2005	9.71	0.5	0.5		0.5		0.5		0.5				0.04	0.04	0.04	0.04	0.04
5/18/2005	6.13	0.5	0.5		0.5		0.5		0.5				0.03	0.03	0.03	0.03	0.03
8/16/2005	5.79	0.51	0.5	2%	0.5		0.5		1.1		-116%	0.5	0.02	0.02	0.02	0.02	0.05
11/15/2005	5.69	0.52	0.5	4%	0.5		0.5		0.5		4%		0.02	0.02	0.02	0.02	0.02
2/3/2006	6.12	0.5	0.5		0.5		0.5		0.5		0%		0.03	0.03	0.03	0.03	0.03
5/10/2006	5.24	5	4.4	12%	1	77%	1		1		80%		0.22	0.19	0.04	0.04	0.04
9/20/2006	5.07	0.5	0.5		1		0.5		1			1	0.02	0.02	0.04	0.02	0.04
11/29/2006	9.05	0.5	0.5		0.5		0.5		0.5				0.04	0.04	0.04	0.04	0.04
2/14/2007	7.14	0.5	0.5		0.5		0.5		0.5				0.03	0.03	0.03	0.03	0.03
5/9/2007	4.32	1	1		1		1		1				0.04	0.04	0.04	0.04	0.04
8/21/2007	4.06	1.2	1.1		1		1.8		1			1	0.04	0.04	0.03	0.06	0.03
10/31/2007	5.85	0.5	0.5		0.5		0.5		0.5				0.02	0.02	0.02	0.02	0.02
2/5/2008	6.22	1	1		1		1		1				0.05	0.05	0.05	0.05	0.05
5/13/2008	6.00	0.5	0.5		0.5		0.5		0.5				0.03	0.03	0.03	0.03	0.03
8/20/2008	4.76	0.5	0.5		0.5		0.5		0.5			1	0.02	0.02	0.02	0.02	0.02
11/5/2008	4.90	1	1		1		1		1				0.04	0.04	0.04	0.04	0.04
2/25/2009	6.85	0.5	0.5		0.5		0.5		0.5				0.03	0.03	0.03	0.03	0.03
6/3/2009	5.12	0.5	0.5		0.5		0.5		0.5				0.02	0.02	0.02	0.02	0.02
AVE	5.79	0.8	0.7		0.6		0.7		0.7			0.9	0.04	0.03	0.03	0.03	0.03
AVE '08-'09	5.41	0.6	0.6		0.6		0.6		0.6			1.0	0.03	0.03	0.03	0.03	0.03

TABLE 6-8
SUMMARY OF LOCAL LIMITS SAMPLING FOR CYANIDE

CYANIDE REMOVALS

BLUE INDICATES LESS THAN DETECTION LIMIT

Date	Flow mgd	Influent µg/l	Primary µg/l	Removal %	Secondary µg/l	Removal %	BAF µg/l	Removal %	Effluent µg/l	Removal %	TOTAL Removal %	Domestic µg/l	Mass in Pounds				
													Influent	Primary	Secondary	BAF	Effluent
2/28/2002	4.62	10	10						10			10	0.39	0.39			0.39
6/18/2002	5.43	10	10		10				10				0.45	0.45	0.45		0.45
9/29/2002	4.31	10	10		10				10				0.36	0.36	0.36		0.36
11/7/2002	4.84	10	10		10				10			10	0.40	0.40	0.40		0.40
3/11/2003	7.14	10	10		10				10				0.60	0.60	0.60		0.60
5/20/2003	6.12	10	10		10				10				0.51	0.51	0.51		0.51
8/20/2003	5.75	10	10		10				10			10	0.48	0.48	0.48		0.48
11/4/2003	6.28	10	10		10				10				0.52	0.52	0.52		0.52
2/25/2004	5.04	10	10		10				10				0.42	0.42	0.42		0.42
5/19/2004	5.96	10	10		10				10				0.50	0.50	0.50		0.50
8/25/2004	4.82	10	10		10				10			10	0.40	0.40	0.40		0.40
10/27/2004	5.44	10	10		10				10				0.45	0.45	0.45		0.45
2/16/2005	9.71	10	10		10		10		10				0.81	0.81	0.81	0.81	0.81
5/18/2005	6.13	10	10		10		10		10				0.51	0.51	0.51	0.51	0.51
8/16/2005	5.79	10	10		10		10		10				0.48	0.48	0.48	0.48	0.48
11/15/2005	5.69	10	10		10		10		10				0.47	0.47	0.47	0.47	0.47
2/3/2006	6.12	10	10		10		10		10			10	0.51	0.51	0.51	0.51	0.51
5/10/2006	5.24	10	10		10		10		10				0.44	0.44	0.44	0.44	0.44
9/20/2006	5.07	10	10		10		10		10			10	0.42	0.42	0.42	0.42	0.42
11/29/2006	9.05	10	10		10		10		10				0.75	0.75	0.75	0.75	0.75
2/14/2007	7.14	10	10		10		10		10				0.60	0.60	0.60	0.60	0.60
5/9/2007	4.32	10	10		10		10		10				0.36	0.36	0.36	0.36	0.36
8/21/2007	4.06	10	10		10		10		10			10	0.34	0.34	0.34	0.34	0.34
10/31/2007	5.85	10	10		10		10		10				0.49	0.49	0.49	0.49	0.49
2/5/2008	6.22	10	10		10		10		10				0.52	0.52	0.52	0.52	0.52
5/13/2008	6.00	10	10		10		10		10				0.50	0.50	0.50	0.50	0.50
8/20/2008	4.76	10	10		10		10		10			10	0.40	0.40	0.40	0.40	0.40
11/5/2008	4.90	10	10		10		10		10				0.41	0.41	0.41	0.41	0.41
2/25/2009	6.85	10	10		10		10		10				0.57	0.57	0.57	0.57	0.57
6/3/2009	5.12	10	10		10		10		10				0.43	0.43	0.43	0.43	0.43
AVE	5.79	10	10		10		10		10			10	0.48	0.48	0.49	0.50	0.48
AVE '08-'09	5.41	10	10		10		10		10			10	0.45	0.45	0.45	0.45	0.45

TABLE 6-9
SUMMARY OF LOCAL LIMITS SAMPLING FOR CHROMIUM

CHROMIUM REMOVALS

BLUE INDICATES LESS THAN DETECTION LIMIT

Date	Flow mgd	Influent µg/l	Primary µg/l	Removal %	Secondary µg/l	Removal %	BAF µg/l	Removal %	Effluent µg/l	Removal %	TOTAL Removal %	Domestic µg/l	Mass in Pounds					
													Influent	Primary	Secondary	BAF	Effluent	
2/28/2002	4.62	11.0	12.0	-9%					2		82%	3.9	0.42	0.46				0.08
6/18/2002	5.43	6.7	5.9	12%	2	66%			2		70%		0.30	0.27	0.09			0.09
9/29/2002	4.31	2.0	2.6	-30%	2	23%			2				0.07	0.09	0.07			0.07
11/7/2002	4.84	2.2	2.0	9%	2				2		9%	2	0.09	0.08	0.08			0.08
3/11/2003	7.14	4.8	5.6	-17%	2	64%			2		58%		0.29	0.33	0.12			0.12
5/20/2003	6.12	6.9	6.5	6%	2	69%			2		71%		0.35	0.33	0.10			0.10
8/20/2003	5.75	5.7	4.9	14%	2	59%			2		65%		0.27	0.23	0.10			0.10
11/4/2003	6.28	4.8	4.4	8%	2	55%			2		58%	3.0	0.25	0.23	0.10			0.10
2/25/2004	5.04	3.6	3.3	8%	2	39%			2		44%		0.15	0.14	0.08			0.08
5/19/2004	5.96	6.5	5.7	12%	2.0	65%			2.4		63%		0.32	0.28	0.10			0.12
8/25/2004	4.82	5.1	4.1	20%	2	51%			2		61%	2	0.21	0.16	0.08			0.08
10/27/2004	5.44	4.6	5.8	-26%	2	66%			2		57%		0.21	0.26	0.09			0.09
2/16/2005	9.71	2.2	2.0	9%	2		2		2		9%		0.18	0.16	0.16	0.16		0.16
5/18/2005	6.13	3.0	2.0	33%	2		2		2		33%		0.15	0.10	0.10	0.10		0.10
8/16/2005	5.79	8.0	2.0	75%	2		2		2		75%	2	0.39	0.10	0.10	0.10		0.10
11/15/2005	5.69	3.3	2.6	21%	2	23%			2		39%		0.16	0.12	0.09	0.09		0.09
2/3/2006	6.12	5.7	4.7	18%	2	57%	2		2		65%		0.29	0.24	0.10	0.10		0.10
5/10/2006	5.24	8.0	4.1	49%	1.0	76%	1		1		88%		0.35	0.18	0.04	0.04		0.04
9/20/2006	5.07	17.0	16.0	6%	5.6	65%	5.3	5%	0.51	90%	97%	10	0.72	0.68	0.24	0.22		0.02
11/29/2006	9.05	3.0	2.1	30%	1.1	48%	1	9%	2.3	-130%	23%		0.23	0.16	0.08	0.08		0.17
2/14/2007	7.14	10.0	12.0	-20%	3.8	68%	2.5	34%	2.6	-4%	74%		0.60	0.71	0.23	0.15		0.15
5/9/2007	4.32	1.3	4.3	-231%	1.5	65%	1.8	-20%	1.4	22%	-8%		0.05	0.15	0.05	0.06		0.05
8/21/2007	4.06	11.0	6.7	39%	2.3	66%	1.8	22%	1.9	-6%	83%	3.7	0.37	0.23	0.08	0.06		0.06
10/31/2007	5.85	7.0	6.7	4%	2.9	57%	2.6	10%	2.5	4%	64%		0.34	0.33	0.14	0.13		0.12
2/5/2008	6.22	3.2	1.9	41%	1.3	32%	1.2	8%	1.2	0%	63%		0.17	0.10	0.07	0.06		0.06
5/13/2008	6.00	3.7	3.9	-5%	1.6	59%	1.4	13%	1.3	7%	65%		0.19	0.20	0.08	0.07		0.07
8/20/2008	4.76	4.7	5.0	-6%	2.9	42%	2.8	3%	2.9	-4%	38%	3.8	0.19	0.20	0.12	0.11		0.12
11/5/2008	4.90	3.3	5.4	-64%	2.2	59%	11.0	-400%	2	82%	39%		0.13	0.22	0.09	0.45		0.08
2/25/2009	6.85	1.7	1.9	-12%	1.2	37%	1.0	17%	1.3	-30%	24%		0.10	0.11	0.07	0.06		0.07
6/3/2009	5.12	3.2	4.2	-31%	1.7	60%	1.6	6%	2	-25%	38%		0.14	0.18	0.07	0.07		0.09
AVE	5.79	5.4	5.0	-1%	2.1	55%	2.5	-24%	1.9	1%	53%	4	0.26	0.23	0.10	0.12		0.09
AVE '08-'09	5.47	4.7	4.5	-4%	2.0	51%	2.9	-40%	1.9	4%	52%	4	0.20	0.19	0.09	0.13		0.08

**TABLE 6-10
SUMMARY OF LOCAL LIMITS SAMPLING FOR COPPER**

COPPER REMOVALS

BLUE INDICATES LESS THAN DETECTION LIMIT

Date	Flow mgd	Influent µg/l	Primary µg/l	Removal %	Secondary µg/l	Removal %	BAF µg/l	Removal %	Effluent µg/l	Removal %	TOTAL Removal %	Domestic µg/l	Mass in Pounds					
													Influent	Primary	Secondary	BAF	Effluent	
2/28/2002	4.62	24	28	-17%					6.0		75%	83	0.92	1.08				0.23
6/18/2002	5.43	24	17	29%	5.2	69%			8.1	-56%	66%		1.09	0.77	0.24			0.37
9/29/2002	4.31	26	23	12%	3.9	83%			4.2	-8%	84%		0.93	0.83	0.14			0.15
11/7/2002	4.84	33	23	30%	6.3	73%			10.0	-59%	70%	21	1.33	0.93	0.25			0.40
3/11/2003	7.14	24	15	38%	5.4	64%			4.1	24%	83%		1.43	0.89	0.32			0.24
5/20/2003	6.12	28	19	32%	7.1	63%			7.6	-7%	73%		1.43	0.97	0.36			0.39
8/20/2003	5.75	31	18	42%	3.9	78%			4.8	-23%	85%	22	1.49	0.86	0.19			0.23
11/4/2003	6.28	16	17	-6%	3.8	78%			3.8	0%	76%		0.84	0.89	0.20			0.20
2/25/2004	5.04	22	21	5%	10.0	52%			11.0	-10%	50%		0.92	0.88	0.42			0.46
5/19/2004	5.96	28	22	21%	14.0	36%			16.0	-14%	43%		1.39	1.09	0.70			0.80
8/25/2004	4.82	30	24	20%	7.1	70%			6.6	7%	78%	30	1.21	0.96	0.29			0.27
10/27/2004	5.44	28	25	11%	5.9	76%			5.1	14%	82%		1.27	1.13	0.27			0.23
2/16/2005	9.71	13	12	8%	4.4	63%	6.6	-50%	6.0	9%	54%		1.05	0.97	0.36	0.53		0.49
5/18/2005	6.13	17	11	35%	3.4	69%	3.1	9%	3.2	-3%	81%		0.87	0.56	0.17	0.16		0.16
8/16/2005	5.79	44	23	48%	4.0	83%	8.0	-100%	2.6	68%	94%	30	2.12	1.11	0.19	0.39		0.13
11/15/2005	5.69	38	12	68%	4.6	62%	4.2	9%	3.0	29%	92%		1.80	0.57	0.22	0.20		0.14
2/3/2006	6.12	20	13	35%	4.3	67%	3.5	19%	3.5	0%	83%		1.02	0.66	0.22	0.18		0.18
5/10/2006	5.24	34	19	44%	6.0	68%	3.4	43%	3.6	-6%	89%		1.49	0.83	0.26	0.15		0.16
9/20/2006	5.07	26	16	38%	1.8	89%	2.1	-17%	2.4	-14%	91%	65	1.10	0.68	0.08	0.09		0.10
11/29/2006	9.05	12	6.7	44%	3.7	45%	2.4	35%	6.0	-150%	50%		0.91	0.51	0.28	0.18		0.45
2/14/2007	7.14	21	23	-10%	21.0	9%	16.0	24%	7.8	51%	63%		1.25	1.37	1.25	0.95		0.46
5/9/2007	4.32	4	17	-325%	9.6	44%	14.0	-46%	3.8	73%	5%		0.14	0.61	0.35	0.50		0.14
8/21/2007	4.06	44	19	57%	9.3	51%	6.4	31%	6.4	0%	85%	30	1.49	0.64	0.31	0.22		0.22
10/31/2007	5.85	34	19	44%	8.6	55%	5.0	42%	3.1	38%	91%		1.66	0.93	0.42	0.24		0.15
2/5/2008	6.22	15	11	27%	5.1	54%	5.4	-6%	2.9	46%	81%		0.78	0.57	0.26	0.28		0.15
5/13/2008	6.00	29	16	45%	5.5	66%	4.3	22%	3.3	23%	89%		1.45	0.80	0.28	0.22		0.17
8/20/2008	4.76	44	18	59%	8.9	51%	5.7	36%	4.0	30%	91%	38	1.75	0.71	0.35	0.23		0.16
11/5/2008	4.90	19	13	32%	10.0	23%	11.0	-10%	15.0	-36%	21%		0.78	0.53	0.41	0.45		0.61
2/25/2009	6.85	12	12	0%	5.5	54%	5.4	2%	4.2	22%	65%		0.69	0.69	0.31	0.31		0.24
6/3/2009	5.12	20	8.6	57%	2.1	76%	2.7	-29%	5.0	-85%	75%		0.85	0.37	0.09	0.12		0.21
AVE	5.79	25.3	17.4	17%	6.6	61%	6.1	1%	5.8	-1%	72%	40	1.18	0.81	0.32	0.30		0.28
AVE '08-'09	5.47	27.1	14.6	40%	6.9	54%	5.7	11%	5.5	5%	75%	34	1.18	0.65	0.30	0.26		0.24

TABLE 6-11
SUMMARY OF LOCAL LIMITS SAMPLING FOR IRON

IRON REMOVALS

BLUE INDICATES LESS THAN DETECTION LIMIT

Date	Flow mgd	Influent µg/l	Primary µg/l	Removal		Secondary µg/l	Removal		BAF µg/l	Removal		Effluent µg/l	Removal		TOTAL Removal %	Domestic µg/l	Mass in Pounds				
				%	%		%	%		%	%		Influent	Primary			Secondary	BAF	Effluent		
2/28/2002	4.62	580	730	-26%								70			88%	1,500	22.3	28.1			2.7
6/18/2002	5.43	840	760	10%	80	89%						70	13%	92%			38.0	34.4	3.6		3.2
9/29/2002	4.31	660	750	-14%	100	87%						99	1%	85%			23.7	27.0	3.6		3.6
11/7/2002	4.84	640	800	-25%	190	76%						190	0%	70%		710	25.8	32.3	7.7		7.7
3/11/2003	7.14	520	770	-48%	340	56%						150	56%	71%			31.0	45.9	20.2		8.9
5/20/2003	6.12	710	870	-23%	150	83%						110	27%	85%			36.2	44.4	7.7		5.6
8/20/2003	5.75	780	1000	-28%	120	88%						130	-8%	83%			37.4	48.0	5.8		6.2
11/4/2003	6.28	580	720	-24%	92	87%						96	-4%	83%		1,105	30.4	37.7	4.8		5.0
2/25/2004	5.04	550	540	2%	100	81%						110	-10%	80%			23.1	22.7	4.2		4.6
5/19/2004	5.96	520	720	-38%	170	76%						210	-24%	60%			25.8	35.8	8.5		10.4
8/25/2004	4.82	580	600	-3%	81	87%						90	-11%	84%		1,300	23.3	24.1	3.3		3.6
10/27/2004	5.44	450	440	2%	52	88%						50	4%	89%			20.4	20.0	2.4		2.3
2/16/2005	9.71	720	390	46%	80	79%	61	24%				57	7%	92%			58.3	31.6	6.5	4.9	4.6
5/18/2005	6.13	740	840	-14%	180	79%	420	-133%				160	62%	78%			37.8	42.9	9.2	21.5	8.2
8/16/2005	5.79	1500	380	75%	65	83%	90	-38%				160	-78%	89%		2,800	72.4	18.3	3.1	4.3	7.7
11/15/2005	5.69	1000	350	65%	130	63%	71	45%				60	15%	94%			47.5	16.6	6.2	3.4	2.8
2/3/2006	6.12	570	400	30%	140	65%	94	33%				75	20%	87%			29.1	20.4	7.1	4.8	3.8
5/10/2006	5.24	860	360	58%	170	53%	51	70%				170	-233%	80%			37.6	15.7	7.4	2.2	7.4
9/20/2006	5.07	790	490	38%	71	86%	67	6%				54	19%	93%		5,500	33.4	20.7	3.0	2.8	2.3
11/29/2006	9.05	400	180	55%	57	68%	50	12%				50		88%			30.2	13.6	4.3	3.8	3.8
2/14/2007	7.14	430	320	26%	120	63%	82	32%				69	16%	84%			25.6	19.1	7.1	4.9	4.1
5/9/2007	4.32	420	390	7%	55	86%	50	9%				50		88%			15.1	14.1	2.0	1.8	1.8
8/21/2007	4.06	870	260	70%	90	65%	72	20%				53	26%	94%		1,400	29.5	8.8	3.0	2.4	1.8
2/5/2008	6.22	560	300	46%	80	73%	50	38%				50		91%			29.0	15.6	4.1	2.6	2.6
10/31/2007	5.85	660	300	55%	82	73%	50	39%				50		92%			32.2	14.6	4.0	2.4	2.4
5/13/2008	6.00	760	360	53%	58	84%	50	14%				50		93%			38.0	18.0	2.9	2.5	2.5
8/20/2008	4.76	1000	390	61%	88	77%	57	35%				50	12%	95%		2,000	39.7	15.5	3.5	2.3	2.0
11/5/2008	4.90	680	320	53%	82	74%	59	28%				59	0%	91%			27.8	13.1	3.4	2.4	2.4
2/25/2009	6.85	340	310	9%	92	70%	51	45%				50	2%	85%			19.4	17.7	5.3	2.9	2.9
6/3/2009	5.12	530	280	47%	59	79%	80	-36%				62	23%	88%			22.6	12.0	2.5	3.4	2.6
AVE	5.79	675	511	19%	109	77%	84	13%				90	-3%	86%		2,039	32	24	5	4	4
AVE '08-'09	5.41	638	325	42%	80	75%	62	18%				55	9%	90%		2,000	30	14	4	3	2

TABLE 6-12A
SUMMARY OF LOCAL LIMITS SAMPLING FOR LEAD

LEAD REMOVALS

BLUE INDICATES LESS THAN DETECTION LIMIT

Date	Flow mgd	Influent µg/l	Primary µg/l	Removal %	Secondary µg/l	Removal %	BAF µg/l	Removal %	Effluent µg/l	Removal %	TOTAL Removal %	Domestic µg/l	Mass in Pounds				
													Influent	Primary	Secondary	BAF	Effluent
2/28/2002	4.62	2	2						2			6.6	0.08	0.03			0.08
6/18/2002	5.43	5.6	2.2	61%	2	9%			2		64%		0.25	0.10			0.09
9/29/2002	4.31	4.3	3.4	21%	2	41%			2		53%		0.15	0.12	0.07		0.07
11/7/2002	4.84	2.9	2	31%	2	0%			2		31%	4.1	0.12	0.08	0.08		0.08
3/11/2003	7.14	3.2	2.6	19%	2	23%			2		38%		0.19	0.15	0.12		0.12
5/20/2003	6.12	4.1	2.5	39%	2	20%			2		51%		0.21	0.13	0.10		0.10
8/20/2003	5.75	4.6	6.1	-33%	2	67%			2		57%		0.22	0.29	0.10		0.10
11/4/2003	6.28	3.1	2.6	16%	2	23%			2		35%	5.35	0.16	0.14	0.10		0.10
2/25/2004	5.04	2.8	2	29%	2				2		29%		0.12	0.08	0.08		0.08
5/19/2004	5.96	3	2	33%	2				2		33%		0.15	0.10	0.10		0.10
8/25/2004	4.82	3.6	2.9	19%	2	31%			2		44%	4.3	0.14	0.12	0.08		0.08
10/27/2004	5.44	2	18	-800%	2	89%			2		0%		0.09	0.82	0.09		0.09
2/16/2005	9.71	3.0	2.4	20%	2	17%	2		2		33%		0.24	0.19	0.16	0.16	0.16
5/18/2005	6.13	2.5	2	20%	2		2		2		20%		0.13	0.10	0.10	0.10	0.10
8/16/2005	5.79	8.1	2.6	68%	2	23%	2		2		75%	2	0.39	0.13	0.10	0.10	0.10
11/15/2005	5.69	5.5	2	64%	2		2		2		64%		0.26	0.09	0.09	0.09	0.09
2/3/2006	6.12	3.9	2	49%	2		2		2		49%		0.20	0.10	0.10	0.10	0.10
5/10/2006	5.24	5.8	4.1	29%	1.0	76%	2.9		2.9	0%	50%		0.25	0.18	0.04	0.13	0.13
9/20/2006	5.07	3.8	2.1	45%	1	52%	1		1		74%	9.6	0.16	0.09	0.04	0.04	0.04
11/29/2006	9.05	1.7	1	41%	1		1		1		41%		0.13	0.08	0.08	0.08	0.08
2/14/2007	7.14	1.9	1.6	16%	1.3	19%	1	23%	1		47%		0.11	0.10	0.08	0.06	0.06
5/9/2007	4.32	1	1.2	-20%	1.0	17%	1.7	-70%	1.1	35%	-10%		0.04	0.04	0.04	0.06	0.04
8/21/2007	4.06	5.3	1.8	66%	1	44%	1.2	-20%	1	17%	81%	4.3	0.18	0.06	0.03	0.04	0.03
10/31/2007	5.85	3.3	1.6	52%	1	38%	1		1		70%		0.16	0.08	0.05	0.05	0.05
2/5/2008	6.22	2.8	1.7	39%	1	41%	1		1		64%		0.15	0.09	0.05	0.05	0.05
5/13/2008	6.00	3.7	1.7	54%	1	41%	1		1		73%		0.19	0.09	0.05	0.05	0.05
8/20/2008	4.76	6.9	1.9	72%	1	47%	1		1		86%	2.5	0.27	0.08	0.04	0.04	0.04
11/5/2008	4.90	3.5	1.8	49%	1	44%	1		1		71%		0.14	0.07	0.04	0.04	0.04
2/25/2009	6.85	1.8	1.8	0%	1	44%	1		1		44%		0.10	0.10	0.06	0.06	0.06
6/3/2009	5.12	2.9	1.0	66%	1	0%	1		1		66%		0.12	0.04	0.04	0.04	0.04
AVE	5.79	3.6	2.8	6%	1.6	35%	1.4	-22%	1.6	17%	49%	4.8	0.17	0.13	0.08	0.07	0.08
AVE '08-'09	5.47	3.8	1.7	50%	1.0	38%	1.0	-20%	1.0	17%	69%	3.4	0.16	0.08	0.05	0.05	0.05

TABLE 6-12B
 TOWN OF WEST WARWICK
 WATER POLLUTION CONTROL FACILITY
SUMMARY OF LEAD LOADING AND REMOVAL

LEAD CONCENTRATION						
MONTH/YEAR	FLOW MGD	Total Lead (µg/l)		Total Lead (µg/l)		LEAD REMOVAL %
		Mo. Avg. mg/l	Day Max. mg/l	Mo. Avg. mg/l	Day Max. mg/l	
Jul-08	4.2	3.60	4.20	1	1	72%
Aug-08	4.6	3.20	4.50	1	1	69%
Sep-08	6.0	3.70	4.20	1	1	73%
Oct-08	5.9	3.20	6.00	1	1	69%
Nov-08	5.7	3.40	5.70	1	1	71%
Dec-08	8.7	5.00	18.00	1	1	80%
Jan-09	6.8	2.10	2.90	1	1	52%
Feb-09	6.4	2.00	2.00	1	1	50%
Mar-09	6.6	2.00	3.00	1	1	50%
Apr-09	8.1	2.60	4.40	1	1	62%
May-09	6.7	2.60	4.40	1	1	62%
Jun-09	5.3	3.60	5.10	1	1	72%
AVERAGE	6.3	3.1	5.4	1	1	65%

LEAD MASS					
MONTH/YEAR	Total Lead (lb/day)		Total Lead (lb/day)		LEAD REMOVAL %
	Mo. Avg. LBS/D	Day Max. LBS/D	Mo. Avg. LBS/D	Day Max. LBS/D	
Jul-08	0.13	0.15	0.04	0.04	72%
Aug-08	0.12	0.17	0.04	0.04	69%
Sep-08	0.19	0.21	0.05	0.05	73%
Oct-08	0.16	0.30	0.05	0.05	69%
Nov-08	0.16	0.27	0.05	0.05	71%
Dec-08	0.36	1.31	0.07	0.07	80%
Jan-09	0.12	0.16	0.06	0.06	52%
Feb-09	0.11	0.11	0.05	0.05	50%
Mar-09	0.11	0.17	0.06	0.06	50%
Apr-09	0.18	0.30	0.07	0.07	62%
May-09	0.15	0.25	0.06	0.06	62%
Jun-09	0.16	0.23	0.04	0.04	72%
AVERAGE	0.16	0.30	0.05	0.05	65%

Date	AVE. FLOW (mgd)	influent	primary effl	secondary effl	BAF eff	µg/l effluent	LEAD % REMOVAL	DOMESTIC
	MGD	mg/l	mg/l	mg/l	mg/l	mg/l	%	
8/20/2008	4.76	6.9	1.9	1	1	1	86%	2.5
11/5/2008	4.90	3.5	1.8	1	1	1	71%	
2/25/2009	6.85	1.8	1.8	1	1	1	44%	
6/3/2009	5.12	2.9	1	1	1	1	66%	
AVERAGE	5.41	3.8	1.6	1	1.0	1	67%	2.5

Date	INFLUENT	PRIMARY	SECONDARY	BAF eff	EFFLUENT	LEAD
	LBS/D	LBS/D	LBS/D	LBS/D	LBS/D	% REMOVAL
8/20/2008	0.274	0.075	0.040	0.040	0.040	86%
11/5/2008	0.143	0.074	0.041	0.041	0.041	71%
2/25/2009	0.103	0.103	0.057	0.057	0.057	44%
6/3/2009	0.124	0.043	0.043	0.043	0.043	66%
Average	0.161	0.074	0.045	0.045	0.045	67%

**TABLE 6-13
SUMMARY OF LOCAL LIMITS SAMPLING FOR MERCURY**

MERCURY REMOVALS

BLUE INDICATES LESS THAN DETECTION LIMIT

Date	Flow mgd	Influent µg/l	Primary µg/l	Removal %	Secondary µg/l	Removal %	BAF µg/l	Removal %	Effluent µg/l	Removal %	TOTAL Removal %	Domestic µg/l	Mass in Pounds					
													Influent	Primary	Secondary	BAF	Effluent	
2/28/2002	4.62	0.5	0.5		0.5				0.5			0.5						
6/18/2002	5.43	0.5	0.5		0.5				0.5					0.02	0.02	0.02		0.02
9/29/2002	4.31	0.5	0.5		0.5				0.5					0.02	0.02	0.02		0.02
11/7/2002	4.84	0.5	0.5		0.5				0.5			0.5		0.02	0.02	0.02		0.02
3/11/2003	7.14	0.5	0.5		0.5				0.5					0.03	0.03	0.03		0.03
5/20/2003	6.12	0.5	0.5		0.5				0.5					0.03	0.03	0.03		0.03
8/20/2003	5.75	0.5	0.5		0.5				0.5			0.5		0.02	0.02	0.02		0.02
11/4/2003	6.28	0.5	0.5		0.5				0.5					0.03	0.03	0.03		0.03
2/25/2004	5.04	0.5	0.5		0.5				0.5					0.02	0.02	0.02		0.02
5/19/2004	5.96	0.5	0.5		0.5				0.5					0.02	0.02	0.02		0.02
8/25/2004	4.82	0.5	0.5		0.5				0.5			0.5		0.02	0.02	0.02		0.02
10/27/2004	5.44	0.5	0.5		0.5				0.5					0.02	0.02	0.02		0.02
2/16/2005	9.71	0.5	0.5		0.5		0.5		0.5					0.04	0.04	0.04	0.04	0.04
5/18/2005	6.13	0.5	0.5		0.5		0.5		0.5					0.03	0.03	0.03	0.03	0.03
8/16/2005	5.79	0.5	0.5		0.5		0.5		0.5			0.5		0.02	0.02	0.02	0.02	0.02
11/15/2005	5.69	0.5	0.5		0.5		0.5		0.5					0.02	0.02	0.02	0.02	0.02
2/3/2006	6.12	0.5	0.5		0.5		0.5		0.5					0.03	0.03	0.03	0.03	0.03
5/10/2006	5.24	0.2	0.2		0.2		0.2		0.2					0.01	0.01	0.01	0.01	0.01
9/20/2006	5.07	0.2	0.2		0.2		0.2		0.2			0.2		0.01	0.01	0.01	0.01	0.01
11/29/2006	9.05	0.2	0.2		0.2		0.2		0.2					0.02	0.02	0.02	0.02	0.02
2/14/2007	7.14	0.2	0.2		0.2		0.2		0.2					0.01	0.01	0.01	0.01	0.01
5/9/2007	4.32	0.2	0.2		0.2		0.2		0.2					0.01	0.01	0.01	0.01	0.01
8/21/2007	4.06	0.2	0.2		0.2		0.2		0.2			0.2		0.01	0.01	0.01	0.01	0.01
10/31/2007	5.85	0.2	0.2		0.2		0.2		0.2					0.01	0.01	0.01	0.01	0.01
2/5/2008	6.22	0.2	0.2		0.2		0.2		0.2					0.01	0.01	0.01	0.01	0.01
5/13/2008	6.00	0.2	0.2		0.2		0.2		0.2					0.01	0.01	0.01	0.01	0.01
8/20/2008	4.76	0.21	0.2		0.2		0.2		0.2			0.2		0.01	0.01	0.01	0.01	0.01
11/5/2008	4.90	0.2	0.2		0.2		0.2		0.2					0.01	0.01	0.01	0.01	0.01
2/25/2009	6.85	0.2	0.2		0.2		0.2		0.2					0.01	0.01	0.01	0.01	0.01
6/3/2009	5.12	0.25	0.2		0.2		0.2		0.2					0.01	0.01	0.01	0.01	0.01
AVE	5.79	0.4	0.4		0.4		0.3		0.4			0.4		0.02	0.02	0.02	0.01	0.02
AVE '08-'09	5.47	0.2	0.2		0.2		0.2		0.2			0.2		0.01	0.01	0.01	0.01	0.01

TABLE 6-14

SUMMARY OF LOCAL LIMITS SAMPLING FOR NICKEL

NICKEL REMOVALS

BLUE INDICATES LESS THAN DETECTION LIMIT

Date	Flow	Influent	Primary	Removal	Secondary	Removal	BAF	Removal	Effluent	Removal	TOTAL Removal	Domestic	Influent	Primary	Secondary	BAF	Effluent
	mgd	µg/l	µg/l	%	µg/l	%	µg/l	%	µg/l	%	%	µg/l	Mass in Pounds				
2/28/2002	4.62	20	20		20				20			20	0.77	0.77	0.77		0.77
6/18/2002	5.43	20	20		20				20				0.91	0.91	0.91		0.91
9/29/2002	4.31	20	20		20				20				0.72	0.72	0.72		0.72
11/7/2002	4.84	20	20		20				20			20	0.81	0.81	0.81		0.81
3/11/2003	7.14	20	20		20				20				1.19	1.19	1.19		1.19
5/20/2003	6.12	20	20		20				20				1.02	1.02	1.02		1.02
8/20/2003	5.75	20	20		20				20			20	0.96	0.96	0.96		0.96
11/4/2003	6.28	20	20		20				20				1.05	1.05	1.05		1.05
2/25/2004	5.04	20	20		20				20				0.84	0.84	0.84		0.84
5/19/2004	5.96	20	20		20				20				0.99	0.99	0.99		0.99
8/25/2004	4.82	20	20		20				20			20	0.80	0.80	0.80		0.80
10/27/2004	5.44	20	20		20				20				0.91	0.91	0.91		0.91
2/16/2005	9.71	20	20		20		20		20				1.62	1.62	1.62	1.62	1.62
5/18/2005	6.13	20	20		20		20		20				1.02	1.02	1.02	1.02	1.02
8/16/2005	5.79	20	20		20		20		20			25	0.97	0.97	0.97	0.97	0.97
11/15/2005	5.69	20	20		20		20		20				0.95	0.95	0.95	0.95	0.95
2/3/2006	6.12	20	20		20		20		20				1.02	1.02	1.02	1.02	1.02
5/10/2006	5.24	1.9	1.6	16%	1	38%	1		1		47%		0.08	0.07	0.04	0.04	0.04
9/20/2006	5.07	24	24		24		24		24			24	1.01	1.01	1.01	1.01	1.01
11/29/2006	9.05	1.4	1.3	7%	1	23%	1		1.3	-30%	7%		0.11	0.10	0.08	0.08	0.10
2/14/2007	7.14	1.8	1.6	11%	1.5	6%	1.5	0%	1.4	7%	22%		0.11	0.10	0.09	0.09	0.08
5/9/2007	4.32	1	1.7	-70%	1.3	24%	1.4	-8%	1.2	14%	-20%		0.04	0.06	0.05	0.05	0.04
8/21/2007	4.06	4.4	3.9	11%	3.7	5%	4.4	-19%	3.4	23%	23%	3.4	0.15	0.13	0.13	0.15	0.12
10/31/2007	5.85	4.6	4.1	11%	3.7	10%	2.4	35%	4.3	-79%	7%		0.22	0.20	0.18	0.12	0.21
2/5/2008	6.22	1.8	1.2	33%	1	17%	1		1	0%	44%		0.09	0.06	0.05	0.05	0.05
5/13/2008	6.00	2.7	2.6	4%	1	62%	1		1	0%	63%		0.14	0.13	0.05	0.05	0.05
8/20/2008	4.76	4.0	2.6	35%	1.2	54%	1		1	0%	75%	4.3	0.16	0.10	0.05	0.04	0.04
11/5/2008	4.90	1.7	1.8	-6%	1.2	33%	8.7		1.1	87%	35%		0.07	0.07	0.05	0.36	0.04
2/25/2009	6.85	1.7	1.7	0%	1	41%	1		1	0%	41%		0.10	0.10	0.06	0.06	0.06
6/3/2009	5.12	2.3	2.0	13%	1	50%	1.2		2.5	-108%	-9%		0.10	0.09	0.04	0.05	0.11
AVE	5.79	13.1	13.0	5%	12.8	30%	8.3	2%	12.8	-8%	28%	17	0.63	0.63	0.61	0.43	0.62
AVE '08-'09	5.47	2.9	2.5	13%	1.7	34%	2.6	8%	1.9	-10%	35%	4	0.13	0.11	0.08	0.11	0.08

TABLE 6-15

SUMMARY OF LOCAL LIMITS SAMPLING FOR SILVER

SILVER REMOVALS

BLUE INDICATES LESS THAN DETECTION LIMIT

Date	Flow mgd	Influent	Primary	Removal	Secondary	Removal	BAF	Removal	Effluent	Removal	TOTAL	Domestic	Influent	Primary	Secondary	BAF	Effluent
		µg/l	µg/l	%	µg/l	%	µg/l	%	µg/l	%	%	µg/l	Mass in Pounds				
2/28/2002	4.62	1	1		1				1			1	0.04	0.04	0.04		0.04
6/18/2002	5.43	1	1		1				1				0.05	0.05	0.05		0.05
9/29/2002	4.31	1	1		1				1				0.04	0.04	0.04		0.04
11/7/2002	4.84	1	1		1				1			1	0.04	0.04	0.04		0.04
3/11/2003	7.14	1	1		1				1				0.06	0.06	0.06		0.06
5/20/2003	6.12	1	1		1				1				0.05	0.05	0.05		0.05
8/20/2003	5.75	1	1		1				1			1	0.05	0.05	0.05		0.05
11/4/2003	6.28	1	1		1				1				0.05	0.05	0.05		0.05
2/25/2004	5.04	1	1		1				1				0.04	0.04	0.04		0.04
5/19/2004	5.96	1	1		1				1				0.05	0.05	0.05		0.05
8/25/2004	4.82	1	1		1				1			1	0.04	0.04	0.04		0.04
10/27/2004	5.44	1	1		1				1				0.05	0.05	0.05		0.05
2/16/2005	9.71	1	1		1		1		1				0.08	0.08	0.08	0.08	0.08
5/18/2005	6.13	1	1		1		1		1				0.05	0.05	0.05	0.05	0.05
8/16/2005	5.79	1	1		1		1		1			1	0.05	0.05	0.05	0.05	0.05
11/15/2005	5.69	1	1		1		1		1				0.05	0.05	0.05	0.05	0.05
2/3/2006	6.12	1	1		1		1		1				0.05	0.05	0.05	0.05	0.05
5/10/2006	5.24	1	1		1		1		1				0.04	0.04	0.04	0.04	0.04
9/20/2006	5.07	1	1		1		1		1			1	0.04	0.04	0.04	0.04	0.04
11/29/2006	9.05	1	1		1		1		1				0.08	0.08	0.08	0.08	0.08
2/14/2007	7.14	1	1		1		1		1				0.06	0.06	0.06	0.06	0.06
5/9/2007	4.32	1	1		1		1		1				0.04	0.04	0.04	0.04	0.04
8/21/2007	4.06	1	1		1		1		1			1	0.03	0.03	0.03	0.03	0.03
10/31/2007	5.85	1	1		1		1		1				0.05	0.05	0.05	0.05	0.05
2/5/2008	6.22	1	1		1		1		1				0.05	0.05	0.05	0.05	0.05
5/13/2008	6.00	1	1		1		1		1				0.05	0.05	0.05	0.05	0.05
8/20/2008	4.76	1	1		1		1		1			1	0.04	0.04	0.04	0.04	0.04
11/5/2008	4.90	1	1		1		1		1				0.04	0.04	0.04	0.04	0.04
2/25/2009	6.85	1	1		1		1		1				0.06	0.06	0.06	0.06	0.06
6/3/2009	5.12	1	1		1		1		1				0.04	0.04	0.04	0.04	0.04
AVE	5.79	1	1		1		1		1			1	0.05	0.05	0.05	0.05	0.05
AVE '08-'09	5.47	1	1		1		1		1			1	0.05	0.05	0.05	0.05	0.05

**TABLE 6-16A
SUMMARY OF LOCAL LIMITS SAMPLING FOR ZINC**

ZINC REMOVAL
BLUE INDICATES LESS THAN DETECTION LIMIT

Date	Flow mgd	Influent µg/l	Primary µg/l	Removal %	Secondary µg/l	Removal %	BAF µg/l	Removal %	Effluent µg/l	Removal %	TOTAL Removal %	Domestic µg/l	Mass in Pounds				
													Influent	Primary	Secondary	BAF	Effluent
2/28/2002	4.62	56	92	-64%					31		45%	642	2.2	3.5			1.2
6/18/2002	5.43	82	90	-10%	37	59			46	-24%	44%		3.7	4.1	1.7		2.1
9/29/2002	4.31	92	70	24%	35	50			36	-3%	61%		3.3	2.5	1.3		1.3
11/7/2002	4.84	82	62	24%	44	29%			56	-27%	32%	120	3.3	2.5	1.8		2.3
3/11/2003	7.14	80	52	35%	36	31%			32	11%	60%		4.8	3.1	2.1		1.9
5/20/2003	6.12	96	68	29%	43	37%			45	-5%	53%		4.9	3.5	2.2		2.3
8/20/2003	5.75	110	66	40%	57	14%			44	23%	60%	170	5.3	3.2	2.7		2.1
11/4/2003	6.28	68	68	0%	41	40%			42	-2%	38%		3.6	3.6	2.1		2.2
2/25/2004	5.04	77	62	19%	53	15%			55	-4%	29%		3.2	2.6	2.2		2.3
5/19/2004	5.96	83	72	13%	63	13%			61	3%	27%		4.1	3.6	3.1		3.0
8/25/2004	4.82	69	67	3%	34	49%			36	-6%	48%	180	2.8	2.7	1.4		1.4
10/27/2004	5.44	77	70	9%	50	29%			45	10%	42%		3.5	3.2	2.3		2.0
2/16/2005	9.71	63	58	8%	27	53%	29	-7%	29	0%	54%		5.1	4.7	2.2	2.3	2.3
5/18/2005	6.13	73	55	25%	38	31%	39	-3%	39	0%	47%		3.7	2.8	1.9	2.0	2.0
8/16/2005	5.79	140	75	46%	31	59%	35	-13%	38	-10%	73%	320	6.8	3.6	1.5	1.7	1.8
11/15/2005	5.69	140	52	63%	38	27%	38	0%	40	-5%	71%		6.6	2.5	1.8	1.8	1.9
2/3/2006	6.12	91	71	22%	57	20%	46	19%	49	-5%	46%		4.6	3.6	2.9	2.3	2.5
5/10/2006	5.24	110	56	49%	25	55%	27	-8%	25	8%	77%		4.8	2.4	1.1	1.2	1.1
9/20/2006	5.07	99	71	28%	27	62%	44	-63%	30	52%	70%	450	4.2	3.0	1.1	1.9	1.3
11/29/2006	9.05	56	44	21%	17	61%	12	29%	12	0%	79%		4.2	3.3	1.3	0.9	0.9
2/14/2007	7.14	71	58	18%	45	22%	36	20%	31	11%	56%		4.2	3.5	2.7	2.1	1.8
5/9/2007	4.32	120	51	58%	29	43%	37	-28%	28	31%	77%		4.3	1.8	1.0	1.3	1.0
8/21/2007	4.06	120	51	58%	28	45%	30	-7%	25	18%	79%	200	4.1	1.7	0.9	1.0	0.8
10/31/2007	5.85	88	42	52%	25	40%	21	16%	20	4%	77%		4.3	2.0	1.2	1.0	1.0
2/5/2008	6.22	91	89	2%	30	66%	29	3%	29	0%	68%		4.7	4.6	1.6	1.5	1.5
5/13/2008	6.00	110	64	42%	32	50%	31	3%	29	6%	74%		5.5	3.2	1.6	1.6	1.5
8/20/2008	4.76	120	54	55%	23	57%	18	22%	17	4%	86%	400	4.8	2.1	0.9	0.7	0.7
11/5/2008	4.90	79	66	16%	27	59%	27	0%	29	-7%	63%		3.2	2.7	1.1	1.1	1.2
2/25/2009	6.85	70	59	16%	36	39%	31	14%	32	-3%	54%		4.0	3.4	2.1	1.8	1.8
6/3/2009	5.12	76	39	49%	25	36%	28	-12%	24	16%	68%		3.2	1.7	1.1	1.2	1.0
AVE	5.79	90	63	25%	36	413%	31	-1%	35	3%	59%	310	4.24	3.02	1.76	1.53	1.68
AVE '08-'09	5.41	94	58	36%	28	49%	27	5%	26	5%	71%	300	4.23	2.68	1.31	1.23	1.19

TABLE 6-16B
TOWN OF WEST WARWICK
WATER POLLUTION CONTROL FACILITY
SUMMARY OF ZINC LOADING AND REMOVAL

MONTH/YEAR	FLOW	Total Zinc (µg/L)		Total Zinc(µg/L)		ZINC REMOVAL
		Mo. Avg.	Day Max.	Mo. Avg.	Day Max.	
	MGD	µg/l	µg/l	µg/l	µg/l	%
Jul-08	4.2	89.8	110	23.6	25.0	74%
Aug-08	4.6	86.5	110	19.0	25.0	78%
Sep-08	6.0	70.8	92	15.6	20.0	78%
Oct-08	5.9	60.3	69	17.0	20.0	72%
Nov-08	5.7	68.3	77	19.8	21.0	71%
Dec-08	8.7	56.0	65	24.2	36.0	57%
Jan-09	6.8	74.8	83	31.5	49.0	58%
Feb-09	6.4	62.0	72	31.8	34.0	49%
Mar-09	6.6	62.0	22	22.0	22.0	65%
Jun-09	5.3	76.0	76	24.0	24.0	68%
AVERAGE	6.0	70.7	77.6	22.9	27.6	68%

MONTH/YEAR	Total Zinc (lb/day)		Total Zinc (lb/day)		ZINC % REMOVAL
	Mo. Avg.	Day Max.	Mo. Avg.	Day Max.	
	LBS/D	LBS/D	LBS/D	LBS/D	%
Jul-08	3.15	3.85	0.83	0.88	74%
Aug-08	3.32	4.22	0.73	0.96	78%
Sep-08	3.54	4.60	0.78	1.00	78%
Oct-08	2.97	3.40	0.84	0.98	72%
Nov-08	3.25	3.66	0.94	1.00	71%
Dec-08	4.06	4.72	1.76	2.61	57%
Jan-09	4.24	4.71	1.79	2.78	58%
Feb-09	3.31	3.84	1.70	1.81	49%
Mar-09	3.41	1.21	1.21	1.21	65%
Jun-09	3.36	3.36	1.06	1.06	68%
AVERAGE	3.46	3.76	1.16	1.43	66%

Date	AVE. FLOW (mgd)	influent	primary effl	secondary effl	BAF eff	µg/l effluent	ZINC % REMOVAL	DOMESTIC
	MGD	µg/l	µg/l	µg/l	µg/l	µg/l	%	µg/l
8/20/2008	4.76	120	54	23	18	17	86%	450
11/5/2008	4.90	79	66	27	27	29	63%	
2/25/2009	6.85	70	59	36	31	32	54%	
6/3/2009	5.12	76	39	25	28	24	68%	
AVERAGE	5.41	86	55	28	26	26	68%	450

Date	INFLUENT	PRIMARY	SECONDARY	BAF eff	EFFLUENT	ZINC
	LBS/D	LBS/D	LBS/D	LBS/D	LBS/D	% REMOVAL
8/20/2008	4.764	2.144	0.913	0.715	0.675	81%
11/5/2008	3.228	2.697	1.103	1.103	1.185	66%
2/25/2009	3.997	3.369	2.056	1.770	1.827	49%
6/3/2009	3.245	1.665	1.068	1.196	1.025	67%
Average	3.81	2.47	1.28	1.20	1.18	66%

TABLE 6-17

SUMMARY OF LOCAL LIMITS SAMPLING FOR NITROGEN

NITROGEN REMOVAL

BLUE INDICATES LESS THAN DETECTION LIMIT

Date	Flow	Influent	Primary	Removal	Secondary	Removal	BAF	Removal	Effluent	Removal	TOTAL	Domestic	Influent	Primary	Secondary	BAF	Effluent
	mgd	mg/l	mg/l	%	mg/l	%	mg/l	%	mg/l	%	%	mg/l	Mass in Pounds				
9/20/2006	5.07	34.05	27.04	21%	19.0	30%	9.70	49%	9.80	-1%	71%	81.08	1440	1144	803	410	414
11/29/2006	9.05	14.69	16.97	-16%	17.5	-3%	16.25	7%	15.26	6%	-4%		1109	1281	1321	1226	1151
2/14/2007	7.14	30.00	38.68	-29%	33.9	12%	29.98	12%	30.96	-3%	-3%		1786	2303	2019	1785	1844
5/9/2007	4.32	30.04	30.03	0%	33.3	-11%	19.97	40%	19.84	1%	34%		1082	1082	1200	719	715
8/21/2007	4.06	47.05	29.04	38%	31.0	-7%	7.48	76%	6.84	9%	85%	70.074	1593	983	1050	253	232
10/31/2007	5.85	57.06	45.05	21%	55.0	-22%	9.30	83%	8.45	9%	85%		2784	2198	2683	454	412
2/5/2008	6.22	27.65	28.06	-1%	20.1	29%	20.10	0%	19.10	5%	31%		1434	1456	1041	1043	991
5/13/2008	6.00	32.02	28.56	11%	25.3	11%	14.56	42%	14.43	1%	55%		1602	1429	1266	728	722
8/20/2008	4.76	33.03	31.04	6%	22.9	26%	4.82	79%	5.00	-4%	85%	92.058	1311	1232	909	191	198
11/5/2008	4.90	38.05	29.04	24%	21.4	26%	6.05	72%	6.24	-3%	84%		1555	1187	875	247	255
2/25/2009	6.85	22.02	20.30	8%	13.6	33%	9.50	30%	9.53	0%	57%		1257	1159	775	542	544
6/3/2009	5.12	39.02	32.00	18%	20.8	35%	5.65	73%	5.75	-2%	85%		1666	1366	886	241	246
AVE	5.78	34	30	8%	26	13%	12.78	47%	12.60	1%	55%	81	1552	1402	1236	653	644
AVE '08-09	5.41	33	28	14%	20	30%	6.50	63%	6.63	-2%	78%	92	1447	1236	861	306	311

TABLE 6-18

SUMMARY OF LOCAL LIMITS SAMPLING FOR PHOSPHORUS

PHOSPHORUS REMOVAL

BLUE INDICATES LESS THAN DETECTION LIMIT

Date	Flow mgd	Influent mg/l	Primary mg/l	Removal %	Secondary mg/l	Removal %	BAF mg/l	Removal %	Effluent mg/l	Removal %	TOTAL Removal %	Domestic mg/l	Mass in Pounds				
													Influent	Primary	Secondary	BAF	Effluent
9/20/2006	5.07	8.9	5.9	34%	0.69	88%			0.49		94%	16.0	376	249	29		21
11/29/2006	9.05	4.5	1.8	60%	0.76	58%			0.63		86%		340	136	57		48
2/14/2007	7.14	5.4	5.1	6%	3.40	33%			3.60		33%		322	304	202		214
5/9/2007	4.32	5.6	4.1	27%	0.71	83%			0.39		93%		202	148	26		14
8/21/2007	4.06	9.8	3.6	63%	1.60	56%	1.10	31%	1.10	0%	89%	7.4	332	122	54	37	37
10/31/2007	5.85	6.7	3.1	54%	0.64	79%	0.19	70%	0.18	5%	97%		327	151	31	9	9
2/5/2008	6.22	4.7	3.4	28%	2.00	41%	2.00	0%	1.80	10%	62%		244	176	104	104	93
5/13/2008	6.00	8.2	3.5	57%	1.40	60%	1.20	14%	1.10	8%	87%		410	175	70	60	55
8/20/2008	4.76	6.2	4.4	29%	0.94	79%	0.37	61%	0.34	8%	95%	12.0	246	175	37	15	13
11/5/2008	4.90	7.2	3.9	46%	1.10	72%	0.61	45%	0.57	7%	92%		294	159	45	25	23
2/25/2009	6.85	5.2	5.2	0%	3.20	38%	5.00	-56%	3.70	26%	29%		297	297	183	285	211
6/3/2009	5.12	7.2	3.4	53%	1.10	68%	0.87	21%	0.84	3%	88%		307	145	47	37	36
AVE	5.78	7	4	38%	1.46	63%	1.42	23%	1.23	8%	79%	12	308	186	74	72	65
AVE '08-09	5.41	6	4	32%	1.59	64%	1.71	17%	1.36	11%	76%	12	286	194	78	91	71

FIGURE 6-1
AVERAGE & PEAK DAILY FLOWS
JULY 2008 TO JUNE 2009

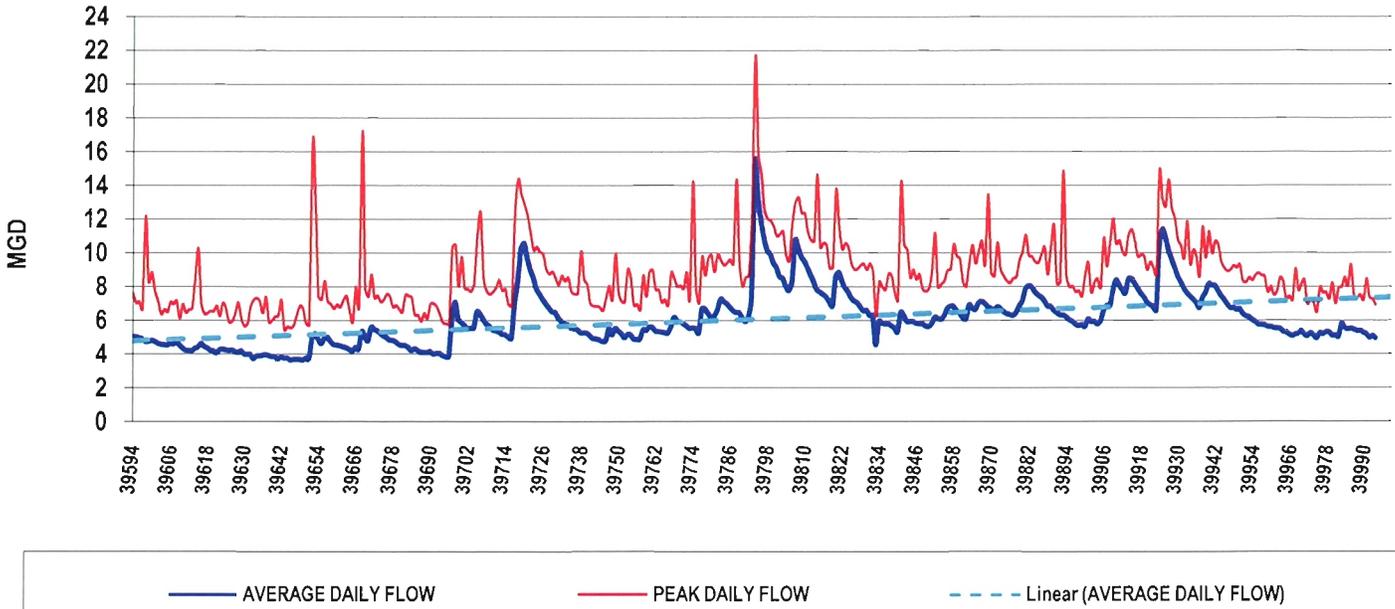


FIGURE 6-2
AVERAGE - MONTHLY FLOW VS MONTHLY LIMIT
JULY 2004 TO JUNE 2009

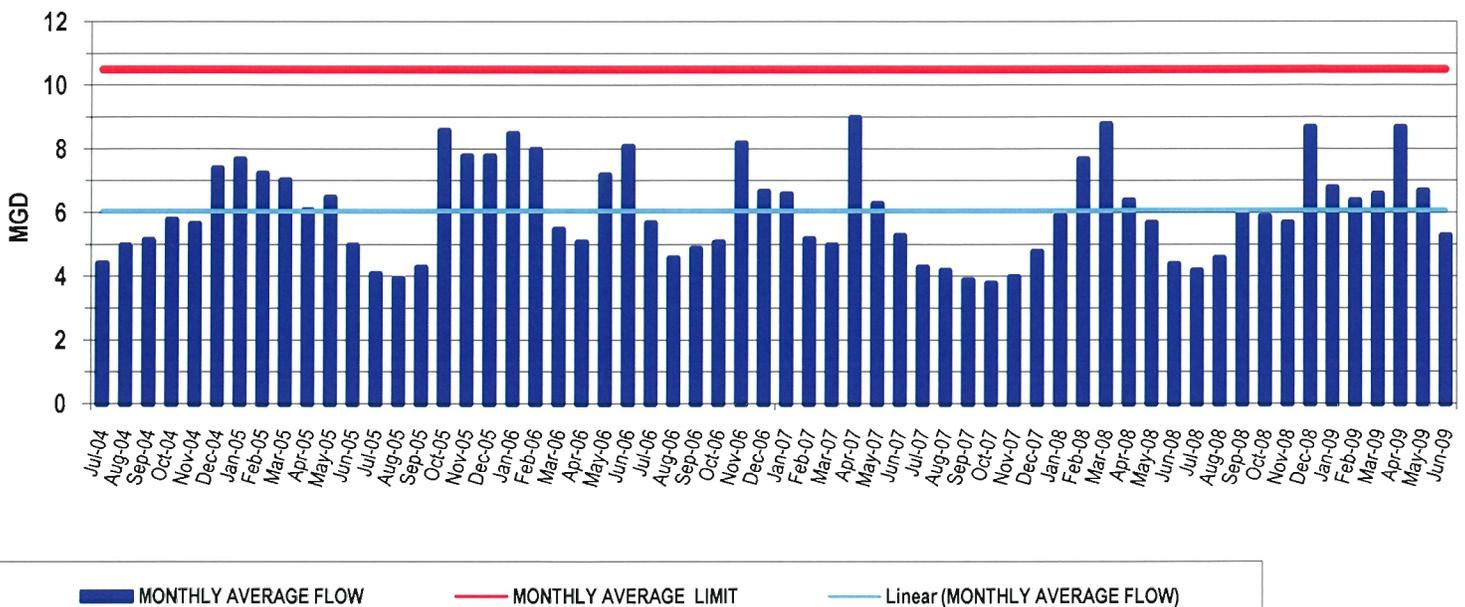


FIGURE 6-3
 AVERAGE-DAILY AND MONTHLY FLOW VS MONTHLY LIMIT
 JULY 2008 TO JUNE 2009

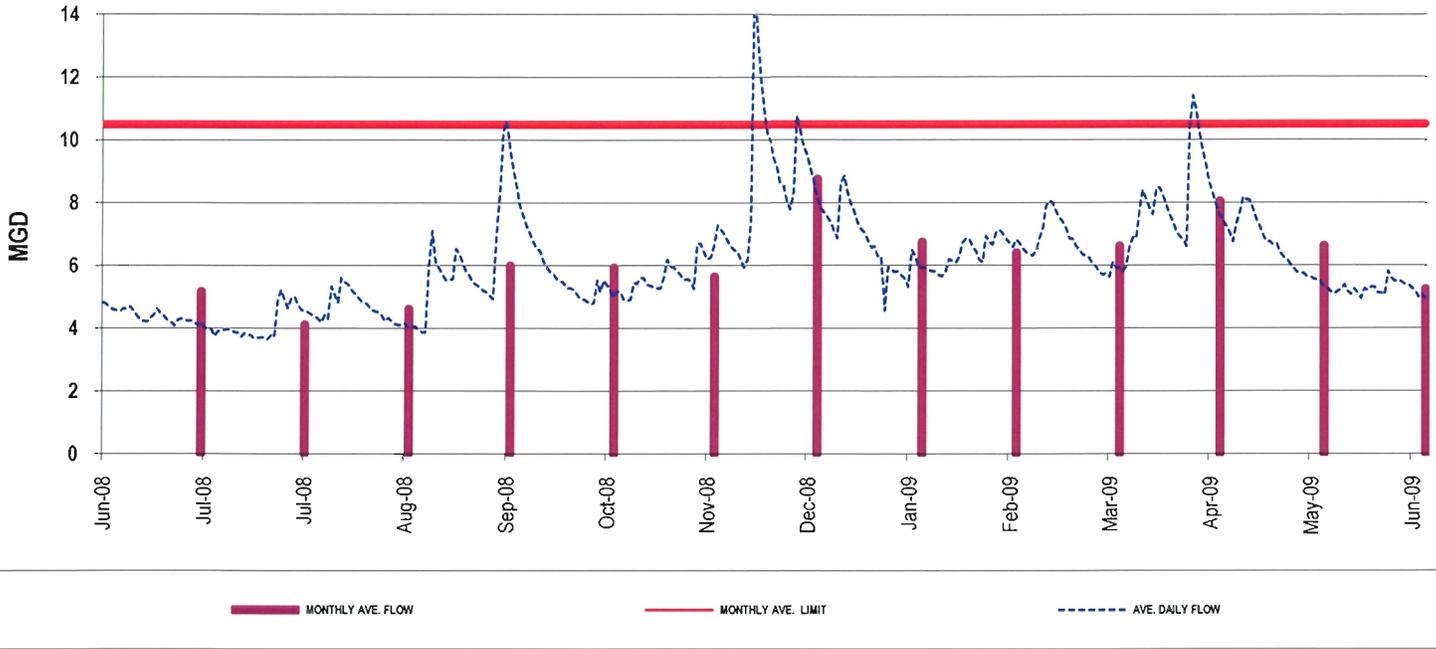


FIGURE 6-4
 BOD & CBOD MONTHLY VS LIMITS
 JULY 2004 TO JUNE 2009

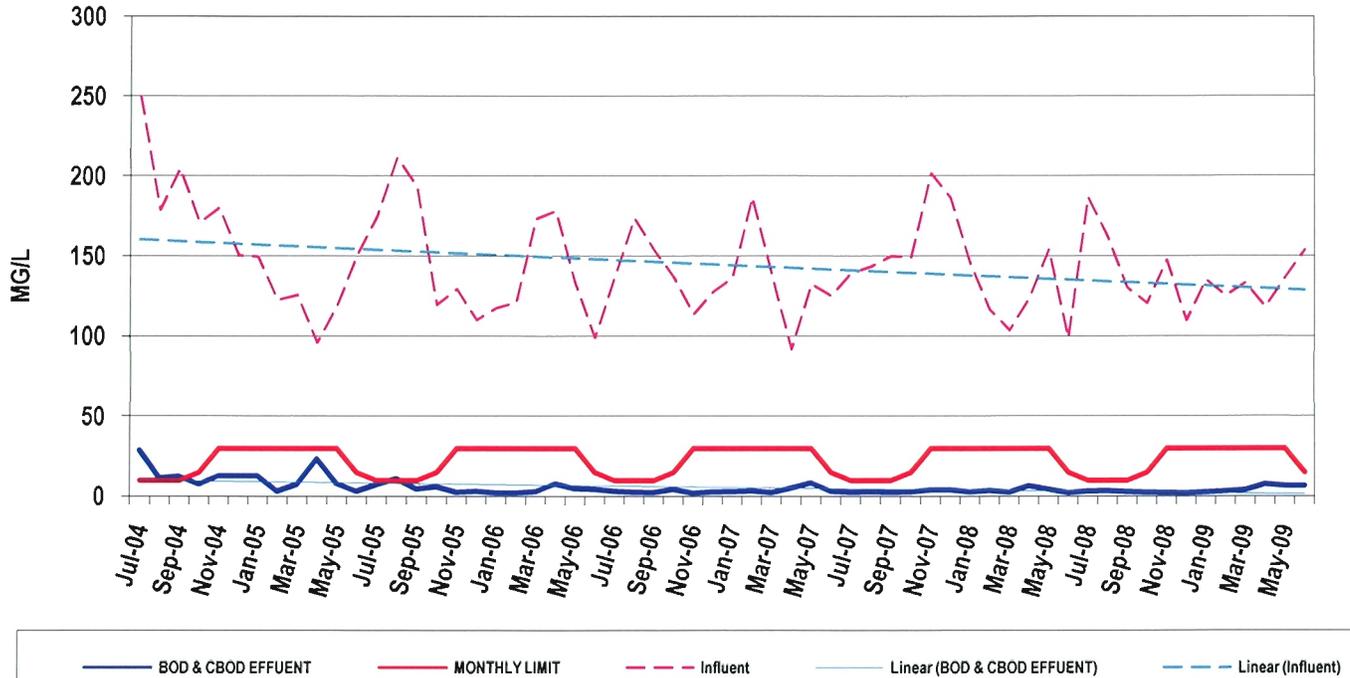


FIGURE 6-5
BOD & CBOD MONTHLY VS LIMITS
JULY 2008 TO JUNE 2009

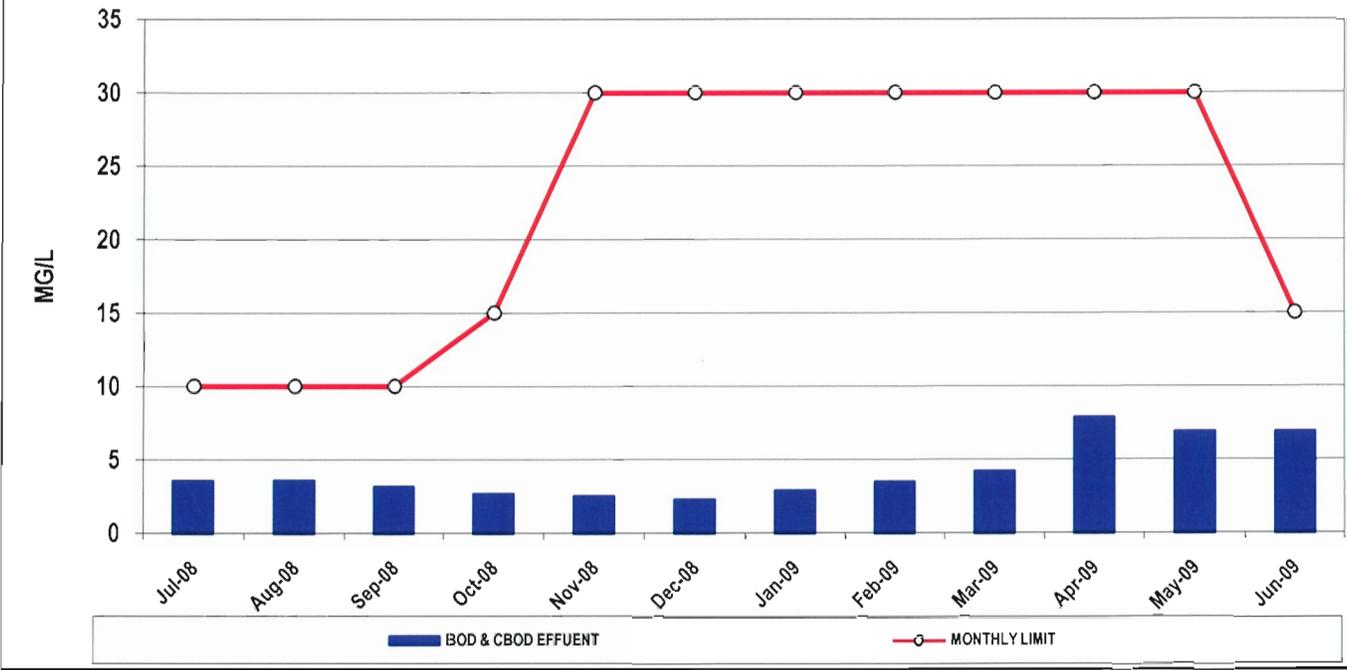
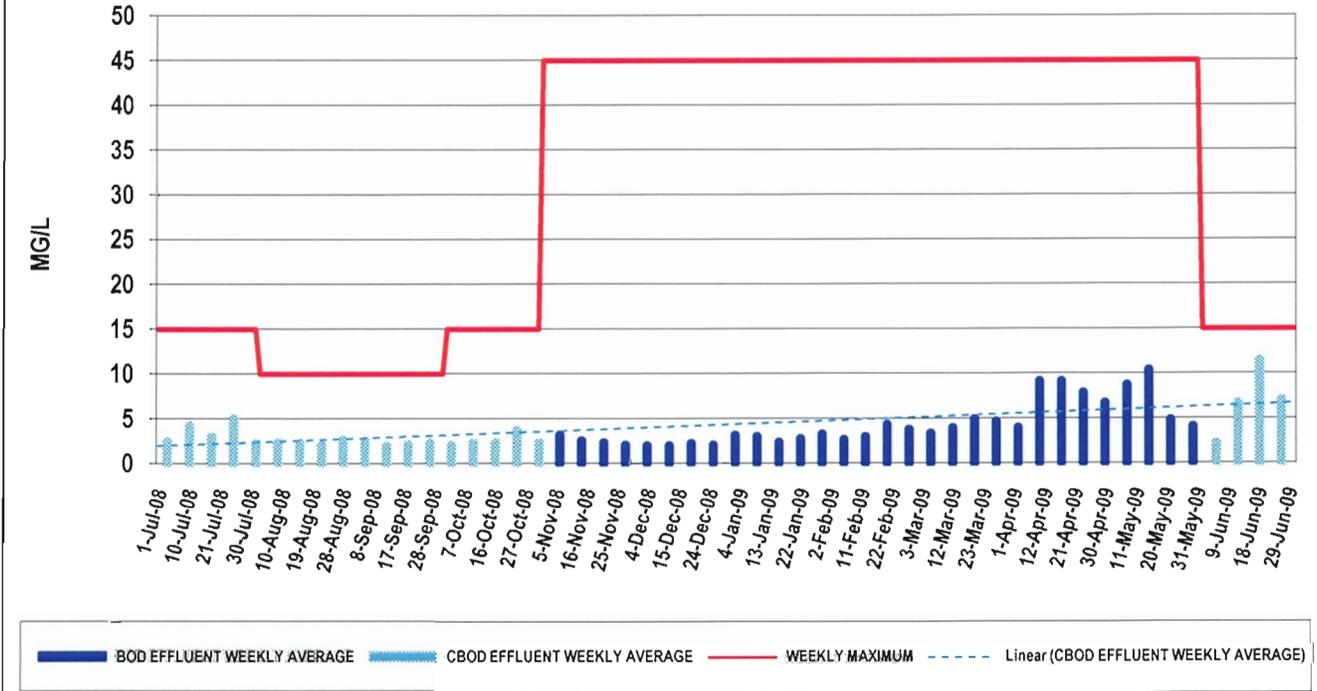
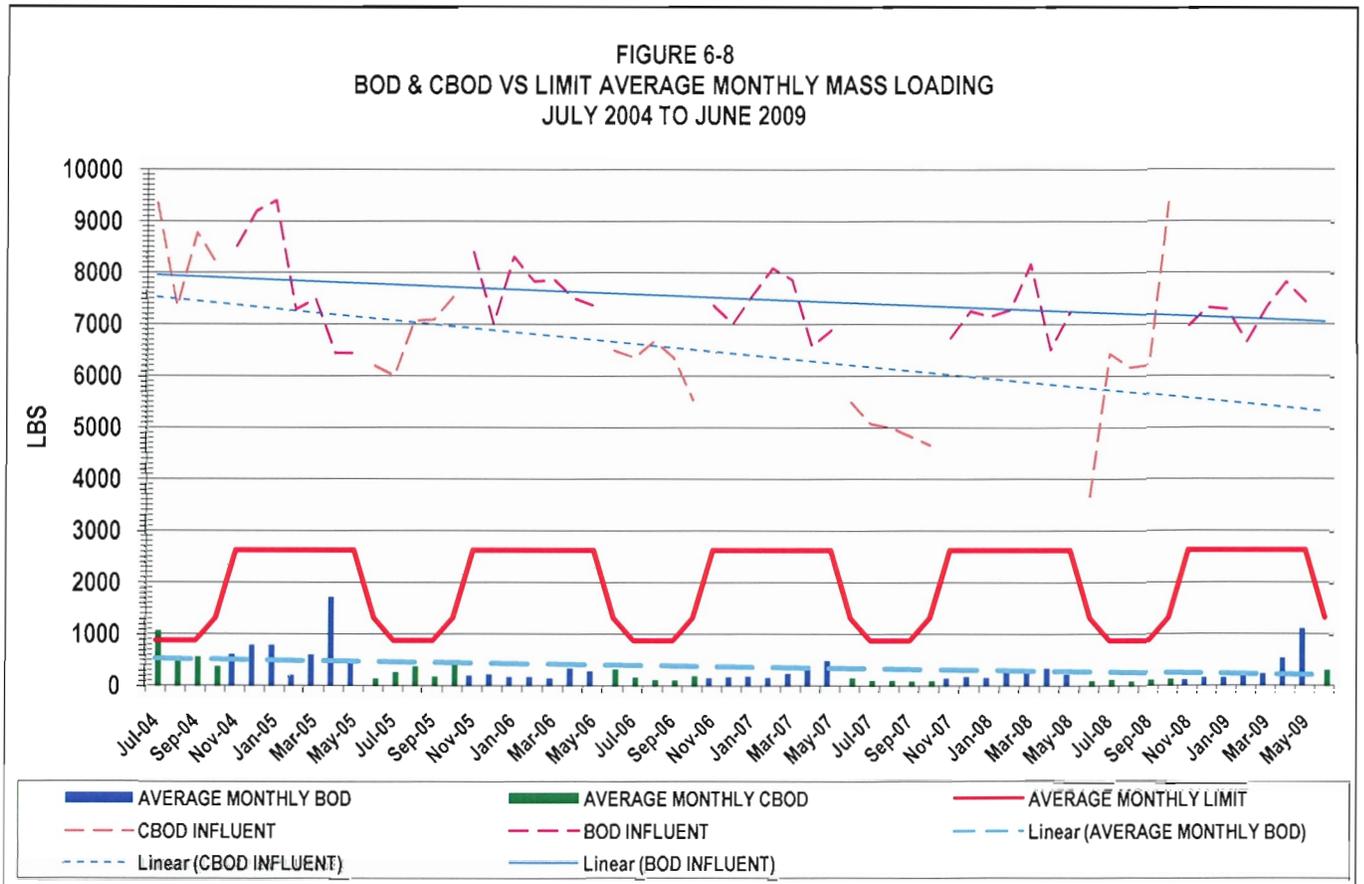
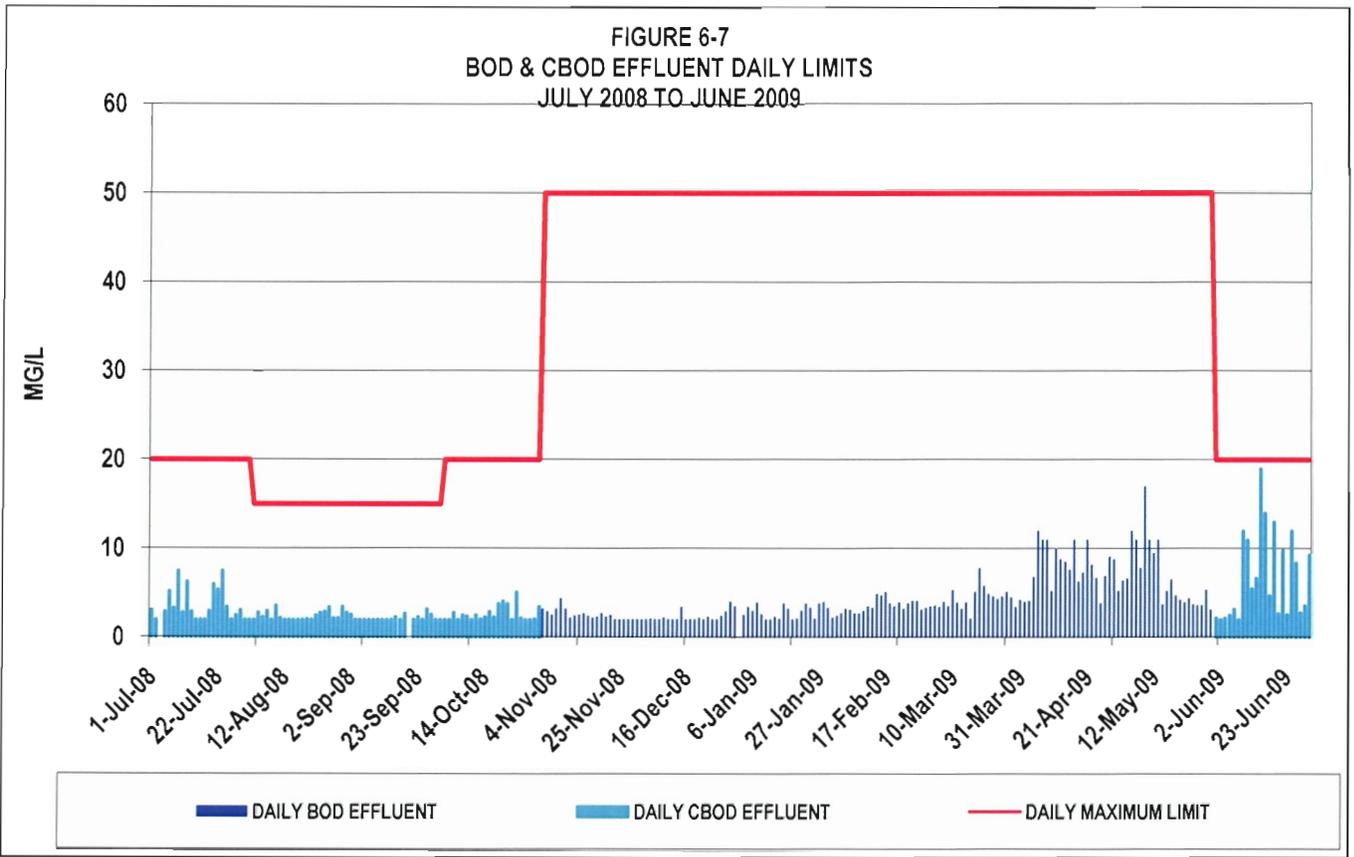


FIGURE 6-6
BOD/CBOD VS WEEKLY LIMITS
JULY 2008 - JUNE 2009





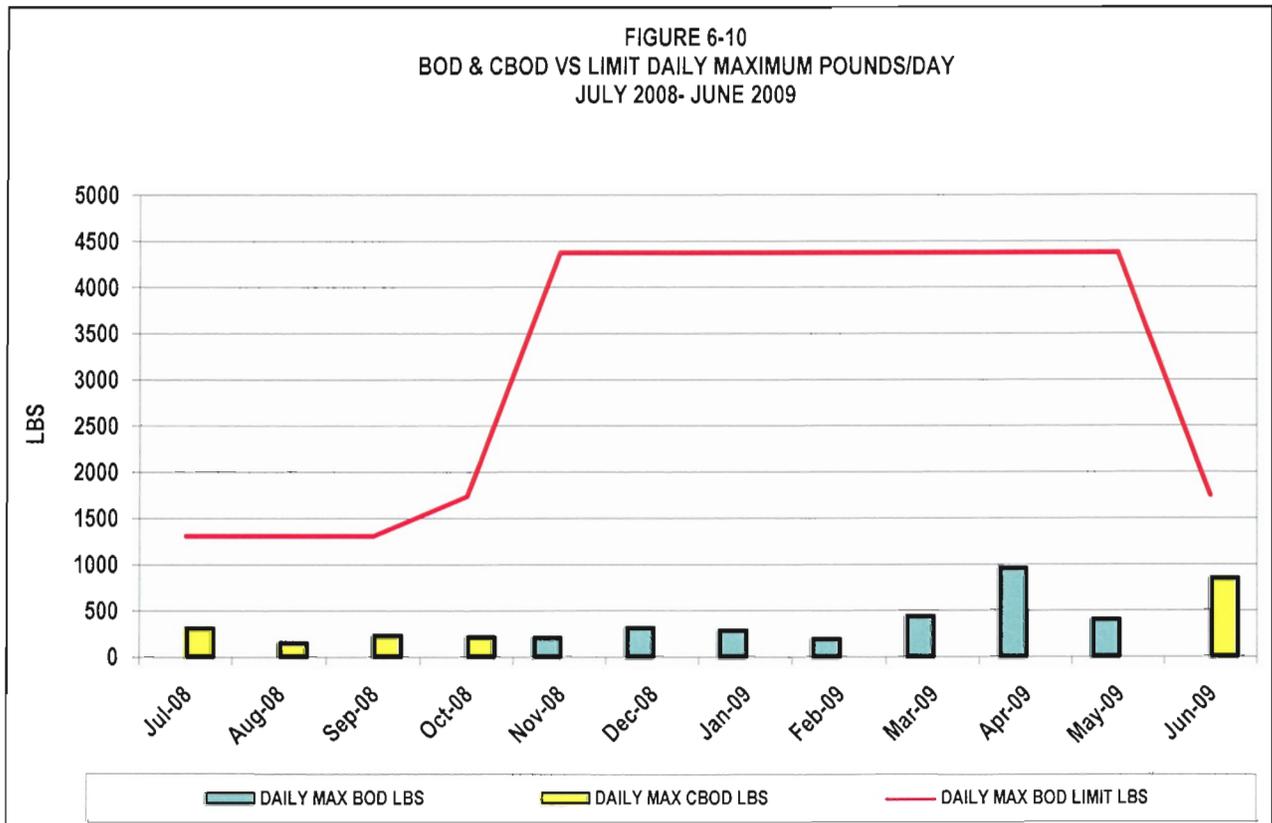
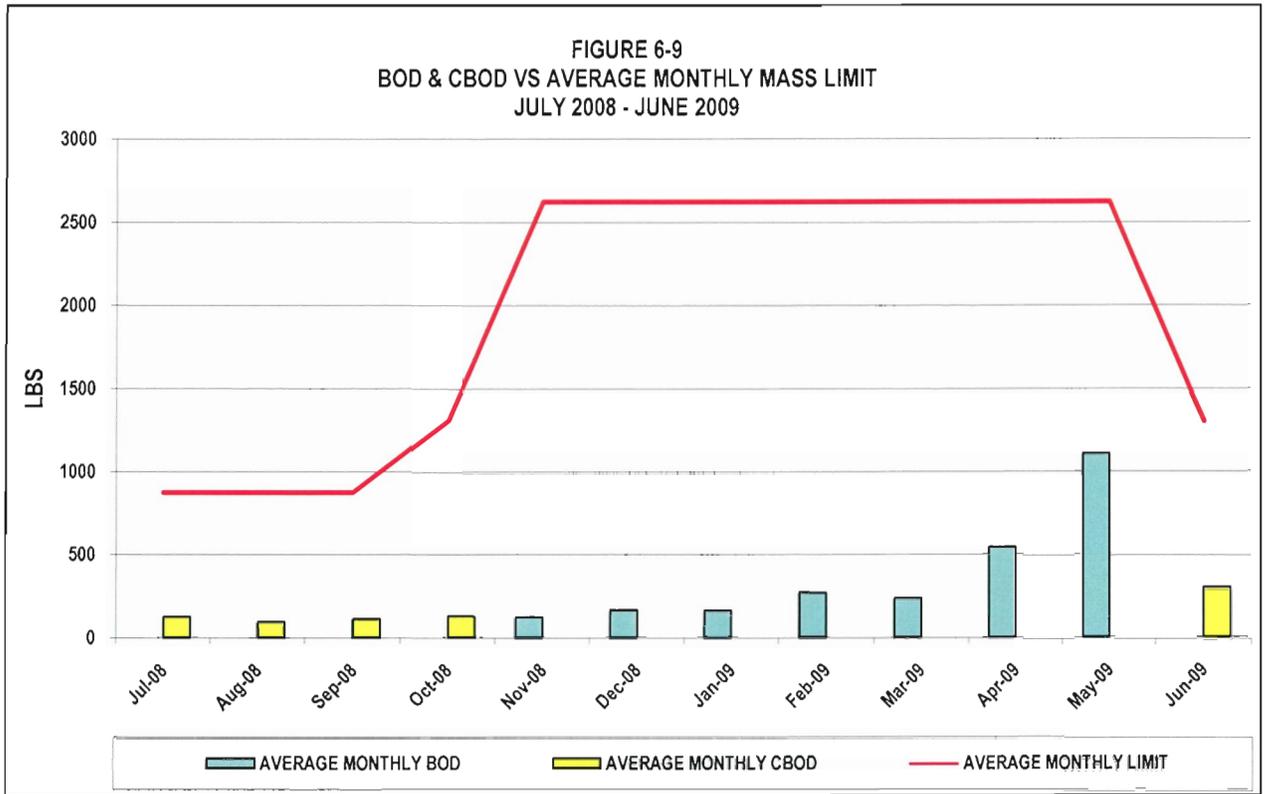


FIGURE 6-11
TSS MONTHLY VS LIMITS
JULY 2004 TO JUNE 2009

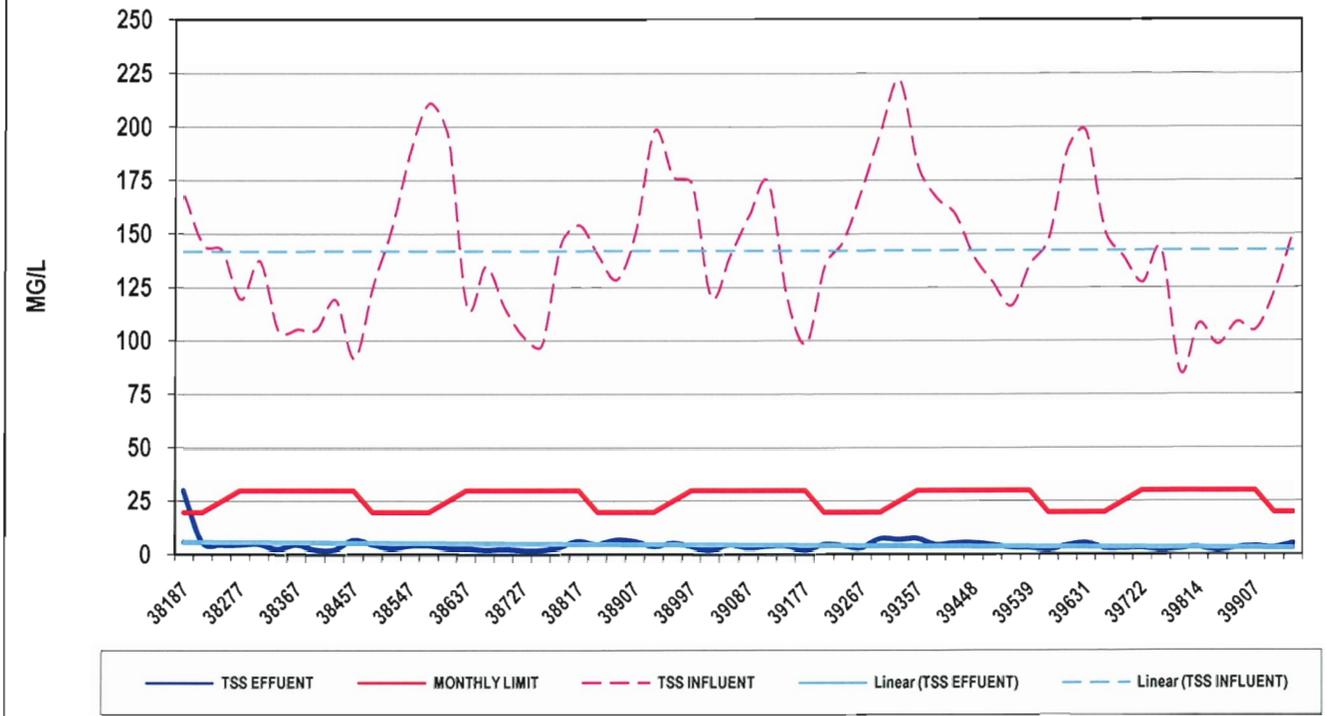


FIGURE 6-12
TSS MONTHLY VS LIMITS
JULY 2008 TO JUNE 2009

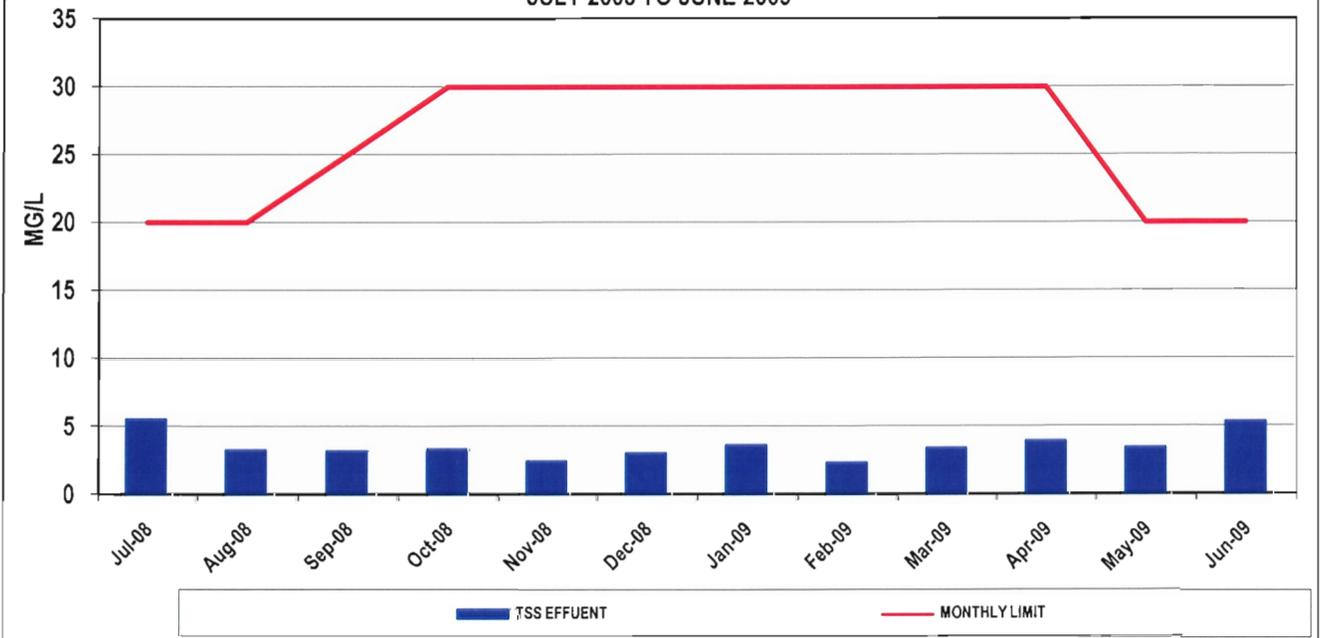


FIGURE 6-13
TSS WEEKLY VS LIMITS
JULY 2008-JUNE 2009

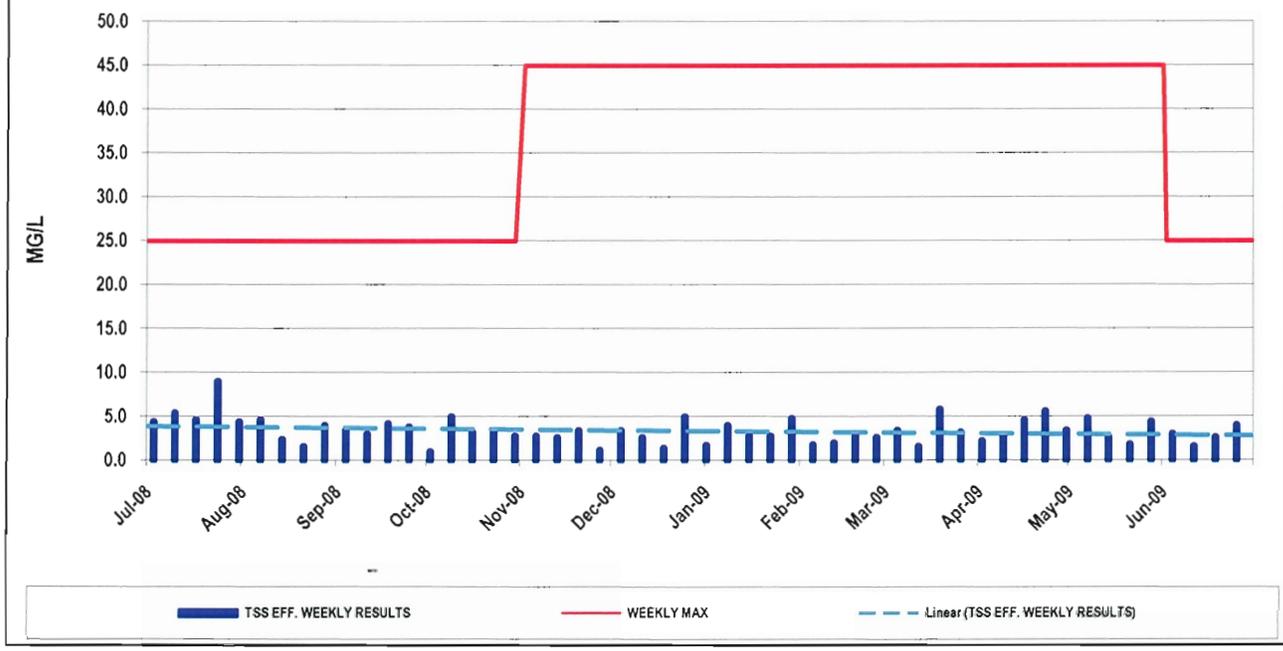


FIGURE 6-14
TSS EFFLUENT DAILY LIMITS
JULY 2008- JUNE 2009

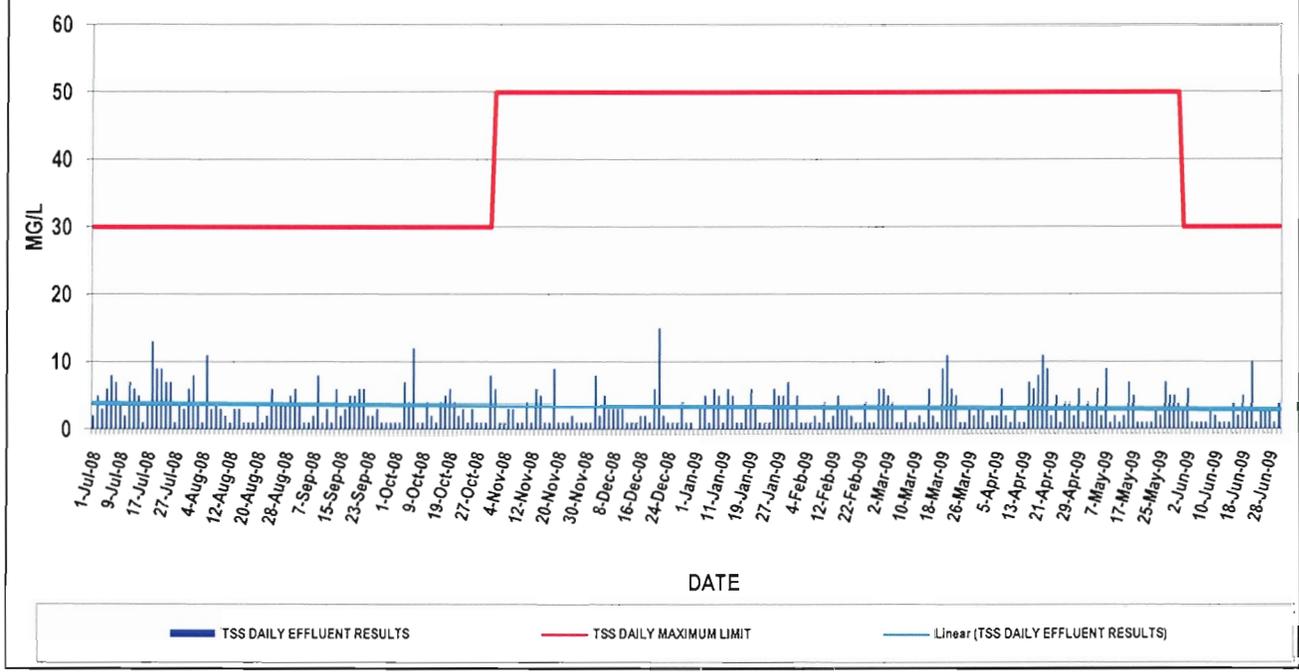


FIGURE 6-15
TSS VS LIMIT MONTHLY AVERAGE POUNDS PER DAY
JULY 2004 TO JUNE 2009

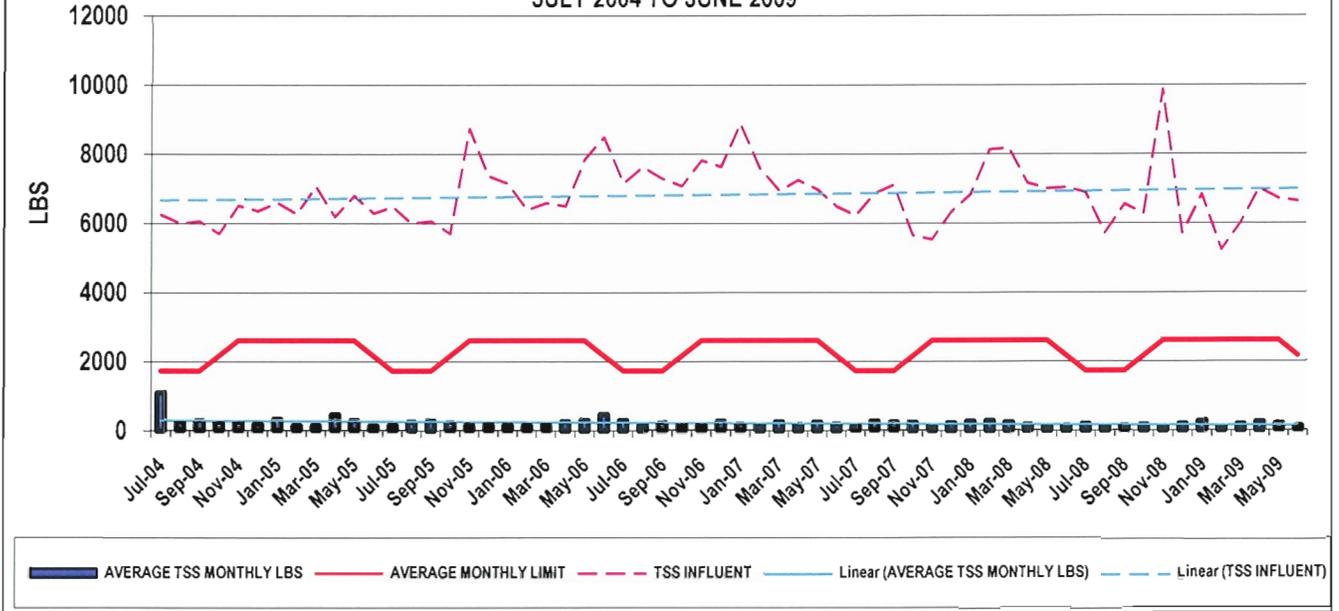


FIGURE 6-16
TSS VS LIMIT DAILY MAXIMUM POUNDS/DAY
JULY 2008 TO JUNE 2009

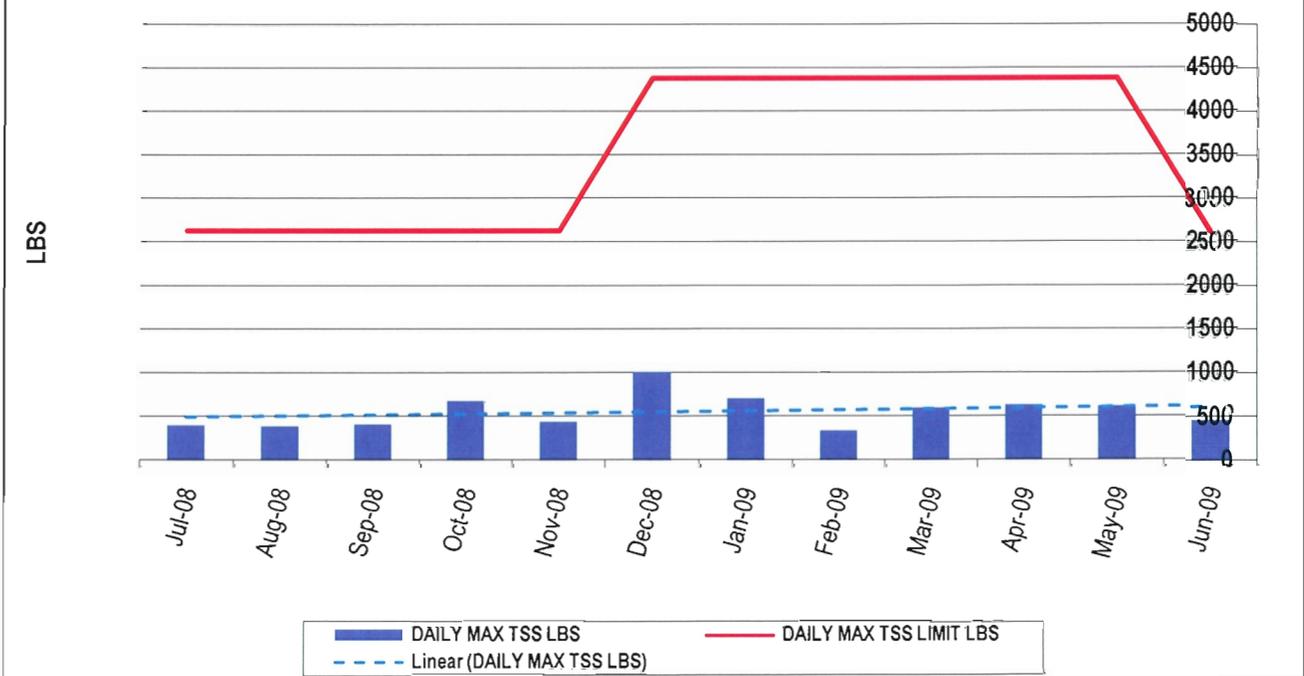


FIGURE 6-17
EFFLUENT AND INFLUENT CADMIUM MONTHLY AVERAGE
JULY 2008 TO JUNE 2009

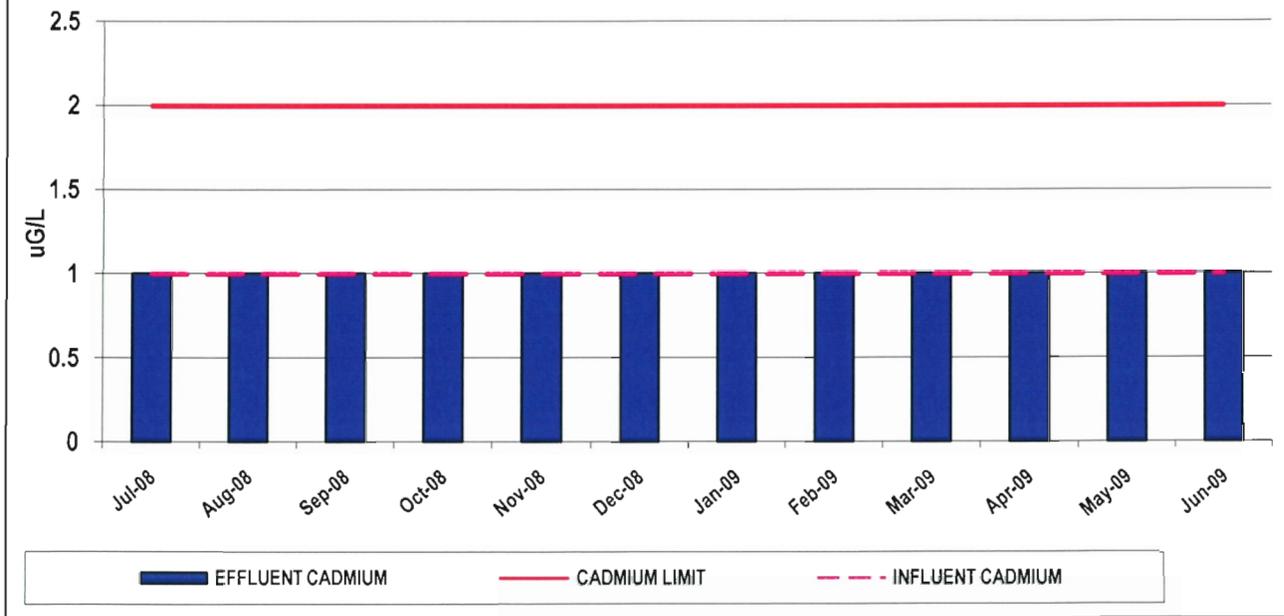


FIGURE 6-18
EFFLUENT & INFLUENT LEAD MONTHLY AVERAGE
JULY 2008 TO JUNE 2009

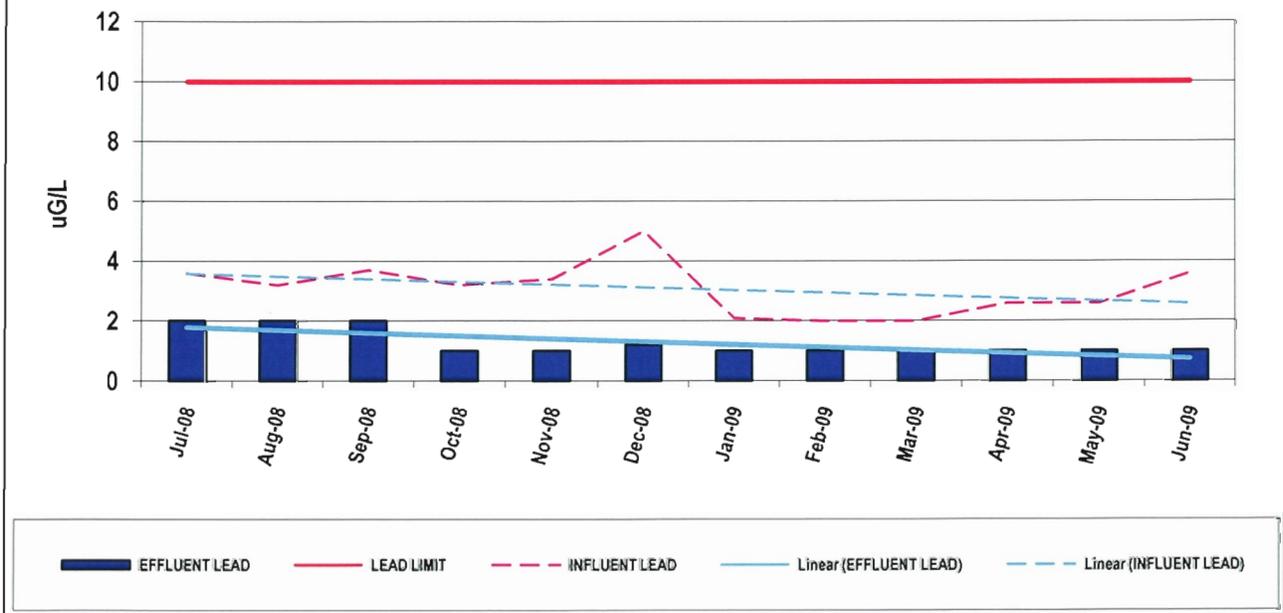


FIGURE 6-19
EFFLUENT & INFLUENT CYANIDE MONTHLY AVERAGE
JULY 2008 TO JUNE 2009

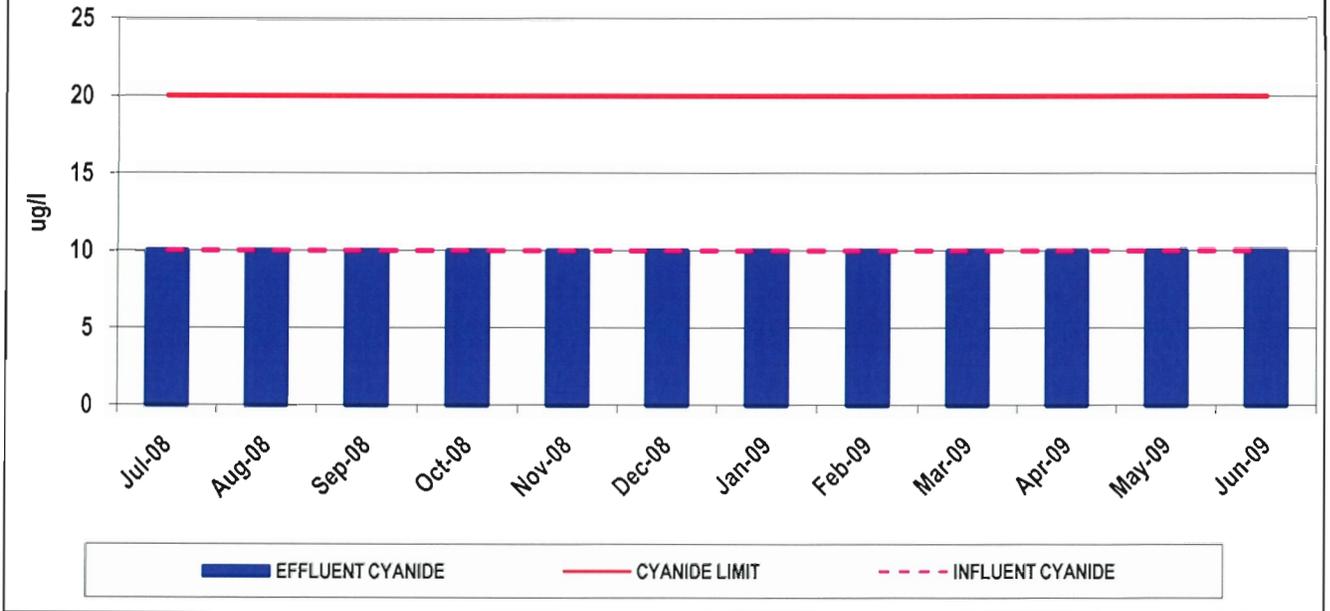
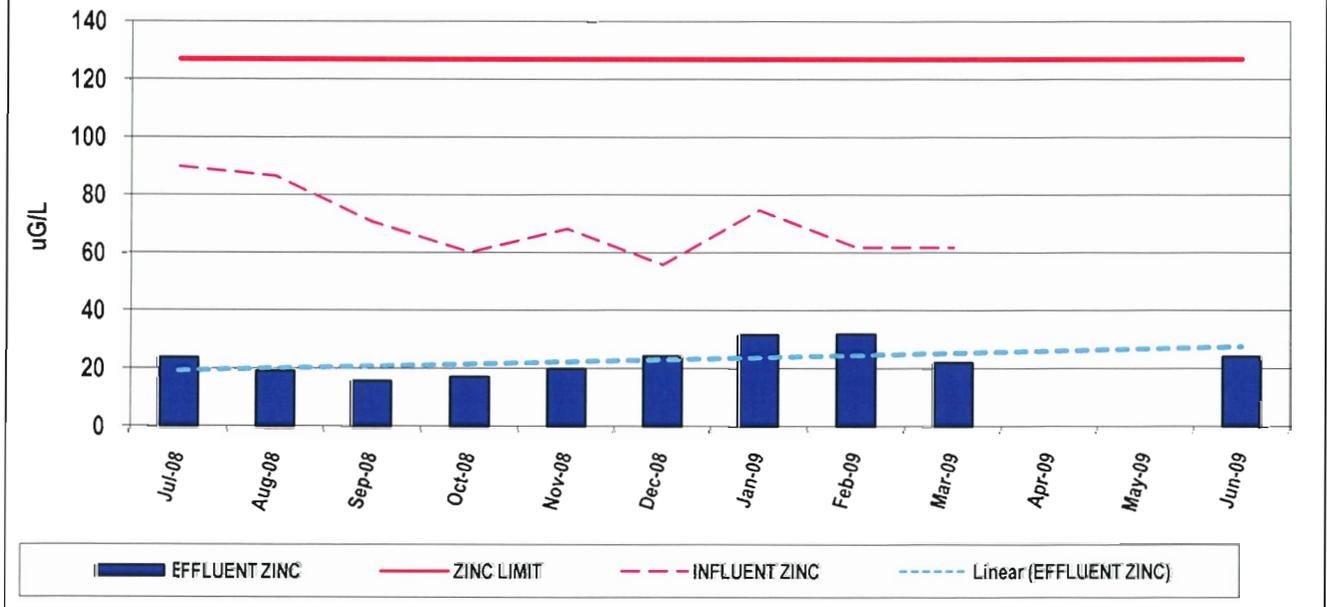


FIGURE 6-20
EFFLUENT & INFLUENT ZINC MONTHLY AVERAGE
JULY 2008 TO JUNE 2009



Permit change to Quarterly sampling

FIGURE 6-21
 AVERAGE DAILY FLOWS VS. RAS
 JULY 2007 TO JUNE 2009

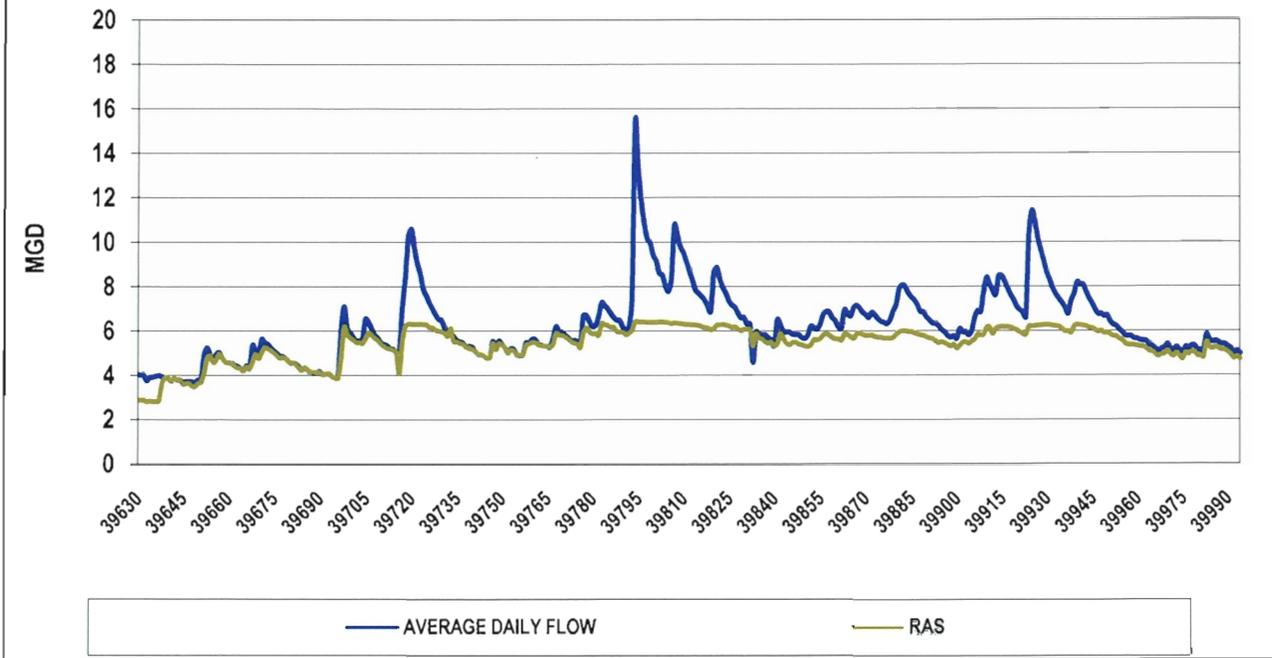


FIGURE 6-22
 MLSS RESULTS
 JULY 2008 TO JUNE 2009

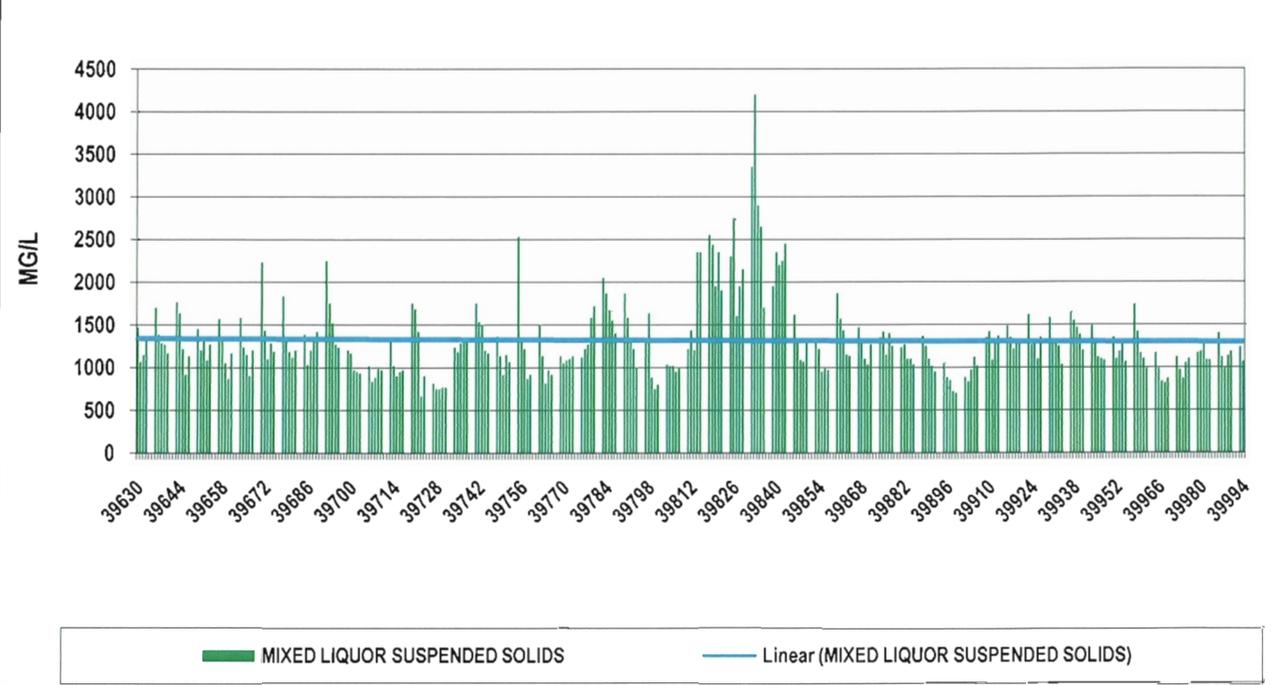


FIGURE 6-23
 PRIMARY SLUDGE RESULTS
 JULY 2008 TO JUNE 2009

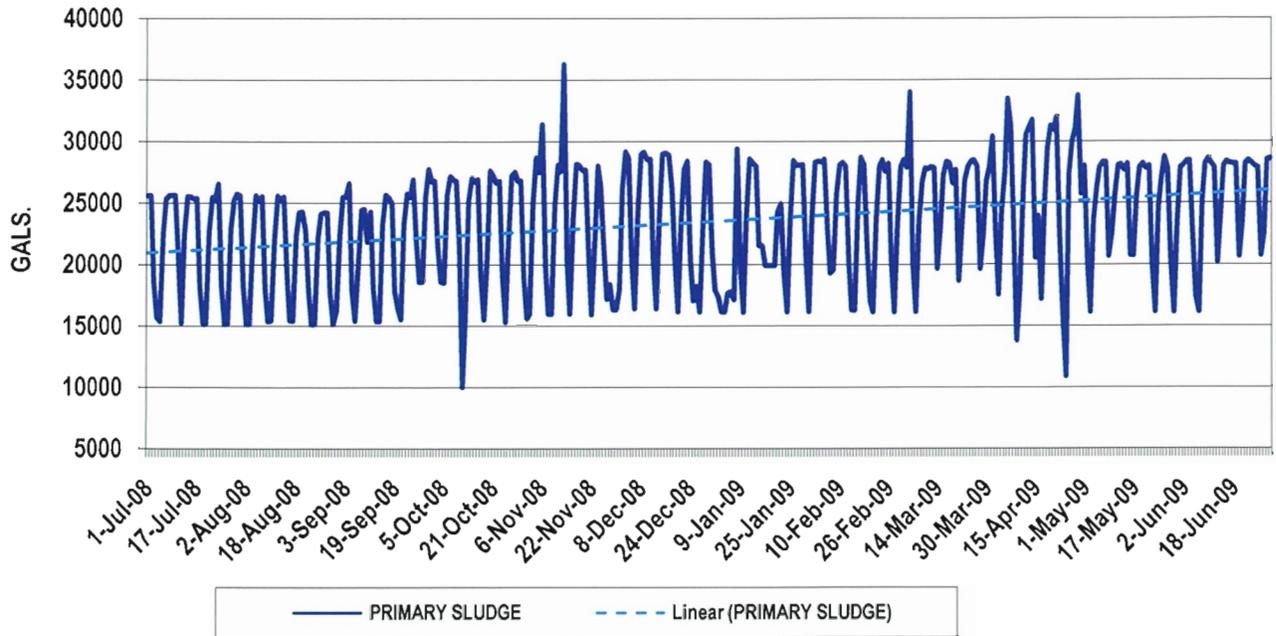


FIGURE 6-24
 SECONDARY SLUDGE RESULTS
 JULY 2008 TO JUNE 2009

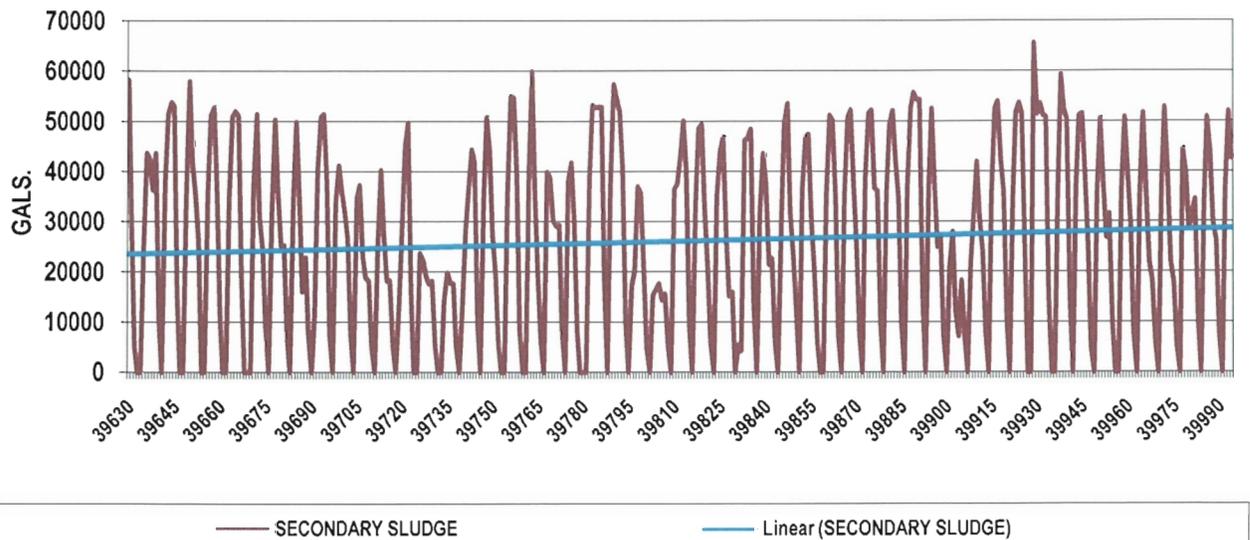


FIGURE 6-25
EFFLUENT AMMONIA AVERAGE MONTHLY
JULY 2004 TO JUNE 2009

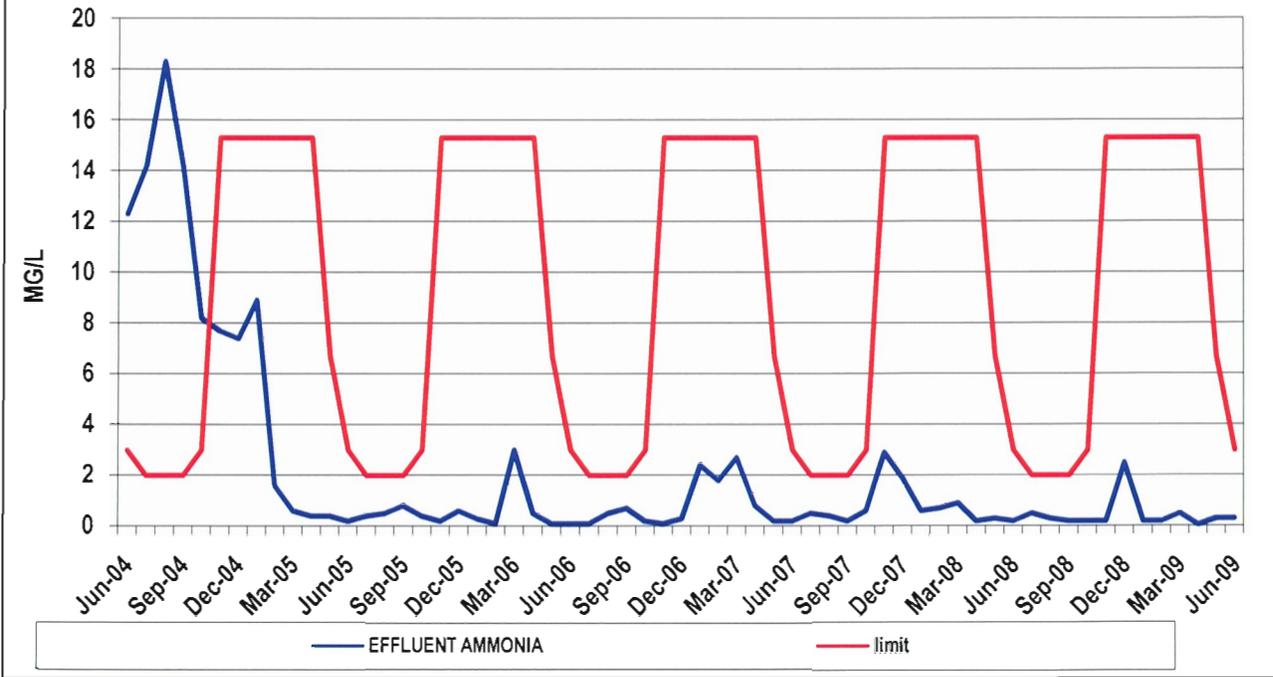


FIGURE 6-26
EFFLUENT TKN MONTHLY AVERAGE
JULY 2008 TO JUNE 2009

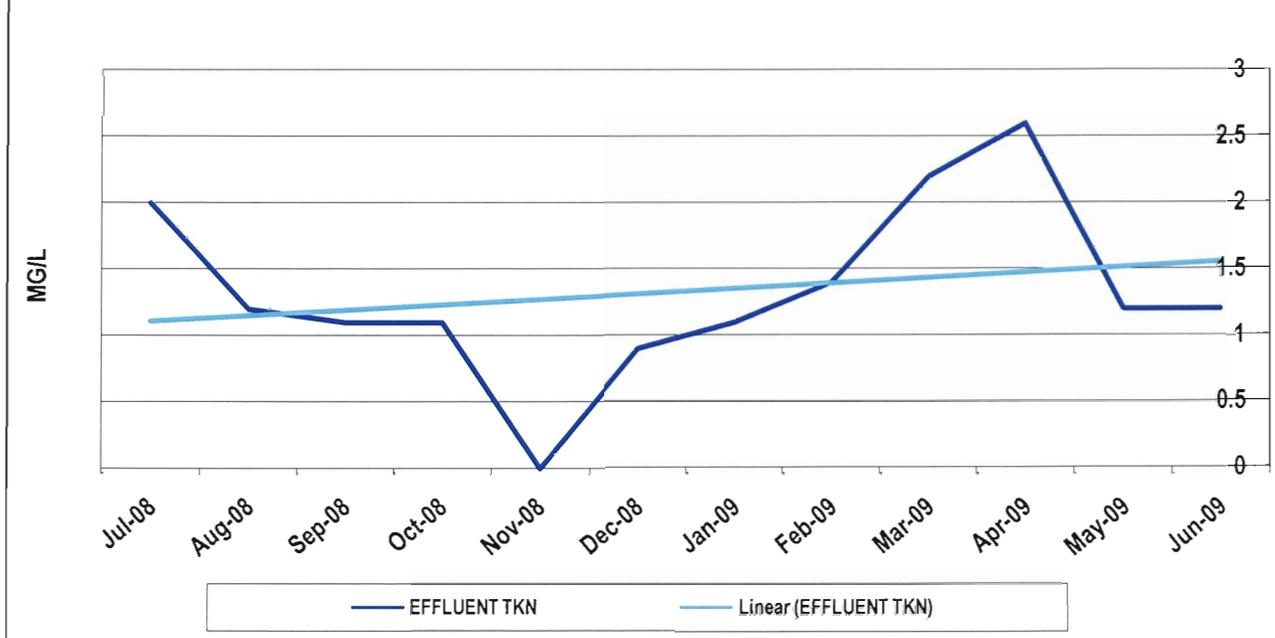


FIGURE 6-27
 EFFLUENT NITRATE MONTHLY AVERAGE
 JULY 2008 TO JUNE 2009

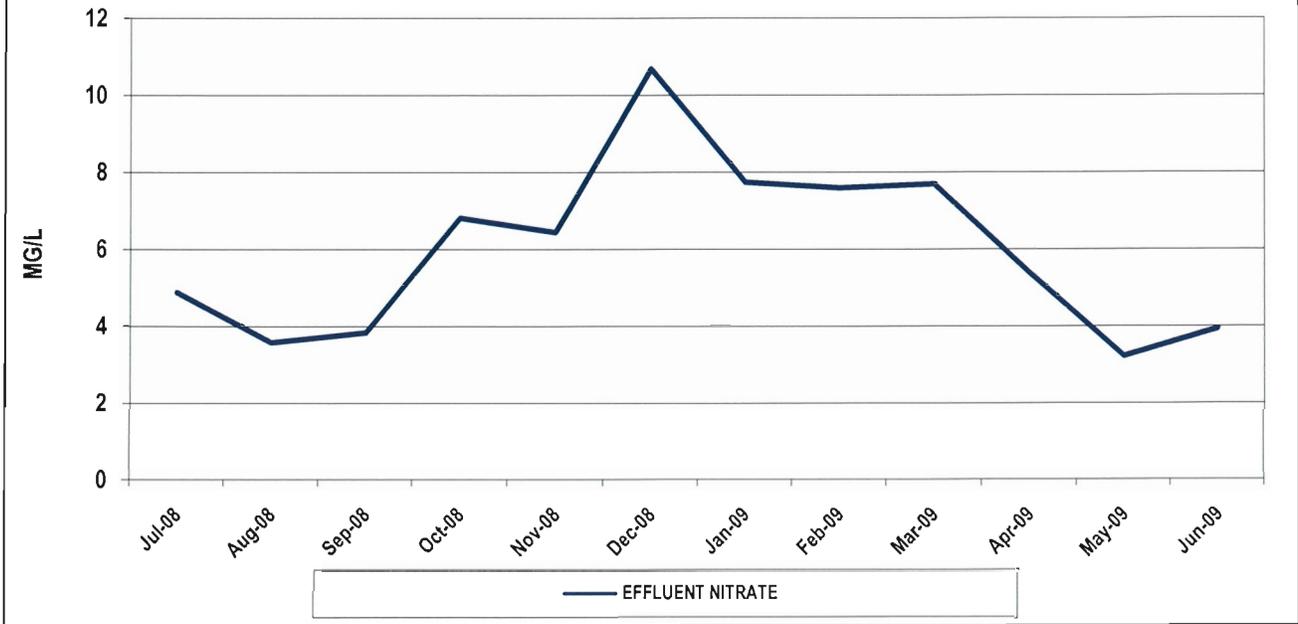


FIGURE 6-28
 EFFLUENT NITRITE MONTHLY AVERAGE
 JULY 2008 TO JUNE 2009

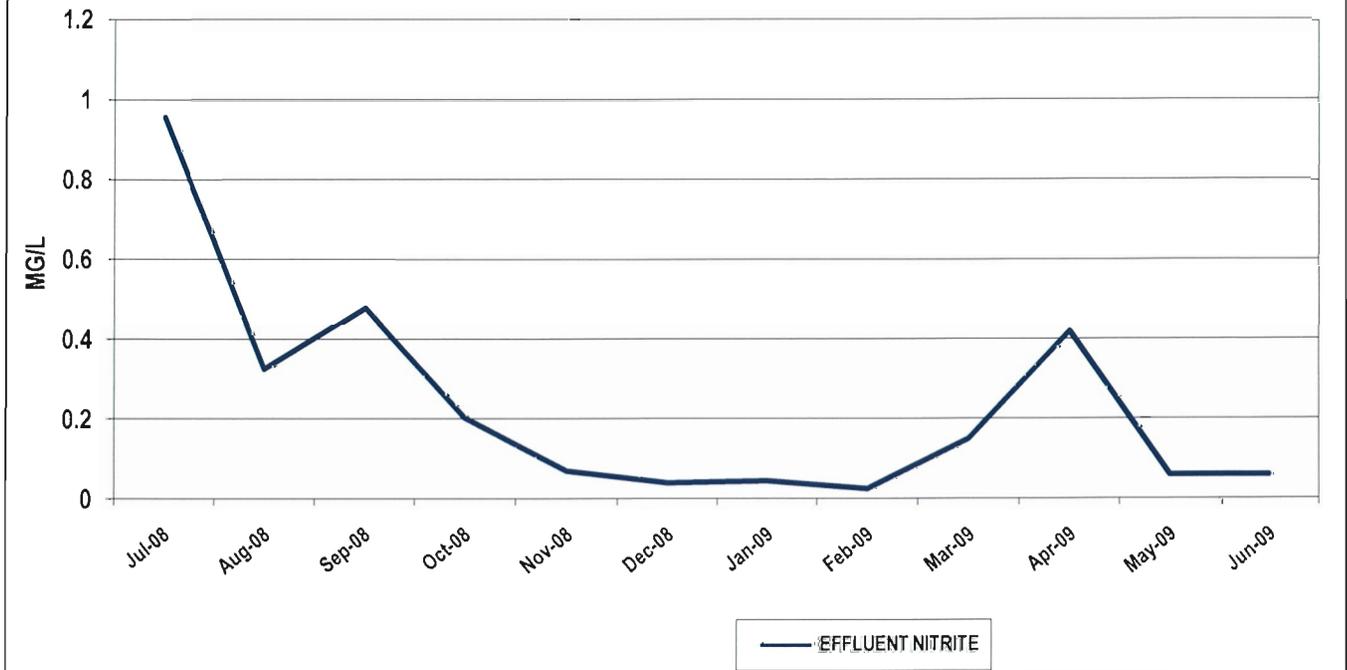


FIGURE 6-29
EFFLUENT TOTAL NITROGEN MONTHLY AVERAGE
JULY 2004 TO JUNE 2009

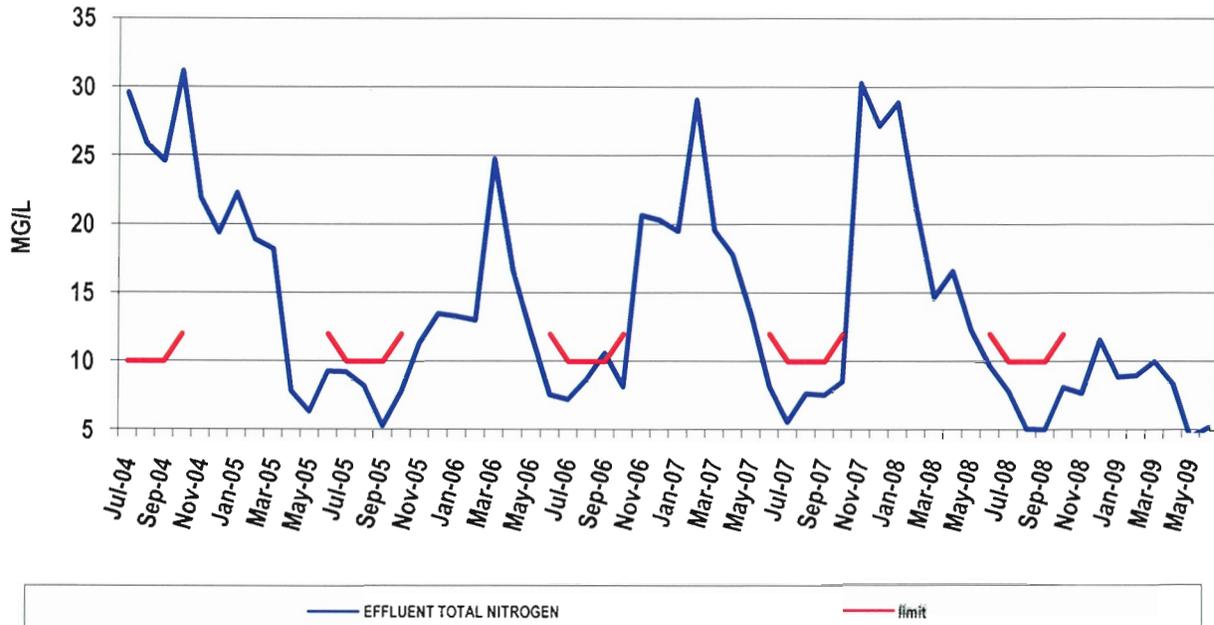


FIGURE 6-30
EFFLUENT PHOSPHOROUS MONTHLY AVERAGE
JULY 2004 TO JUNE 2009

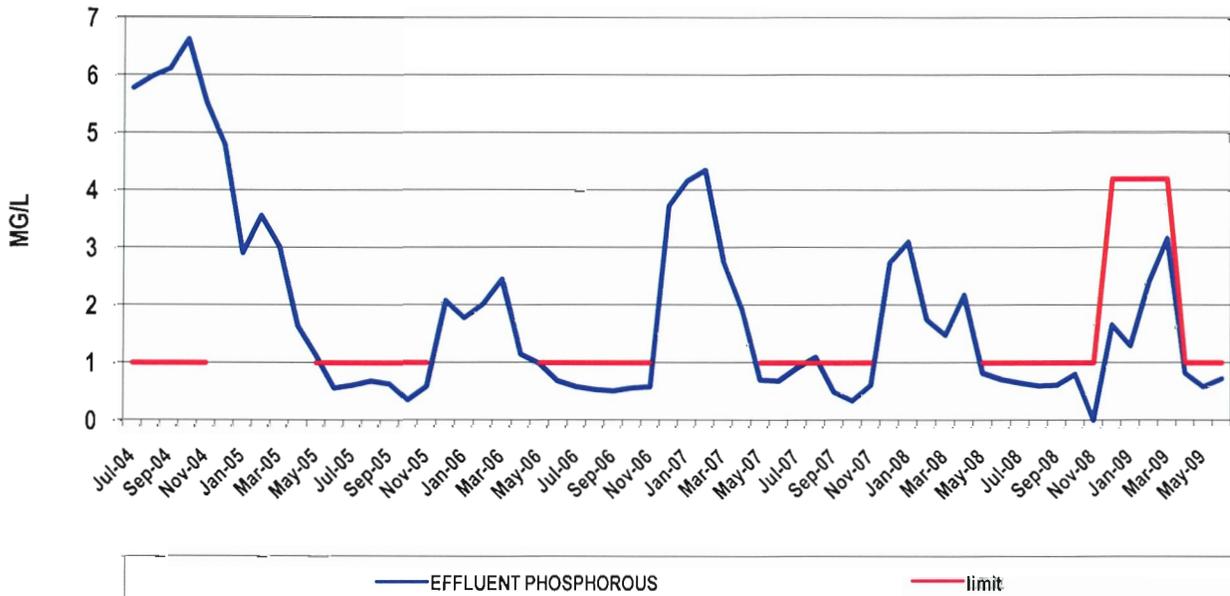
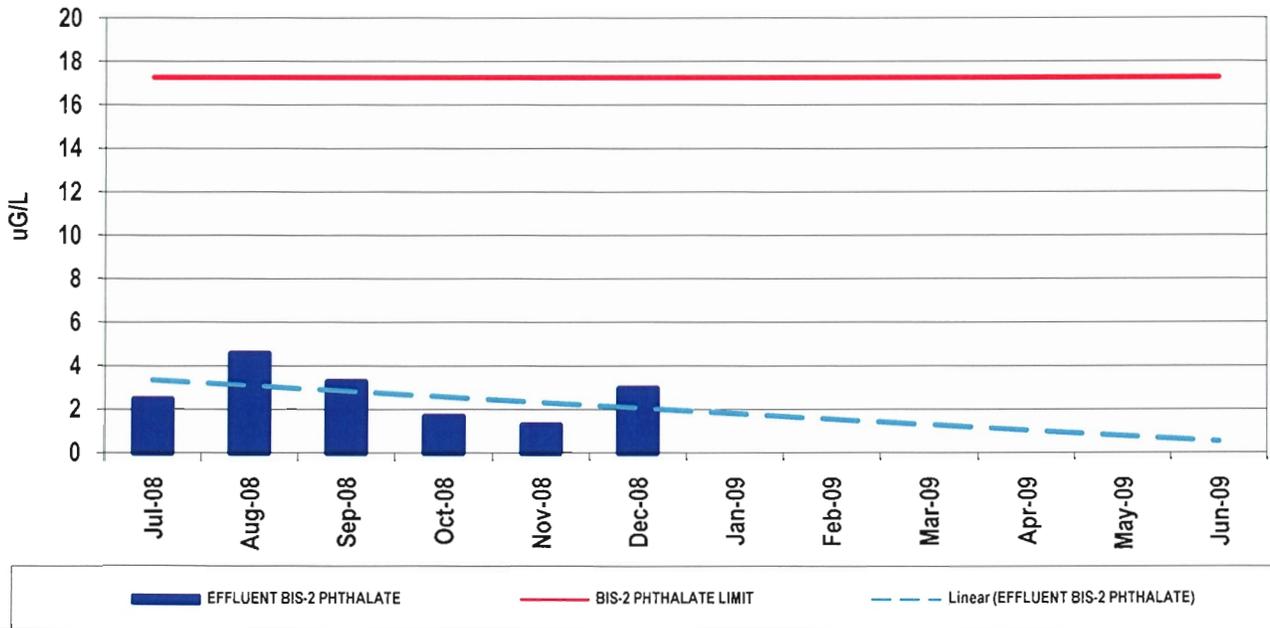


FIGURE 6-31
 BIS-2 PHTHALATE MONTHLY AVERAGE
 JULY 2008 TO JUNE 2009



Parameter testing requirements discontinued December 2009

FIGURE 6-32
 SLUDGE VOLUME INDEX
 JULY 2008 TO JUNE 2009

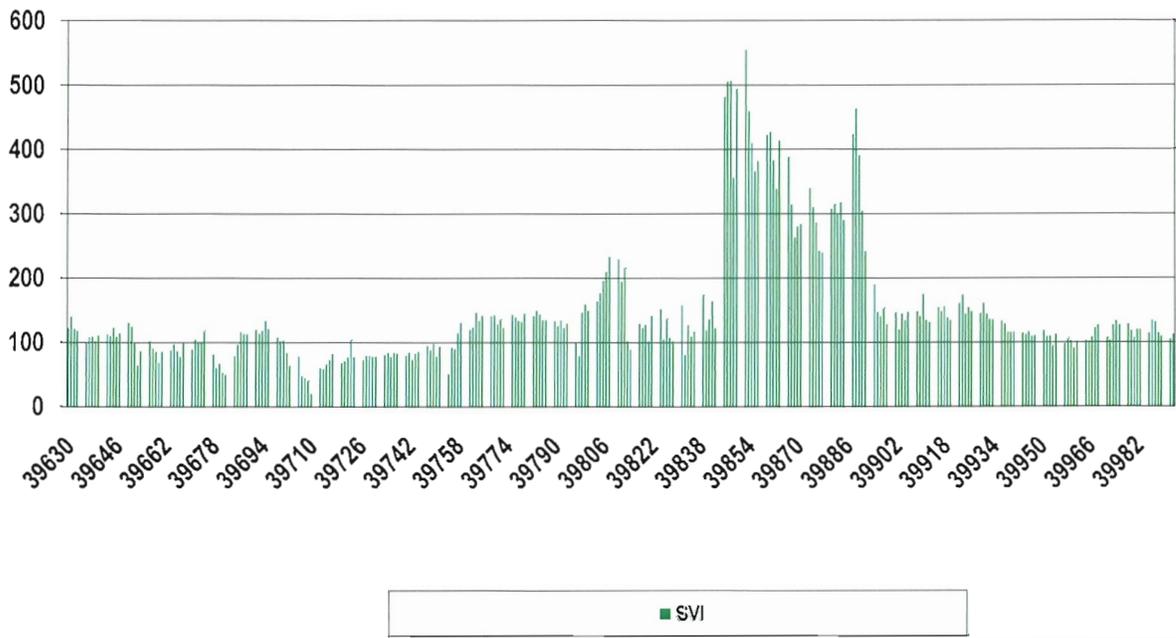
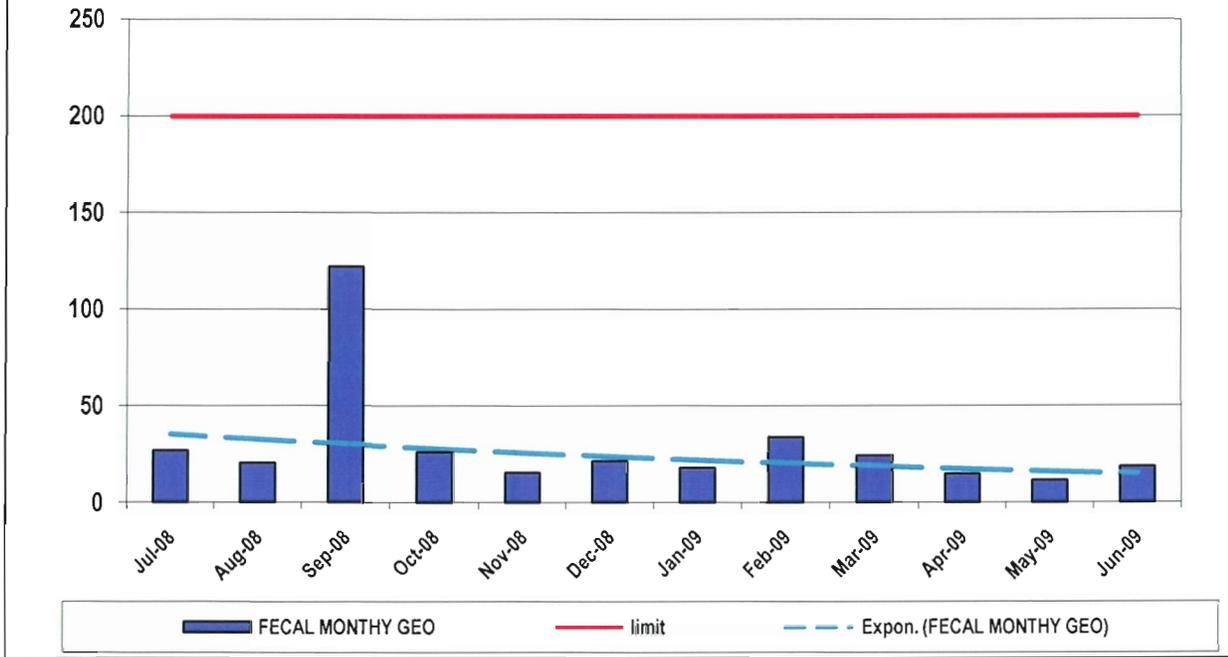


FIGURE 6-33
FECAL MONTHLY GEO MEAN
JULY 2008 TO JUNE 2009



APPENDIX A

Pretreatment Annual Report Summary

EPA Region 1 Annual Pretreatment Report Summary Sheet

December 2007

POTW Name:	WEST WARWICK REGIONAL TREATMENT FACILITY
NPDES Permit #:	RI0100153
Pretreatment Report Period Start Date:	July 1, 2008
Pretreatment Report Period End Date:	June 30, 2009
# of Significant Industrial Users (SIUs):	5
# of SIU's Without Control Mechanisms:	0
# of SIUs not Inspected:	0
# of SIUs not Sampled:	0
# of SIUs in Significant Noncompliance (SNC) with Pretreatment Standards:	0
# of SIUS in SNC with Reporting Requirements:	0
# of SIUs in SNC with Pretreatment Compliance Schedule:	0
# of SIUs in SNC Published in Newspaper:	3
# of SIUs with Compliance Schedules:	1
# of Violation Notices Issued to SIUs:	5
# of Administrative Orders Issued to SIUs:	3
# of Civil Suits Filed Against SIUs:	0
# of Criminal Suits Filed Against SIUs:	0
# of Categorical Industrial Users (CIUs):	0
# of CIUs in SNC:	0

Penalties

Total Dollar Amount of Penalties Collected	\$100.00
--	----------

of IUs from which Penalties have been collected:

1

Local Limits

Date of Most Recent Technical Evaluation of Local Limits:

September 15, 2007

Date of Most Recent Adoption of Technically Based Local Limits:

February 27, 2008

Pollutant	Limit (mg/l)	MAHL (lb/day)
BOD	2000	21,893
TSS	2000	21,893
O&G	100	
Cadmium	0.02	0.27
Chromium	0.70	27.13
Copper	0.80	15.64
Cyanide	0.19	2.12
lead	0.15	2.14
Mercury	0.00	0.42
Nickel	1.00	14.70
Silver	0.24	3.85
Zinc	0.60	24.21
Phenol	1.00	5.04

APPENDIX B
Public Participation

AFFIDAVIT OF PUBLICATION
The Providence Journal
The Providence Sunday Journal

Published by The Providence Journal Company
Providence, Rhode Island 02902

State of Rhode Island
City and County of Providence

On this 18th day of September 20 08,

before me, a Notary Public, duly qualified for said County

and State, personally appeared Cheryl Jacobs, Senior

Sales Director, in the office of The Providence Journal

Company, publishers of **THE PROVIDENCE JOURNAL**,

a newspaper published in the City of Providence by The

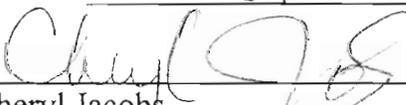
Providence Journal Company, who, on being duly

sworn, states that the advertisement of TOWN OF WEST WARWICK
WASTEWATER TREATMENT FACILITY LIST OF SIGNIFICANT
NONCOMPLIANCE The United States Environmental
Protection Agency (EPA) Regulation 40CFR403.8...

a true copy of which is hereunto annexed, was duly

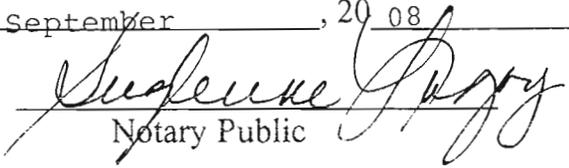
inserted in **THE PROVIDENCE JOURNAL** in its

issue of September 17 20 08,


Cheryl Jacobs

Subscribed and sworn to before me this 18th

day of September, 20 08


Notary Public

My Commission expires: 1/5/10

See Exhibit "A"
attached hereto

**TOWN OF WEST WARWICK
WASTEWATER TREATMENT FACILITY
LIST OF SIGNIFICANT NONCOMPLIANCE**

The United States Environmental Protection Agency (EPA) Regulation 40CFR403.8(f)(2)(vii) and Sec. 15-15 (g) of the West Warwick Code of Ordinances require the Town of West Warwick, referred to as the "Control Authority", to publish the names of all industrial users which have been in significant noncompliance of any applicable pretreatment standard over the past twelve months.

Specifically, 40CFR403.8(f)(2)(viii) states:

(viii) Comply with the public participation requirements of 40 CFR part 25 in the enforcement of National Pretreatment Standards. These procedures shall include provision for at least annual public notification in a newspaper(s) of general circulation that provides meaningful public notice within the jurisdiction(s) served by the POTW of Industrial Users which, at any time during the previous 12 months, were in significant noncompliance with applicable Pretreatment requirements. For the purposes of this provision, a Significant Industrial User (or any Industrial User which violates paragraphs (f)(2)(viii)(C), (D), or (H) of this section) is in significant noncompliance if its violation meets one or more of the following criteria:

(A) Chronic violations of wastewater Discharge limits, defined here as those in which 66 percent or more of all of the measurements taken for the same pollutant parameter during a 6-month period exceed (by any magnitude) a numeric Pretreatment Standard or Requirement, including instantaneous limits, as defined by 40 CFR 403.3(i);

(B) Technical Review Criteria (TRC) violations, defined here as those in which 33 percent or more of all of the measurements taken for the same pollutant parameter during a 6-month period equal or exceed the product of the numeric Pretreatment Standard or Requirement including instantaneous limits, as defined by 40 CFR 403.3(i) multiplied by the applicable TRC (TRC=1.4 for BOD, TSS, fats, oil, and grease, and 1.2 for all other pollutants except pH);

(C) Any other violation of a Pretreatment Standard or Requirement as defined by 40 CFR 403.3(i) (daily maximum, long-term average, instantaneous limit, or narrative Standard) that the POTW determines has caused, alone or in combination with other Discharges, Interference or Pass Through (including endangering the health of POTW personnel or the general public);

(D) Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the POTW's exercise of its emergency authority under paragraph (f)(1)(vi)(B) of this section to halt or prevent such a discharge;

(E) Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance;

(F) Failure to provide, within 45 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules;

(G) Failure to accurately report noncompliance;

(H) Any other violation or group of violations, which may include a violation of Best Management Practices, which the POTW determines will adversely affect the operation or implementation of the local Pretreatment program.

LIST OF SIGNIFICANT NONCOMPLIANCE

In the reporting period of July 1, 2007 to June 30, 2008 the following industrial users were found to be in Significant Noncompliance as defined above.

Amtron, Inc. A, B

**TOWN OF WEST WARWICK
WASTEWATER TREATMENT FACILITY
LIST OF SIGNIFICANT NONCOMPLIANCE**

The United States Environmental Protection Agency (EPA) Regulation 40CFR403.8(f)(2)(vii) and Sec. 15-15 (g) of the West Warwick Code of Ordinances require the Town of West Warwick, referred to as the "Control Authority", to publish the names of all industrial users which have been in significant noncompliance of any applicable pretreatment standard over the past twelve months.

Specifically, 40CFR403.8(f)(2)(viii) states:

Comply with the public participation requirements of 40 CFR part 25 in the enforcement of National Pretreatment Standards. These procedures shall include provision for at least annual public notification in a newspaper(s) of general circulation that provides meaningful public notice within the jurisdiction(s) served by the POTW of Industrial Users which, at any time during the previous 12 months, were in significant noncompliance with applicable Pretreatment requirements. For the purposes of this provision, a Significant Industrial User (or any Industrial User which violates paragraphs (f)(2)(viii)(C), (D), or (H) of this section) is in significant noncompliance if its violation meets one or more of the following criteria:

(A) Chronic violations of wastewater Discharge limits, defined here as those in which 66 percent or more of all of the measurements taken for the same pollutant parameter during a 6-month period exceed (by any magnitude) a numeric Pretreatment Standard or Requirement, including instantaneous limits, as defined by 40 CFR 403.3(l);

(B) Technical Review Criteria (TRC) violations, defined here as those in which 33 percent or more of all of the measurements taken for the same pollutant parameter during a 6-month period equal or exceed the product of the numeric Pretreatment Standard or Requirement including instantaneous limits, as defined by 40 CFR 403.3(l) multiplied by the applicable TRC (TRC=1.4 for BOD, TSS, fats, oil, and grease, and 1.2 for all other pollutants except pH);

(C) Any other violation of a Pretreatment Standard or Requirement as defined by 40 CFR 403.3(l) (daily maximum, long-term average, instantaneous limit, or narrative Standard) that the POTW determines has caused, alone or in combination with other Discharges, Interference or Pass Through (including endangering the health of POTW personnel or the general public);

(D) Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the POTW's exercise of its emergency authority under paragraph (f)(1)(vi)(B) of this section to halt or prevent such a discharge;

(E) Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance;

(F) Failure to provide, within 45 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules;

(G) Failure to accurately report noncompliance;

(H) Any other violation or group of violations, which may include a violation of Best Management Practices, which the POTW determines will adversely affect the operation or implementation of the local Pretreatment program.

LIST OF SIGNIFICANT NONCOMPLIANCE

In the reporting period of July 1, 2008 to June 30, 2009 the following industrial users were found to be in Significant Noncompliance as defined above.

Amtrol, Inc.	B
Riverpoint Lace Works	F
Warwick Ice Cream	B

APPENDIX C
Biosolids Characteristics

BIOSOLIDS CHARACTERISTICS

APPENDIX C
TOWN OF WEST WARWICK
WATER POLLUTION CONTROL FACILITY

LIMIT	41	39	1200	1500	300	17	75	420	36	2,800
Date	Arsenic mg/kg dry	Cadmium mg/kg dry	Chromium mg/kg dry	Copper mg/kg dry	Lead mg/kg dry	Mercury mg/kg dry	Molybdenum mg/kg dry	Nickel mg/kg dry	Selenium mg/kg dry	Zinc mg/kg dry
07/15/02	43.00	2.30	35	58	87	0.45	4.30	22	17	280
10/18/02	9.00	1.90	44	67	55	0.75	5.40	20	18	260
01/22/03	7.80	1.90	29	51	48	0.57	3.90	14	16	220
04/01/03	11.00	2.70	43	60	66	0.52	4.40	18	18	270
07/01/03	9.50	2.30	36	50	65	0.25	3.80	18	15	240
10/01/03	8.70	1.80	32	51	61	0.36	5.60	11	15	160
04/05/04	22.00	1.20	37	45	53	0.26	3.80	13	15	160
07/01/04	23.00	2.10	35	54	130	0.34	4.60	17	18	240
07/20/04	22.00	2.50	40	73	63	0.38	5.50	18	22	240
10/05/04	22.00	2.30	34	92	66	0.34	11.00	15	12	370
01/04/05	13.00	1.50	26	43	41	0.25	5.00	12	22	160
01/28/05	39.00	3.00	38	80	46	1.20	15.00	21	23	190
04/04/05	23.00	1.60	24	44	45	0.41	5.60	13	16	120
07/06/05	10.00	1.60	21	41	37	0.28	4.20	20	17	180
11/03/05	16.00	1.60	22	59	25	0.57	4.40	14	18	130
01/04/06	21.00	1.80	30	58	44	0.28	5.20	15	16	180
03/01/06	20.00	2.80	31	76	43	0.49	9.60	21	17	230
05/17/06	9.20	1.90	11	36	25	0.47	5.30	12	11	91
07/07/06	30.00	2.80	22	73	50	0.47	10.00	17	18	160
09/05/06	14.00	1.50	8	42	17	0.47	6.30	7	8	67
11/14/06	13.00	2.40	13	54	21	0.52	9.20	12	14	110
01/04/07	12.00	2.20	10	47	35	0.34	5.00	11	11	130
03/06/07	12.00	1.50	14	45	22	0.33	5.00	9	7	110
05/08/07	9.10	2.10	10	40	19	0.31	6.00	10	9	97
07/02/07	12.00	2.50	12	34	28	0.14	4.20	12	13	120
09/10/07	13.00	2.30	14	57	17	0.40	7.10	12	12	140
11/06/07	5.90	1.40	14	51	17	0.30	2.60	7	10	140
01/02/08	7.30	1.50	18	47	21	0.12	2.30	8	11	170
05/01/08	2.20	2.60	23	65	11	0.07	5.20	8	1	300
07/07/08	2.30	2.90	32	70	10	0.04	8.40	14	2	380
09/03/08	0.89	0.78	10	29	4	0.02	2.60	5	0.3	140
11/06/08	1.90	2.20	14	59	11	0.46	0.70	10	0.6	290
01/06/09	2.60	1.50	48	47	7	0.74	1.80	7	1.2	200
03/10/09	2.60	3.30	23	61	12	0.05	3.00	11	0.6	350
05/05/09	2.40	2.40	12	81	20	0.39	2.60	9	1.0	260
Average	13.50	2.08	25	55	38	0.38	5.39	13	12	197
Ave '08-'09	2.12	2.18	23	58	11	0.28	3.18	9	1	270
% limit	33%	5%	2%	4%	13%	2%	7%	3%	34%	7%
%limit '08-'09	5%	6%	2%	4%	4%	2%	4%	2%	3%	10%

Blue indicates less than detection limit

Date	Specific Conductance uMHOS/CM	Nitrite (as N) mg/kg/dry	Nitrate (asN) mg/kg/dry	Ammonia (as N) mg/kg/dry	TKN mg/kg/dry	Total Nitrogen (asN) mg/kg/dry	Total Volatile Solids %	Avail. Phos. Acid mg/kg/dry	Soluble Potash mg/l	Phosphorus mg/kg/dry
7/15/02	2,100	67	110	3,000	7,300	7,500	23.00	6000	430	
10/18/02	2,000	68	30	3,300	7,200	7,300	28.00	4000	370	
1/22/03	1,700	77	420	380	3,100	3,600	37.00	4600	420	
4/1/03	3,400	100	170	3,200	8,200	8,500	0.50	3700	440	
7/1/03	2,500	400	945	1,300	5,000	6,300	28.00	4000	480	
10/1/03	1,800	140	26	2,000	5,400	5,600	46.00	3200	390	
4/5/04	3,000	94	88	2,600	6,900	7,100	26.00	4400	320	
7/20/04	1,200	96	19	2,800	7,700	7,800	32.00	3900	250	
10/5/04	2,800	340	0.25	1,800	6,300	6,600	28.00	4300	580	
1/4/05	2,200	1,800	650	1,400	5,600	8,000	40.00	2900	270	
1/28/05	1,700	27	21	4,500	9,800	9,800	30.00	3100	170	
7/6/05	1,700	140	32	2,800	7,400	7,600	27.00	4600	180	
1/4/06	1,800	590	130	2,200	5,200	5,900	33.00	5700	180	
3/1/06	2,400	3,100	210	4,000	7,000	7,500	24.00	3200	170	
5/17/06	1,100	300	180	2,100	10,000	10,000	16.00	20	450	
7/7/06	1,600	200	280	280	5,500	5,700	9.80	5000	420	
9/5/06	2,000	26	490	5,600	9,600	10,000	3.50	110	71	
11/14/06	1,300	16	14	3,900	7,600	11,000	11.00	2900	420	
1/4/07	14,000	2	20	6,300	3,000	3,000	19.00	7600	840	
3/6/07	2,500	540	260	4,400	10,000	11,000	20.00	290	630	
5/8/07	1,900	12	22	2,600	8,800	8,800	13.00	220	650	
7/2/07	1,500	230	180	2,400	7,900	8,300	13.00	1820	810	
9/10/07		27	46		13,000	13,000	13.20	2210	390	7000
11/6/07		71	50		16,000	16,000	22.60	350	420	11000
1/2/08		240	260		18,000	18,000	18.40	2810	1000	8900
3/2/08		0	0	2,800	11,000	11,000	17.73	2310	1500	7300
5/1/08		290	280		10,000	10,000	13.13	3470	1600	1000
7/7/08		0	4		8,600	8,600		990	18	9100
9/3/08		0.2	4		5,500	5,500		3470	8	11000
11/6/08		41	79		18,000	18,000		2432	19	7700
1/6/09		1,100	490		6,900	8,500		3160	15	10000
3/10/09		0.2	3		18,000	18,000		3100	21	9900
5/5/09		130	110		7,200	7,400		1200	21	6600
Average	2,555	315	168	2,855	8,688	9,118	22	3,062	423	8,136
Ave '08-'09		212	115		10,700	11,000		2,392	17	9,050