

PENNSYLVANIA PUBLIC UTILITY COMMISSION

NOTICE TO BE PUBLISHED

Application of Pennsylvania-American Water Company for approval of the right to offer, render, furnish, or supply wastewater service to the public in a portion of Highland Township, Chester County, Pennsylvania.  
A-230073F0011

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Formal protests and petitions to intervene must be filed in accordance with Title 52 of the Pennsylvania Code. All filings must be made with the Secretary of the Pennsylvania Public Utility Commission, P. O. Box 3265, Harrisburg, PA 17105-3265, with a copy served on the Applicant, on or before August 14, 2006. The documents filed in support of the Application are available for inspection and copying at the Office of the Secretary between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday, and at the Applicant's business address.

Applicant:

Pennsylvania American Water Company

Through and By Counsel:

Velma A. Redmond, Esquire  
Susan Simms Marsh, Esquire  
800 West Hersheypark Drive  
Hershey, PA 17033

**DOCKETED**

JUL 18 2006

DOCUMENT  
FOLDER

BY THE COMMISSION

*James J. McNulty*

James J. McNulty  
Secretary

RECEIVED  
LEGISLATIVE REFERENCE  
BUREAU  
06 JUL 18 PM 2:45  
PA. CODE & BULLETIN

## SUPERSEDING MEMO

DATE: July 18, 2006

SUBJECT: A-212285F0138

TO: Bureau of Fixed Utility Services

FROM: James J. McNulty, Secretary *KB*

Application of Pennsylvania American Water Company

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Please be advised that the Assignment Memo issued to your Office on July 10, 2006, at docket number A-212285F0138 is incorrect and should be corrected to docket number A-230073F0011.

Please change your records accordingly. We apologize for any inconvenience this may have caused.

cc: Law Bureau

ksb

**DOCKETED**  
JUL 18 2006

DOCUMENT  
FOLDER



# THE COUNTY OF CHESTER



COMMISSIONERS  
Carol Aichele  
Donald A. Mancini  
Patrick C. O'Donnell

PLANNING COMMISSION  
Government Services Center, Suite 270  
601 Westtown Road  
P.O. Box 2747  
West Chester, PA 19380-0990  
610-344-6285  
Fax: 610-344-6515

July 25, 2006

James J. McNulty, Secretary  
Pennsylvania Public Utilities Commission  
400 North Street  
P.O. Box 3265  
Harrisburg, PA 17105-3265

ORIGINAL

2006 JUL 28 11 8:47  
RECEIVED  
PLANNING COMMISSION  
DOCUME  
FOLDE

Re: Pennsylvania American Water Company  
Docket No. A-230073F0011

Dear Mr. McNulty:

The Chester County Planning Commission (CCPC) is the designated planning agency for the County of Chester. A copy of the above referenced application was mailed to the Planning Commission by Susan Simms Marsh of the Pennsylvania American Water Company (PAWC), and received on July 24, 2006. Section 619.2 of Act 247 as amended states, "Commonwealth agencies shall consider and may rely upon comprehensive plans and zoning ordinances when reviewing applications for the funding or permitting of infrastructure or facilities." To assist in your consideration of this application in concurrence with Act 247, the Planning Commission is providing you with comments on this application as they relate to land use issues. This letter should not to be considered a protest.

We find that the project is not consistent with the goals and policies found in the Chester County Comprehensive Plan, *Landscapes*. The proposed franchise area is located in a Rural Landscape, as designated in *Landscapes*. *Landscapes* Policy 6.1.3 states, "Restrict the extension of sewer and water facilities in Rural and Natural locations." However, CCPC is aware that Highland Township has signed a resolution to update their Act 537 Plan to reflect this change, as well as adopt a resolution to allow for PAWC to furnish and serve this limited area of the Township.

Thank you for the opportunity to provide comment on this application. If you have any questions regarding these comments, contact Carrie Conwell at 610-344-6285.

Sincerely,

David D. Ward, AICP  
Interim Secretary

DDW/CJC/kp

cc: Wayne Rothermel, Chester County Commissioner's Office  
Janet Bowers, Chester County Water Resources Authority  
Ralph DeFazio, Chester County Health Department

29



# Pennsylvania-American Water Company

DOCUMENT  
FOLDER

800 West Hershey Park Drive • Hershey, PA 17033-0888  
(717) 533-5000 • Fax: (717) 531-3314 • E-mail: smarsh@pawc.com

Susan Simms Marsh  
Associate Corporate Counsel

July 28, 2006

ORIGINAL

Mr. James J. McNulty, Secretary  
Pennsylvania Public Utility  
Commission  
Commonwealth Keystone Building  
400 North Street, PO Box 3265  
Harrisburg, PA 17120-3265

**In re: Application of Pennsylvania-American Water Company for approval of the right to offer, render, furnish or supply wastewater service to the public in portions of Highland Township, Chester County, Pennsylvania. Docket No. A-230073F0011 . . .**

Dear Mr. McNulty:

Enclosed please find a Proof of Service which evidences copies served upon the affected offices as per your letter of July 18, 2006.

Respectfully,

*Susan Simms Marsh*  
Susan Simms Marsh *by*

blg

Enclosure

RECEIVED  
2006 AUG -2 AM 9:33  
SECRETARY'S BUREAU



BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

**In re: Application of Pennsylvania-American Water Company for approval of the right to offer, render, furnish or supply wastewater service to the public in additional portions of Highland Township, Chester County, Pennsylvania, Docket No. A-230073F0011**

**PROOF OF SERVICE**

I hereby certify that I am this day serving the above-referenced Application upon the persons and in the manner indicated below, which service satisfies the requirements of 52 Pa. Code §3.61 and §3.62 and 1 Pa. Code §33.36:

Service by first class mail addressed as follows:

Chester County Commissioners  
Chester County Courthouse  
2 North High Street  
West Chester, PA 19380

Chester County Planning Commission  
Chester County Courthouse  
2 North High Street  
West Chester, PA 19380

Highland Township  
Board of Supervisors  
100 Five Point Road  
Coatesville, PA 19320

Highland Township  
Planning Commission  
100 Five Point Road  
Coatesville, PA 19320

Office of Consumer Advocate  
555 Walnut Street, Fifth Floor  
Forum Place  
Harrisburg, PA 17101-1923

Office of Small Business Advocate  
Suite 1102, Commerce Building  
300 North Second Street  
Harrisburg, PA 17101

Office of Trial Staff  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
Harrisburg, PA 17105

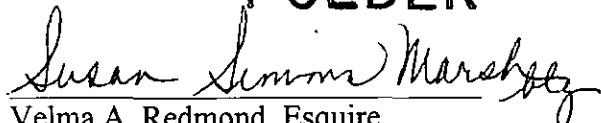
Department of Environmental Protection  
2 East Main Street  
Norristown, PA 19401-4915

Roger Legg  
430 West First Avenue  
Parkersburg, PA 19365

William F. Beers  
Tetrahedron Construction  
P.O. Box 152  
Oxford, PA 19363

Ms. Siti Crook  
ADA Disability Customer Building  
2840 Strasburg Road  
East Fallowfield, PA 19320

**DOCUMENT  
FOLDER**

  
Susan S. Marsh, Esquire

Velma A. Redmond, Esquire  
Susan S. Marsh, Esquire  
Seth A. Mendelsohn, Esquire  
Corporate Counsel for  
Pennsylvania-American Water Company  
800 West Hersheypark Drive  
Hershey, PA 17033  
(717) 533-5000

**DOCKETED**  
NOV 21 2006

Dated: July 20, 2006



# Pennsylvania-American Water Company

800 West Hershey Park Drive • Hershey, PA 17033-0888  
(717) 533-5000 • Fax: (717) 531-3314 • E-mail: smarsh@pawc.com

Susan Simms Marsh  
Associate Corporate Counsel

RECEIVED  
2006 JUN 21 AM 9:55  
SECRETARY'S BUREAU

August 17, 2006

James J. McNulty, Secretary  
Pennsylvania Public Utility  
Commission  
Commonwealth Keystone Building  
400 North Street  
PO Box 3265  
Harrisburg, PA 17105-3265

ORIGINAL

**In re: Application of Pennsylvania-American Water Company for approval of the right to offer, render, furnish or supply wastewater service to the public in portions of Highland Township, Chester County, Pennsylvania. Docket No. A-230073F0011**

Dear Mr. McNulty:

As directed in your letter of July 18, 2006, on the above-referenced application, attached is the proof of publication of the required notice.

Sincerely,

*Susan Simms Marsh*  
Susan Simms Marsh

DOCUMENT  
FOLDER

blg

Attachment



25

# Proof of Publication of Notice in the Daily Local News

## Under Newspaper Advertising Act No. 587, Approved May 16, 1929

State of Pennsylvania  
County of Chester

{ ss:

{ No.

Term, 2006

Patricia Sigda, Legal Representative of the Daily Local News Company, a corporation, of the County and State aforesaid, being duly affirmed, deposes and says that the Daily Local News, a newspaper of general circulation, published at 250 N. Bradford, Ave., West Chester, PA, County and State aforesaid, was established November 19, 1872, and Incorporated December 11, 1911, since which date the Daily Local News has been regularly issued in said county, and that the printed notice or publication attached hereto is exactly the same as printed and published in the regular editions and issues of the said Daily Local News on the following dates viz:

July 24, August 1

A.D. 2006

Affiant further deposes that he/she is the proper person duly authorized by the Daily Local News Company, a corporation, publishers of said Daily Local News, a newspaper of general circulation, to verify the foregoing statement under oath, and that affiant is not interested in the subject matter of the aforesaid notice or advertisement, and that all allegations in the foregoing statements as to time, place and character of publication are true.

**COPY OF NOTICE OR PUBLICATION**

*Patricia Sigda*  
\_\_\_\_\_

affirmed to and subscribed before me this 1st

day of August 2006

*Beverly A. Wolfe*  
\_\_\_\_\_  
Notary Public

My Commission Expires:

Notarial Seal  
Beverly A. Wolfe, Notary Public  
East Bradford Twp., Chester County  
My Commission Expires June 4, 2009

*Bobbi Gausson*  
\_\_\_\_\_  
Member, Pennsylvania Association of Notaries

\_\_\_\_\_  
Pennsylvania American Water

\_\_\_\_\_  
800 West Hersheypark Drive

\_\_\_\_\_  
Hershey, PA 17033

To DAILY LOCAL NEWS COMPANY, Dr.

For publishing the notice or publication attached  
hereto on the above stated dates .....\$

Probating same .....\$

Total .....\$

DOCUMENT  
FOLDER

DOCKETED

SEP 26 2006

**NOTICE**

**PENNSYLVANIA PUBLIC  
UTILITY COMMISSION  
NOTICE TO BE PUBLISHED**

Application of Pennsylvania-American Water Company for approval of the right to offer, render, furnish, or supply wastewater service to the public in a portion of Highland Township, Chester County, Pennsylvania. A-230073F0011

Formal protests and petitions to intervene must be filed in accordance with Title 52 of the Pennsylvania Code. All filings must be made with the Secretary of the Pennsylvania Public Utility Commission, P.O. Box 3265, Harrisburg, PA 17105-3265, with a copy served on the Applicant, on or before August 14, 2006. The documents filed in support of the Application are available for inspection and copying at the Office of the Secretary between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday, and at the Applicant's business address.

**Applicant:**

Pennsylvania American Water Company

**Through and By Counsel:**

Valma A. Redmond, Esquire  
Susan Simms Marsh, Esquire  
800 West Hersheypark Drive  
Hershey, PA 17033

BY THE COMMISSION  
James J. McNulty  
Secretary

**Publisher's Receipt for Advertising Costs**

The Daily Local News Company, a corporation, publishers of the Daily Local News, a newspaper of general circulation, hereby acknowledges receipt of the aforesaid notice and publication costs and certifies that the same has been duly paid.

DAILY LOCAL NEWS, a Corporation, Publishers of the DAILY LOCAL NEWS, a newspaper of General Circulation.



COMMONWEALTH OF PENNSYLVANIA  
PENNSYLVANIA PUBLIC UTILITY COMMISSION  
P.O. BOX 3265, HARRISBURG, PA 17105-3265

IN REPLY PLEASE  
REFER TO OUR FILE

September 28, 2006

SUSAN SIMMS MARSH ESQ  
PENNSYLVANIA-AMERICAN WATER COMPANY  
800 HERSHEY PARK DRIVE  
HERSHEY PA 17033

DOCUMENT  
FOLDER

Re: Application for Additional Territory in Highland Township, Chester County at  
A-230073F0011

Dear Ms. Marsh:

In order for us to complete our analysis of the aforementioned filing, answers to the enclosed data requests are required by the Water/Wastewater Industry Group. This information is necessary for completion of our recommendation to the Commission.

An early and expeditious conclusion of your application filing is dependent upon full and responsive answers to the enclosed data requests which should be received by this office no later than ten working days from the date of this letter.

Mr. James J. McNulty, Secretary  
Pennsylvania Public Utility Commission  
P O Box 3265  
Harrisburg, PA 17105-3265

Attention: Wm. David Shrader - (717) 783-2505

**Your answers should be verified per Pa. Code § 1.36.** If any problems should arise that prevent a full response within ten working days or any clarification of these data requests is required, please contact the above staff person. Thank you for your cooperation in the foregoing matter.

Sincerely,

*H. Edwin Rodrock*  
H. Edwin Rodrock, Supervisor  
Water/Wastewater Industry Group  
Bureau of Fixed Utility Services

Enclosure

cc: Chris Hoover  
Ted Weakley

DOCUMENT  
FOLDER

**BUREAU OF FIXED UTILITY SERVICES**

**WATER/WASTEWATER INDUSTRY GROUP**

**DISCOVERY – SET I**

**PENNSYLVANIA-AMERICAN WATER COMPANY-**

**DOCKET NO. A-230073F0011**

September 28, 2006

**NOTE: RESTATE THE DATA REQUEST PRIOR TO PROVIDING A RESPONSE. ALSO, PROVIDE THE NAME OF THE PERSON, CAPACITY AND NAME OF FIRM PROVIDING THE RESPONSE.**

**APPLICATIONS**

A-1 Provide a listing of all Commission approved Application Docket Nos.; including:

- a) overall location map of the approved territories,
- b) number of customers per territory and
- c) approved rates of each territory.

A-2 Provide the final approval of the 537 Plan for Highland Township.

A-3 What entity provides potable water service to this customer?

A-4 A review of Resolution No. 2004 indicates that there may be other potential customers abutting Boro Line Road.

- a) How many other customers are anticipated to request wastewater and/or water service?
- b) Is there an anticipated time-line for additional connections?
- c) How many other filings of this Application nature is the Company anticipating?

A-5 A March 3, 2006 email from DEP to PAWC indicates that a Connection Management Plan exists. Provide the required copies of this Plan.

A-6 Also, in this same missive, there is an indication of an executed Consent Order and Agreement. Provide the required copies of this CO&A.



# Pennsylvania-American Water Company

800 West Hershey Park Drive • Hershey, PA 17033-0888  
(717) 533-5000 • Fax: (717) 531-3314 • E-mail: smarsh@pawc.com

ORIGINAL

Susan Simms Marsh  
Associate Corporate Counsel

November 10, 2006

James J. McNulty, Secretary  
Pennsylvania Public Utility  
Commission  
Commonwealth Keystone Building  
400 North Street  
Harrisburg, PA 17105-3265  
Attention: William David Shrader  
Bureau of Fixed Utility Services  
Water/Wastewater Industry Group

DOCUMENT  
FOLDER

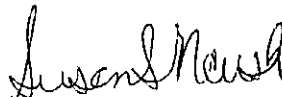
2006 NOV 15 AM 9:18  
SECRETARY'S BUREAU

Re: Application for Additional Territory in Highland Township, Chester  
County Docket No. A-230073F0011

Dear Mr. McNulty:

In response to H. Edwin Rodrock's letter dated September 28, 2006, attached please find three (3) copies of Pennsylvania-American Water Company's answers to the second set of data requests regarding the above referenced docket number.

Respectfully,

  
Susan S. Marsh

blg  
Enclosures

cc: H. Edwin Rodrock  
G. DeBalko  
J. Carlson



14

**ORIGINAL**

**BUREAU OF FIXED UTILITY SERVICES  
WATER/WASTEWATER INDUSTRY GROUP  
DISCOVERY  
PENNSYLVANIA-AMERICAN WATER COMPANY  
DOCKET NUMBER A-230073F0011**

SECRETARY'S BUREAU

2006 NOV 15 AM 9:18

REC'D

**A-1.** Provide a listing of all Commission approved Application Docket Nos.; including:

Application of Pennsylvania-American Water Company for Approval of (1) the transfer, by sale, of substantially all of the City of Coatesville Authority's assets, properties and rights related to its wastewater system to Pennsylvania-American Water Company, and (2) the rights of Pennsylvania-American Water Company to begin to offer or furnish wastewater service to the public in all of the City of Coatesville and Parkesburg Borough, Chester County, Pennsylvania and portions of Caln Township, East Fallowfield Township, Valley Township, Sadsbury Township, and West Sadsbury Township, Chester County, Pennsylvania; and (3) certain additional regulatory approvals. A-230073F0002 (4,230 customers)

Application of Pennsylvania-American Water Company for Approval of (1) the transfer, by sale, of substantially all the water works property and rights of the City of Coatesville Authority water system to Pennsylvania-American Water Company, and (2) the rights of Pennsylvania-American Water Company to begin to offer or furnish water service to the public in all of the City of Coatesville, Parkesburg Borough, South Coatesville Borough and Sadsbury Township, Chester County, Pennsylvania and portions of Caln Township, East Fallowfield Township, Valley Township, Atglen Borough, West Sadsbury Township and West Caln Township, Chester County, Pennsylvania and Quarryville Borough, Bart Township, Colerain Township, Eden Township and Sadsbury Township, Lancaster County, Pennsylvania. No. A-212285F071 (8,090 customers)

Application of Pennsylvania-American Water Company for approval of the right to offer, render, furnish or supply water service to the public in portions of West Sadsbury Township, Chester County, Pennsylvania A-212285F0105 (1 commercial customer)

Application of Pennsylvania-American Wastewater Company for approval of the right to offer, render, furnish or supply wastewater service to the public in portions of West Sadsbury Township, Chester County, Pennsylvania. A-230073F0006 (1 commercial customer)

Application of Pennsylvania-American Water Company for approval of the right to offer, render, furnish or supply water service to the public in portions of West Caln Township, Chester County, Pennsylvania. A-212285F0110 (378 customers)

Application of Pennsylvania-American Wastewater Company for approval of the right to offer, render, furnish or supply wastewater service to the public in portions of West Caln Township, Chester County, Pennsylvania. A-230073F0007 (378 customers)

Application of PAWC for Approval of (the transfer, by sale of public water system within the Township of East Fallowfield, Chester County, Pennsylvania; (2) transfer of wastewater system of the Township of East Fallowfield, Chester County, Pennsylvania to PAWC; (3) the right of PAWC to begin to offer and furnish water and wastewater service to the public in additional areas of East Fallowfield, Chester County, Pennsylvania; and (4) the water and wastewater service and asset purchase agreement between the Township of East Fallowfield, Chester County, Pennsylvania and PAWC. Docket Nos. A-212285F00115; A-230073F0008; U-00035002; U-00035003 (363 water customers, 289 wastewater customers)

Application of Pennsylvania-American Water Company for approval of the right to offer, render, furnish or supply water service to the public in additional portions of West Caln Township, Chester County, Pennsylvania A-212285F0118 (8 customers)

Application of Pennsylvania-American Water Company for approval of the right to offer, render, furnish or supply water service to the public in additional portions of Sadsbury Township, Chester County, Pennsylvania. A-212285F0135 (1 commercial customer, 18 residential customers)

- a) overall location map of the approved territories,
- b) number of customers per territory and
- c) approved rates of each territory.

**RESPONSE:**

- a) Attached are two copies of overall location maps which show the approved service territories.
- b) See the listing above.
- c) See attached pertinent tariff sections.

**A-2.** Provide the final approval of the 537 Plan for Highland Township.

**RESPONSE:** Highland Township adopted Chester County's county-wide Act 537 Plan in 1968. The Township is in the process of developing its first municipal-based Act 537 Plan which will be completed in late 2007; however, the Department of Environmental Protection ("DEP") issued a waiver of Planning Modules. It should be noted that this project does not require a planning module. Attached is a copy of the letter issued by DEP on March 3, 2005, confirming that this project does not meet the definition of a subdivision.

**A-3.** What entity provides potable water service to this customer?

**RESPONSE:** The one (1) residential customer, subject of this application, will be drilling an on-lot well for use on this property. The property, however, will not perk for on-lot wastewater treatment.

**A-4.** A review of Resolution No. 2004 indicates that there may be other potential customers abutting Boro Line Road.

- a) How many other customers are anticipated to request wastewater and/or water service?
- b) Is there an anticipated time-line for additional connections?
- c) How many other filings of this Application nature is the Company anticipating?

**RESPONSE:**

- a) At this time, the Company has made no determinations as to future water and wastewater service in this area.
- b) There is no time line at this point for other wastewater or water connections absent customer demand.
- c) At this time, the Company cannot make a determination if and when it will file future applications.

**A-5.** A March 3, 2006 email from DEP to PAWC indicates that a Connection Management Plan exists. Provide the required copies of this Plan.

**RESPONSE:** Attached is the latest, approved Connection Management Plan for the second quarter, 2006, revised July, 2006. Also attached is a letter dated August 2, 2006, from DEP approving this submission. The third quarterly report was submitted to DEP on October 13, 2006 and is awaiting DEP's review and approval.

**A-6.** Also, in this same missive, there is an indication of an executed Consent Order and Agreement. Provide the required copies of this CO&A.

**RESPONSE:** A copy of the Consent Order and Agreement between PAWC and DEP, dated November 30, 2005, is attached.

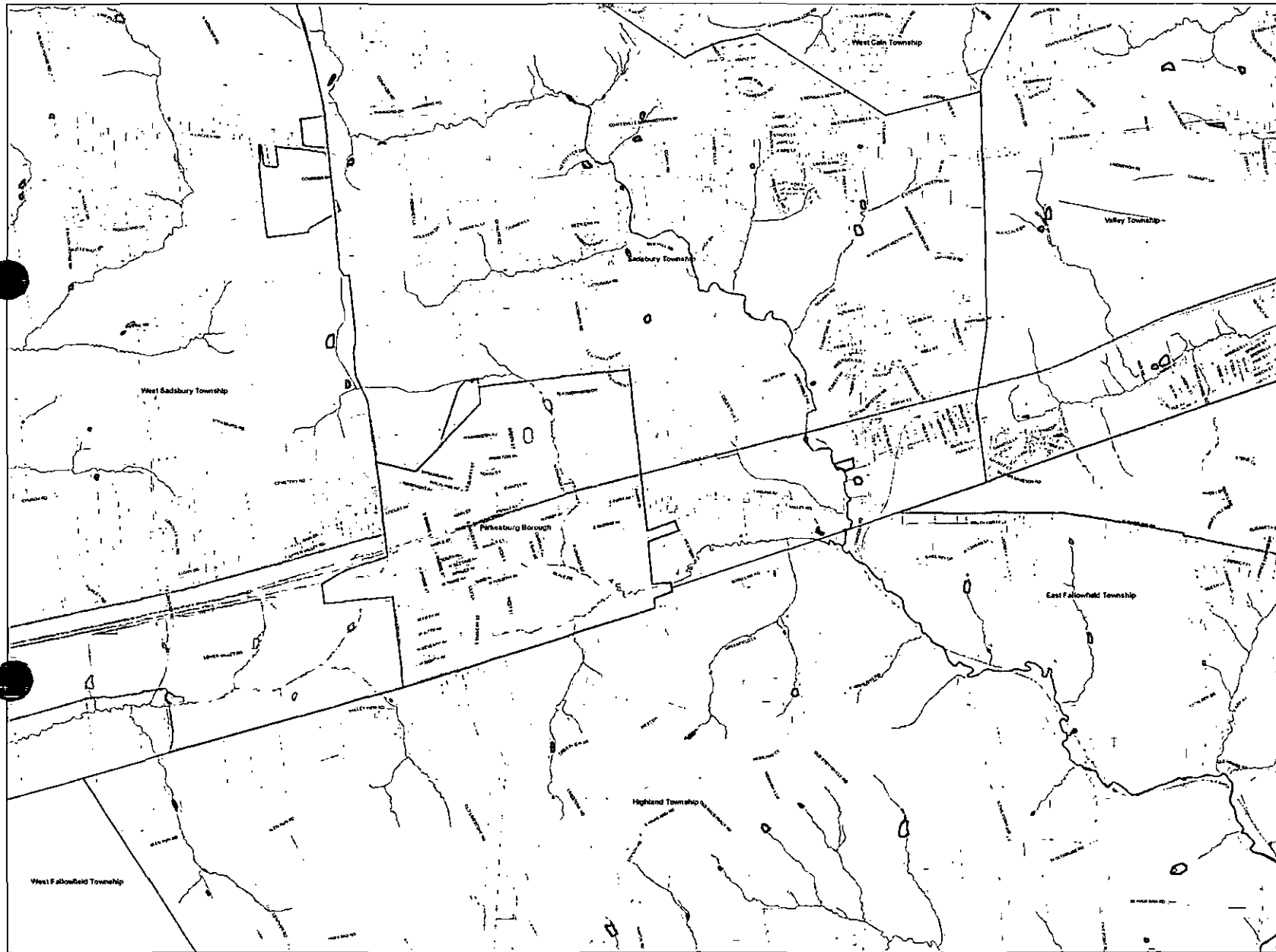
**VERIFICATION**

GERALD DeBALKO subject to the penalties of 18 Pa. Cons. Stat. § 4904 relating to unsworn falsification to authorities, hereby avers that he is Project Manager for PENNSYLVANIA-AMERICAN WATER COMPANY, that as such he is authorized to sign this Verification its behalf; and that the facts set forth in the foregoing Responses to Discovery are true and correct to the best of his knowledge, information or belief.



Gerald DeBalko  
Pennsylvania-American Water Company

Dated: November 13 2006



**Legend**

- Frenchchise Area
- Parcels
- Municipal Boundary
- Railroad
- Pond/Lake
- River/Stream

8/12/00

1" = 100'

0 100 200

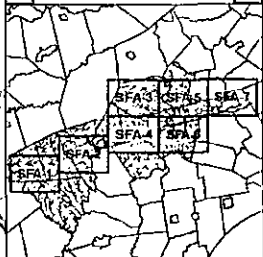
1 inch equals 100 feet

**ENTECH**

1000 North 22nd Street  
 Suite 100  
 Allentown, PA 18104  
 Phone: 610-261-1000  
 Fax: 610-261-1001  
 E-mail: entech@entech.com

**Pennsylvania  
 American Water**

**Sewer Service Franchise Area**



**SFA-4**



Schedule of Consumption Charges

A. Residential/Commercial (Based on Water Usage)

Service Charge per quarter: \$5.59

\$3.02 per 1,000 gallons

B. Special Rate Charges

1. Bulk Metered Usage

Caln Township, Valley Township, V.A. Hospital and West Brandywine Township - Quarterly Service Charge of \$5.59 in addition to \$2.13 per 1,000 gallons of metered water usage.

Lukens Steel - Quarterly Service Charge of \$5.59 in addition to \$1.94 per 1,000 gallons of metered water usage.

2. Unmetered Units

Valley District and East Fallowfield Township - \$148.00 annually

Indicates Increase, (D) Indicates Decrease, (C) Indicates Change

Issued: March 30, 2001

Effective: March 22, 2001

Pennsylvania-American Water Company Canceling Eleventh Revised Page No. 2

LIST OF CHANGES

Changes

This tariff supplement eliminates the Collection System Improvement Charge (CSIC), as set forth on Pages 6A through 6D of the Company's tariff. The Company has made a provision for refunding to customers the amount of the CSIC paid by them during the period from April 1, 2004 through March 31, 2006, when the CSIC was in effect. The CSIC was set at zero effective April 1, 2006. The CSIC is being eliminated from the Company's tariff and refunds are being made for the amounts billed under the CSIC because the Commonwealth Court of Pennsylvania issued an Opinion and Order on March 14, 2005 at No. 2497 C.D. 2003 reversing the Commission's Order entered November 7, 2003 at Docket No. R-00027982 et al that authorized the Company to establish the CSIC and, by Order entered March 7, 2006 at Nos. 315 and 316 Allocator Docket 2005, the Pennsylvania Supreme Court denied Petitions for Allowance of Appeal filed by the Commission and the Company, respectively, seeking further review of the Commonwealth Court's Order. The Company's plan to refund amounts billed under the CSIC was approved by the Commission's Order entered September 19, 2006, which approved the Joint Petition for Settlement of Remand Proceeding and Approval of Refund Plan executed by all active parties at Docket Nos. R-00027982 et al and C-20042816.

Indicates Increase, (D) Indicates Decrease, (C) Indicates Change

Issued: September 27, 2006

Effective: September 28, 2006

SCHEDULE OF RATES APPLICABLE TO RATE ZONE 1  
FOR ALL RATE CLASSES EXCEPT INDUSTRIAL

METER RATES

All water supplied by the Company for any and all purposes, except Industrial, Qualified Private Fire Hydrants and Public Fire Hydrants, shall be metered as hereinafter set forth. All meters shall be read monthly or bimonthly and the water used shall be paid for in accordance with the following schedule of rates.

Service Charges  
For All Rate Classes Except Industrial

All metered customers shall be subject to a monthly or bimonthly service charge, based on the size of meter required to render adequate service. (I)

<u>Size of Meter</u>	<u>Service Charge</u> <u>Per Month Except</u> <u>Other Water Utilities</u>	<u>Service Charge</u> <u>Per Month</u> <u>Other Water Utilities</u>	
		<u>Group A &amp; B</u>	<u>Coatesville</u>
5/8 inch	\$ 11.50	\$ 14.50	\$ 9.50
3/4 inch	17.30	22.00	13.30
1 inch	28.80	36.00	20.30
1-1/2inch	47.20	73.00	38.90
2 inch	75.50	116.00	60.50
3 inch	141.00	218.00	111.90
4 inch	177.00	363.00	187.00
6 inch	265.00	725.00	369.00
8 inch	513.00	1,160.00	588.70
10 inch	743.00	1,668.00	1,668.00
12 inch	1,162.00	2,610.00	2,610.00

Consumption Charges For all Rate Classes Except Industrial

The following rates shall apply per 100 gallons.

(I)

	<u>FIRST</u> <u>16,000/MONTH</u>	<u>NEXT</u> <u>584,000/MONTH</u>	<u>ALL IN EXCESS</u> <u>OF 600,000/MONTH</u>
Residential	.5735	.5735	.5735
Commercial	.5735	.4611	.4611
Municipal	.5735	.4770	.4770
Other Water Utilities			
Group A	.4390	.4390	.4390
Other Water Utilities			
Group B	1.3400	1.3400	1.3400
Other Water Utilities			
Coatesville	.4390	.4390	.4390

SCHEDULE OF RATES APPLICABLE TO RATE ZONE 1  
FOR INDUSTRIAL RATE CLASS

METER RATES

All water supplied by the Company for Industrial purposes shall be metered as hereinafter set forth. All meters shall be read monthly or bimonthly and the water used shall be paid for in accordance with the following schedule of rates.

Service Charges  
For Industrial Rate Class

All metered customers shall be subject to a monthly or bimonthly service charge, based on the size of meter required to render adequate service. (I)

<u>Size of Meter</u>		<u>Per Month</u>
5/8	inch	\$ 17.90
3/4	inch	26.90
1	inch	44.80
1-1/2	inch	89.50
2	inch	143.20
3	inch	269.00
4	inch	448.00
6	inch	895.00
8	inch	1,432.00
10	inch	2,059.00
12	inch	3,222.00

Consumption Charges For Industrial Rate Class (I)

The following rates shall apply per 100 gallons per month.

<u>Industrial</u>		<u>Industrial Curtailment*</u>	
First 16,000	.5735	First 16,000	.5735
Next 584,000	.4430	Next 584,000	.4430
All in Excess		Next 14,400,000	.3540
of 600,000	.3540	All In Excess	
		Of 15,000,000	.2530

- Subject to the availability criteria and terms and conditions of the industrial curtailment rate (pages 9A1 and 9A2, hereof), the foregoing rates shall apply per 100 gallons per month for service provided under the Industrial Curtailment Rate.

Jan 24 08 03:27p

Heartswork

Construct 610 3 1486

**Pennsylvania Department of Environmental Protection**

2 East Main Street  
Norristown, PA 19401  
March 3, 2005

**Southeast Regional Office**

484-250-5970  
Fax 484-250-5971

Ms. Siti Crook  
ADA Disability Custom Building  
2840 Strasburg Road  
East Fallowfield, PA 19320

Re: Application for Planning Modules  
Heartswork Tract  
Code No. 1-15930-113-X  
Highland Township  
Chester County

Dear Ms. Crook:

This letter is in reference to your application for Sewage Facilities Planning Modules for the construction of a 3 bedroom dwelling with an office or storage space on the first floor. This project is located on Boroline Road, in Highland Township, Chester County.

This project does not meet the definition of a subdivision under the Pennsylvania Sewage Facilities Act. Therefore, no planning modules are required to be submitted to the Regional Office of the Department of Environmental Protection.

If you have any questions, please call me at 484-250-5182.

Sincerely,

Kelly Sweeney  
Sewage Planning Specialist II  
Water Management

cc: Chester County Health Department  
Chester County Planning Commission  
Highland Township  
Parkesburg Borough Authority  
Pennsylvania American Water Company  
Planning Section  
Re 30





**Pennsylvania  
American Water**

**COATESVILLE DISTRICT  
CHESTER COUNTY**

**CONNECTION MANAGEMENT PLAN  
WASTEWATER TREATMENT PLANT  
AND  
EAST END TRUNK LINE**

**REPORTING 2nd Quarter 2006 Data REVISED: July 2006**

**PLEASE NOTE  
CMP SUBMITTAL DATES BY PAWC TO PADEP:  
4/13/06 AND 7/13/06**

**PADEP APPROVAL DATES:  
PENDING**

**PREPARED BY:  
PENNSYLVANIA - AMERICAN WATER COMPANY  
COATESVILLE DISTRICT  
GERALD A. DeBALKO, P.E.  
4 WELLINGTON BLVD.  
WYOMISSING, PA 19610  
T: (610) 670-7789 EXT 127  
F: (610) 678-6057**

**CONNECTION MANAGEMENT PLAN  
WASTEWATER TREATMENT PLANT (WWTP)  
&  
EAST END TRUNK LINE (EETL)  
REPORTING 2nd Quarter 2006 Data REVISED: July 2006**

**SUMMARY OF MANAGEMENT PLAN GOALS FOR WWTP**

PAWC, in coordination with tributary municipalities, provides on-going and revised projections through PAWC's Connection Management Plan (CMP) which is submitted to DEP on a quarterly basis as set forth in the Consent Order & Agreement (CO&A). The CMP has two summaries of projections on Table A2 in the report and reflects those developments approved by DEP for construction and connection to the sewer system which is located within the 2001 DEP approved Act 537 service areas of the tributary municipalities. These developments may be connected prior to the completion of the sewer plant expansion pending final DEP approval of the applicable sewer planning modules. The 5 year projected annual flows approved by DEP at this time project total flows in Summary # 1 of 4.383 mgd with a total construction of 4,827 EDUs by 2010. Summary # 2 is a PAWC projection of projects with Planning Modules signed by PAWC or pending submission by PAWC which has a 5 year projected annual flow of 4.483 mgd with total construction of 5,276 EDUs by 2010.

On the CMP, Table A3, Summary #1 indicates all units as requested by developers and townships, and is a highly aggressive growth number which would produce an average flow in 2010 of 5.463 mgd. Summary #2 indicates all units requested which have planning modules signed by PAWC or pending, and is a more conservative and realistic growth number which would produce an average flow in 2010 of 4.451 mgd. Summary #3 shows the difference between Summary #1, the aggressive EDU projection, and Summary #2; and represents the remaining EDU's not yet signed by PAWC. PAWC is requesting the movement of projects marked "P" for pending from Table A3 to A2. Those listed in 2009 and beyond are outside the 2001 DEP approved service areas and are planned for connection after the sewer plant expansion.

*Table A.1A is composed of two (2) different projections. The first projection at the top of the page (Summary No. 2, 2006 Q1, revised July 2006) begins with the 2005 actual average flow of 3,513,074 gpd as reported in the 2005 Chapter 94 report and projects flows for the five year period of 2006-2010 resulting in a 2010 average flow of 4,666,349 gpd.*

The second projection at the bottom of the page Summary No. 2 – Based on adjusted 5 Year Average refers to the CMP Table A2, Summary #2 for which PAWC has approved planning modules or considers to be pending and is a more realistic projection. Starting with the most recent adjusted five year average flow of 3,330,372 gpd, the average flow in 2010 is projected to be 4,483,647 gpd. Table A.1B shows the derivation of the adjusted 5 year average flow based on flow adjustments for prior year connections.

Looking at both summaries, PAWC anticipates the actual flow in the next five years will most realistically follow this second projection for pre-plant expansion. Once the expanded plant is completed and new, additional capacity provided, flows will be able to exceed the pre-plant capacity limits.

As shown in Table 1, PAWC currently has the capacity to accept up to 5,644 new EDU's per the November 2005 CO&A. In accordance with Act 537 and Chapter 94, PAWC will not commit capacity or allow connections for any projects in Summary #3 until such flows are approved by DEP in a revised CMP that lists the projects under Table A2.

*With approval from the Department, we have modified the unit flow rate for senior housing and all other dwelling units from 262.5 gpd/EDU to 150 and 225 gpd/EDU, respectively.*

**CORRECTIVE ACTIONS TO ADDRESS PROJECTED HYDRAULIC OVER LOAD:**

PAWC has been developing a Regional Act 537 Plan since 2001 and distributed the draft plan to the tributary municipalities, the Chester County Planning Commission and the Chester County Health Department for review and comment in 2005. Most of the municipalities and the County agencies did respond and their comments were reflected in a revised draft Plan. PAWC submitted this plan to DEP for review in the 4<sup>th</sup> Quarter of 2005. At a meeting with the tributary municipalities on December 7, 2005, in which PAWC and representatives from DEP attended, DEP explained it had made the decision that each tributary municipality must submit its own revised Act 537 Plan from which certain elements of these plans must be incorporated into PAWC's Regional Act 537 Plan. This was a change from the premise PAWC and the municipalities had been following since PAWC began the update in 2001. East

Fallowfield Township submitted its revised Act 537 Plan to DEP in 2004 and Caln Township submitted its revised Act 537 Plan to DEP on November 7, 2005. The other seven municipalities are in various stages of preparation of their Plans which should be submitted to DEP by the end of 2006. PAWC is working closely with each municipality on the preparation of the Act 537 Plans to assure continuity with PAWC's Regional Plan. One new, proposed tributary, Highland Township, is in the process of developing its first Act 537 Plan which is expected to be completed in 2007. Each municipality must approve its own Act 537 Plan after a Public Hearing and must also approve PAWC's Regional Plan by Resolution.

PAWC is working with all tributary municipalities to obtain the needs analysis for sewer capacity for inclusion in our ACT 537 Plan. We will complete our draft of the Plan by the end of July after which it will be sent to the tributary municipalities for review and comment. We will also send a copy to the Chester County Planning Commission, the Chester County Health Department and a courtesy copy to DEP. There is a sixty (60) day review and comment period allotted; however, we will ask each entity to expedite their review. We will, of course, work with each entity to address any issues which arise. After addressing any concerns or issues, PAWC will request each tributary municipality to adopt the Plan by Resolution which will become part of the final Plan submission to DEP.

We anticipate sending our final Plan to DEP in early October 2006. DEP has 120 days for its review, comment and approval by January 2007. We will be respectfully requesting DEP for an expedited review and approval.

On December 7, 2005, DEP directed that sewer connections would be allowed only in those sewer service areas of the Act 537 Plan approved by DEP on March 15, 2001. Any developments proposed in areas outside the 2001 service area will not be approved until after the plant expansion unless the municipality's limited scope Act 537 Plan revision is first approved by DEP and, further, provided the additional capacity requested does not exceed the CMP allocation of 4.6 mgd prior to the Plant expansion. For four projects (Bone Tract, London Tract, Southwoods, and Ridgecrest) that are outside the Act 537 2001 service areas, PAWC is requesting approval by DEP to move these projects from Table A3 to A2.

PAWC submitted a re-rating study to DEP which shows the organic and hydraulic capacity of the facility to be 4.86 MGD. As part of the CO&A, DEP will permit flow allocations up to the average annual flow rate of 4.6 MGD to be used in the CMP projections prior to the completion of the sewer plant expansion. DEP received the Part I NPDES permit for the proposed 7.0 MGD facility on September 17, 2005. DEP received the Part II NPDES permit for the proposed 7.0 MGD facility on March 31, 2006. Once the Act 537 plan is approved by DEP, PAWC can move forward with plans to expand capacity at WWTP to address any limitations at the plant. PAWC is underway with the design engineering for the WWTP expansion. PAWC anticipates having the WWTP expanded capacity online by late 2008.

#### SUMMARY OF MANAGEMENT PLAN GOALS FOR EETL

Previous Connection Management Plans (CMP) identified MH #16 to #18 as the most critical section of the East End Trunk Line (EETL) and allocated new connections as shown in Table B2 of the CMP, until the line upgrade of this critical section was completed. Construction of this upgrade was substantially completed and placed into service on 5/10/06. There is no need for further allocation of new connections as it pertains to this section.

Utilizing flow projections for the next five years, and based on system flows as monitored in May 2002, Table B1 shows the next critical section of the EETL to be between manholes 21 and 20. Peak flows are based on projections of average daily flow, which correlate to the increase in projected new connections based on Table A2 – summary #2, times a peaking factor of 2.8. The projected EDU's are based on the EDU's as submitted by the contributing municipalities and currently signed Planning Modules and PAW/developer estimates of buildout. Provided that all projected EDU's on Table A2 become active, we project a hydraulic overload in this critical section in 2008. The maximum capacity of the line is 4,472,280 gpd, and the present peak flow is 3,718,400 gpd. The projected EDU's remaining based on the average daily flow would be 1197 EDU's.

As shown in Table 2, PAW currently has capacity to accept 1197 new EDU's through this critical section of the EETL. PAW has indicated by the column labeled EETL MH on Table A2, the projected new connections to the EETL which impact this section. Table A2 indicates that a total of 1032 new EDU's in 2006-07 is projected to flow through this section. PAWC is limiting connection until this critical section is upgraded and placed into service.

As part of the projected hydraulic overload, PAWC offers the following Corrective Action Plan. These target dates are dependent upon the issuance of the DEP Part II permit by the end of August 2006.

- PAWC has completed preparation of plan and profile drawing for the sewer line upgrades between manholes 19A and 46, excluding manhole segments 30 through 39.
- PAWC has agreements in place to fund the upgrade of this critical section and EDU's are allocated in accordance with this agreement as shown in Table A2.
- PAWC submitted Part II Permit on June 19, 2006 for this upgrade.
- Receive bids for construction August 14, 2006.
- Award construction contracts – September 2006.
- Issue Notice to Proceed by end of September 2006.
- Construction timeframe – October 2006 to March 2007.
- Substantial completion of project by mid-March 2007.

PAWC is projecting a hydraulic overload in a portion of the conveyance system in the year 2009 between manholes 10 and 9. This section is projected to become critical after the Coatesville Wastewater Treatment Plant expansion is completed. This segment is located within the Mittal Steel Property just north of the existing sewage treatment plant. The sewer main is part of the 30" interceptor that collects the sewage from the East and West End trunk lines which combine at manhole 15. The 30" interceptor conveys all the sewage in the Coatesville sewer service area from manhole 15 to the headworks of the existing treatment plant.

PAWC plans to upgrade this section in conjunction with its planned upgrades to the Coatesville WWTP. The following action items are underway with regards to this project.

- PAWC has completed plan and profile drawing of the proposed improvement.
- PAWC has funding for upgrade of this critical section and EDU's are allocated in accordance with this agreement as shown in Table A2.
- PAWC will submit the Part II Permit by August 2006 for this upgrade.
- Receive bids for construction February 2007.
- Start construction in conjunction with the treatment facility expansion in June 2007.
- Estimated completion of construction is March 2008 in conjunction with the treatment plant expansion.

**CONNECTION MANAGEMENT PLAN - REPORTING 2nd Quarter 2006 Data REVISED: July 2006**
**WASTEWATER TREATMENT PLANT (WWTP) CAPACITY PROJECTIONS**
**TABLE 1**

<b>CAPACITY BASED ON ACT 537 PLANNING</b>		
<u>Line/Note</u>		
A	ANNUAL AVERAGE FLOW PER ACT 537	3.85 mgd
B	AVAILABLE ALLOCATION LIMIT PER CONSENT ORDER	4.60 mgd
C	ADJUSTED 5 YEAR ANNUAL AVERAGE FLOW	3.330 mgd
D	AVAILABLE CAPACITY TO ALLOCATE	1.270 mgd
E	AVAILABLE EDUS BASED ON AVAILABLE CAPACITY	<b>5,644 edu</b>
1	PERMITTED 3-MONTH MAXIMUM FLOW PER NPDES PERMIT	4.600 mgd
2	5 YEAR MAXIMUM 3-MONTH AVERAGE FLOW	3.612 mgd
3	5 YEAR AVERAGE PEAKING FACTOR: 3-MONTH MAXIMUM TO ANNUAL AVERAGE	1.085 mgd

Note

All referenced tables are located in Appendix

EDU = 225 gpd/edu

(A) Annual Average Flow per 1995 ACT 537 Plan

(B) Available capacity to be allocated per November 30, 2005 Consent Order prior to facility expansion in 2008.

(C) Calculated using the running Adjusted 5 Year Equivalent Base Flows from Table A1B.

(D) Calculated as Line A - Line B

(E) Calculated as (Line C \* 1,000,000) divided by (225 gpd/edu). Available EDU's could be greater when lower EDU values for senior housing are factored in.

(1) 4.60 mgd is the Maximum Month Flow per the NPDES permit which is used to help determine hydraulic loading at WWTP. Hydraulic overload does not occur until the maximum month average is exceeded for 3 consecutive months.

(2) From Table A1A, calculated as Adjusted 5 year annual average flow times peak factor from Table A1.

(3) 5 Year Peak factor from Table A1.

**CONNECTION MANAGEMENT PLAN - REPORTING 2nd Quarter 2006 Data REVISED: July 2006**
**EAST END TRUNK LINE (EETL) CAPACITY PROJECTIONS**
**TABLE 2**

<b>CAPACITY BASED ON MOST CRITICAL SECTION</b>		
<u>Line/Note</u>		
1	HYDRAULIC PEAK CAPACITY AT CRITICAL SECTION (MH# 21 to MH# 20)	4,472,280 gpd
2	EETL AVERAGE DAILY FLOW	1,328,000 gpd
3	EETL PEAK DAILY FLOW	3,718,400 gpd
4	AVAILABLE CAPACITY AS PEAK FLOW	753,880 gpd
5	AVAILABLE CAPACITY AS AVERAGE FLOW	269,243 gpd
6	AVAILABLE EDUS AT AVERAGE FLOW	1,197 edu
	NUMBER OF CONNECTIONS MADE	0 edu

Note

- All referenced tables are located in Appendix
- (1) Critical Section as indicated on Table B1
  - (2) Average Daily Flow as indicated in Table B1 for critical section. Average Daily Flow values as indicated on Table B1 are obtained from the I&I Program's May 2002 metering of basins.
  - (3) Peak Daily Flow as indicated on Table B1 for critical section.
  - (4) Available Capacity as indicated on Table B1 for critical section.
  - (5) Calculated by removing peaking factors from Peak Flow on Line 4.
  - (6) Calculated as Line 5 divided by 225 gpd/EDU

APPENDIX A



**CONNECTION MANAGEMENT PLAN - REPORTING 2nd Quarter 2006 Data REVISED: July 2006  
WASTEWATER TREATMENT PLANT FLOWS**

**TABLE A1**

MONTH	YEAR	MONTHLY FLOW AVERAGE (MGD)					MONTHLY FLOW AVERAGE (MGD)	2006	
		2001	2002	2003	2004	2005		3 MONTH MAXIMUM (MGD)	RAIN TOTAL (in.)
Annual Average		3.85 MGD							
3 Consecutive Month Maximum		4.6 MGD							
JANUARY		2.204	2.965	3.546	3.776	3.939	3.615	10.53	
FEBRUARY		2.076	3.195	3.749	3.652	3.913	3.820	2.06	
MARCH		2.248	4.011	3.183	3.688	3.472	3.775	1.25	
APRIL		2.264	3.421	3.315	4.337	3.411	3.599	4.01	
MAY		2.599	3.204	3.296	3.402	3.189	3.357	1.52	
JUNE		2.511	4.501	3.251	3.124	3.891	3.497	15.01	
JULY	2.500	2.377	3.449	3.118	3.530				
AUGUST	2.233	2.358	3.696	3.422	3.171				
SEPTEMBER	2.197	2.364	4.266	3.408	2.905				
OCTOBER	2.084	2.65	3.719	3.288	3.663				
NOVEMBER	2.054	2.763	4.072	3.269	3.297				
DECEMBER	2.077	3.126	4.296	3.371	3.609				
AVERAGE	2.191	2.462	3.733	3.351	3.513	AVERAGE 3.636	--	5.73	
3 Month MAX	2.310	2.846	4.029	3.493	3.892	3 MTH. MAX.	3.820		

Number of Connections During Quarter 2006	
1st Quarter	83
2nd Quarter	84
3rd Quarter	
4th Quarter	
<b>Total for Year</b>	<b>167</b>

5 YEAR FLOW HISTORY			
	ANNUAL AVERAGE	3 MONTH MAXIMUM	PEAKING FACTOR

2006	3.636	3.820	1.051
2005	3.513	3.892	1.108
2004	3.351	3.493	1.042
2003	3.733	4.029	1.079
2002	2.462	2.846	1.156
2001	2.191	2.310	1.054

**RUNNING ANNUAL AVERAGE FLOW**

**3.499 MGD** July 2005 through June 2006

**RUNNING 5 YEAR AVERAGE**

**3.194 3.465 1.085**

CONNECTION MANAGEMENT PLAN - REPORTING 2nd Quarter 2006 Data REVISED: July 2006  
WASTEWATER TREATMENT PLANT FLOWS

TABLE A1A

PROJECTED TOTAL PER CMP, TABLE A2 (2006 Q2, REVISED JULY 2006), SUMMARY NO. 2								
	Act 537 Approved Contracted Allocation	Chapter 94 Flow 2005	2006	2007	2008	2009	2010	5-year Net Increase
City of Coatesville	*	1,950,772	1,990,372	2,079,322	2,153,272	2,155,297	2,155,297	204,525
Valley Township	550,000	579,203	665,303	734,228	802,028	837,203	837,203	258,000
Caln Township	167,000	167,875	170,125	178,000	192,100	206,350	213,100	45,225
West Brandywine Township	345,000	141,210	174,060	208,485	244,035	269,910	299,385	158,175
Sadsbury Township	410,750	88,832	130,007	172,757	205,607	237,332	237,332	148,500
West Sadsbury Township	*	46,354	46,354	46,354	46,354	46,354	46,354	-
East Fallowfield Township	*	77,580	112,230	154,530	172,305	172,305	172,305	94,725
Borough of Parkesburg	*	368,244	417,294	530,694	587,844	587,844	587,844	219,600
West Caln Township	*	7,809	19,734	32,334	32,334	32,334	32,334	24,525
Veterans Hospital	*	78,877	78,877	78,877	78,877	78,877	78,877	-
Bulk Delivery		6,318	6,318	6,318	6,318	6,318	6,318	
<b>Ave. Total Flow (MGD)</b>		<b>3,513,074</b>	<b>3,810,674</b>	<b>4,221,899</b>	<b>4,521,074</b>	<b>4,630,124</b>	<b>4,666,349</b>	<b>1,153,275</b>
<b>3-Month Max (MGD)</b>		<b>3,892,000</b>	<b>4,222,227</b>	<b>4,677,864</b>	<b>5,009,350</b>	<b>5,130,177</b>	<b>5,170,315</b>	<b>1,278,315</b>
<b>Peak Factor</b>		<b>1.108</b>	<b>1.108</b>	<b>1.108</b>	<b>1.108</b>	<b>1.108</b>	<b>1.108</b>	

PROJECTED TOTAL PER CMP (revised 7/06), TABLE A2 (SUMMARY NO. 2)- BASED ON 5 YEAR ADJUSTED AVERAGES								
<b>Ave. Total Flow (MGD)</b>		<b>3,330,372</b>	<b>3,627,972</b>	<b>4,039,197</b>	<b>4,338,372</b>	<b>4,447,422</b>	<b>4,483,647</b>	<b>1,153,275</b>
<b>3-Month Max (MGD)</b>		<b>3,612,576</b>	<b>3,935,393</b>	<b>4,381,464</b>	<b>4,705,990</b>	<b>4,824,280</b>	<b>4,863,575</b>	<b>1,250,999</b>
<b>Peak Factor</b>		<b>1.085</b>	<b>1.085</b>	<b>1.085</b>	<b>1.085</b>	<b>1.085</b>	<b>1.085</b>	

Contract and Planning Allocations For WWTF Expansion		
	Allocation	Contracted Capacity
City of Coatesville	2,391,490	
Valley Township		1,540,000
Caln Township		800,000
West Brandywine Township		345,000
Sadsbury Township		410,750
West Sadsbury Township	111,951	
East Fallowfield Township	329,232	
Borough of Parkesburg	633,416	
West Caln Township	251,089	
Veterans Hospital	74,271	
Highland Township	56,438	
<b>Totals:</b>	<b>3,847,887</b>	<b>3,095,750</b>
		<b>6,943,637</b>

NOTE (1) Draft Sewer Agreement 4/25/05 pending with requested amounts of 473,000 gpd and 835,000 gpd post plant

**TABLE A1B  
SUMMARY OF CONNECTIONS**

SOURCE	2001		2002		2003		2004		2005 (2)		5 Year Totals	
	New Flow	Equiv. EDU's	New Flow	Equiv. EDU's	New Flow	Equiv. EDU's	New Flow	Equiv. EDU's	New Flow	Equiv. EDU's	New Flow	Equiv. EDU's
<i>Bulk Customers</i>												
Valley Twp.	10,800	48	7,200	32	29,025	129	33,075	147	17,325	77	97,425	433
Caln Twp.	3,150	14	0		0		0	0	675	3	3,825	17
W. Brandywine Twp.	450	2	11,250	50	5,850	26	1,350	6	225	1	19,125	85
Sadsbury	0	0	44,100	196	26,325	117	25,200	112	31,500	140	127,125	565
Subtotal	14,400	64	62,550	278	61,200	272	59,625	265	49,725	221	247,500	1,100
<b>Billed Customers <sup>(1)</sup></b>	47,250	210	67,950	302	65,250	290	53,100	236	55,125	245	288,675	1283
<b>Veteran's Hospital</b>	(14,424)	(64)	(20,863)	(93)	(4,525)	(20)	(3,542)	(16)	4,606	20	(38,748)	(172)
<b>TOTAL</b>	47,226	210	109,637	487	121,925	542	109,183	485	109,456	486	497,427	2211

<sup>(1)</sup> Net EDU addition for City of Coatesville, East Fallowfield Twp., Parkesburg Boro, West Sadsbury, West Caln, & Bulk Haulers

<sup>(2)</sup> The 2005 total was previously reported at 859 EDU's, however 2004 EDU's were counted as 2005 when updating the CMP to date.

Note: One EDU = 225 GPD

Base Flow Determination

	2001	2002	2003	2004	2005	5-YR Adjusted Average
Actual Annual Average	2.474	2.462	3.733	3.351	3.513	
Flow Adjustments 2001	0.110					
Flow Adjustments 2002	0.122	0.122				
Flow Adjustments 2003	0.109	0.109	0.109			
Flow Adjustments 2004	0.109	0.109	0.109	0.109		
<b>Total Adjustment</b>	0.450	0.341	0.219	0.109	0	
<b>Equivalent Flow</b>	2.924	2.803	3.952	3.460	3.513	3.330

CONNECTION MANAGEMENT PLAN - REPORTING 2nd Quarter 2006 Data REVISED: July 2006

PROJECTED NEW CONNECTIONS WITH SIGNED PLANNING MODULES

PLEASE NOTE - CMP WAS SUBMITTED BY PAWC BUT NOT APPROVED BY DEP

TABLE A2

EST. GPD										PROJECTED NEW CONNECTIONS (c)					TOTAL IN	TOTAL
LINE	DEP Code No.	NAME	TOTAL EO. EDU's	EDUS EO. ACTIVE	EDUS REMAINING	REMAINING	PLANNING (b) MODULE	EETL MH	TYPE	2006	2007	2008	2009	2010	5 YEARS	BEYOND 2010
1	City of Coatesville															
2	1-15001-036-3U	Cambria Terrace	69	3	66	14,850	Y	16	R	7	28	22	9	*	68	-
3	1-15001-029-3H	Penn Crossing	78	78	-	-	Y	40	R	-	-	-	-	*	-	-
4	1-15001-023-3H	Milview	187	187	-	-	Y	-	R	-	-	-	-	*	-	-
5	1-15001-032-3J	Milview Apartments	350	350	-	-	Y	-	R	-	-	-	-	*	-	-
6		Cox II	11	11	-	-	Y	37	R	-	-	-	-	*	-	-
7	1-15001-037-3U	Bond House (Mount Pleasant Street)	13	-	13	2,925	Y	-	R	13	-	-	-	*	13	-
8		Brandywine View	638	-	638	143,550	Y	23	R	60	175	175	-	*	410	228
9		Pulver Office Building 1	25	-	25	5,625	Y	-	C	-	10	15	-	*	25	-
10		Marriott Hotel & Restaurant	40	-	40	9,000	Y	-	C	-	40	-	-	*	40	-
11		Chetty Towers 1 - Residential	60	-	60	13,500	Y	23	R	40	20	-	-	*	60	-
12		Chetty Towers 1 - Commercial	10	-	10	2,250	Y	23	C	10	-	-	-	*	10	-
13		Chetty Towers 2 - Residential	150	-	150	33,750	Y	16	R	-	90	90	-	*	150	-
14		Chetty Towers 2 - Commercial	25	-	25	5,625	Y	16	C	-	5	20	-	*	25	-
15		ChesPenn - Residential	15	-	15	2,250	Y	33	R	-	5	10	-	*	15	-
16		ChesPenn - Commercial	4	-	4	900	Y	33	C	-	4	-	-	*	4	-
17		701 ELH - Residential	4	-	4	900	Y	33	R	4	-	-	-	*	4	-
18		701 ELH - Commercial	3	-	3	675	Y	33	C	3	-	-	-	*	3	-
19		731 ELH - Residential	6	-	6	1,350	Y	33	R	6	-	-	-	*	6	-
20		731 ELH - Commercial	3	-	3	675	Y	33	C	3	-	-	-	*	3	-
21		Williams Tract	80	-	80	18,000	Y	16	R	30	50	-	-	*	80	-
22		Coatesville VoTech	5	-	5	1,125	P	-	R	-	1	1	1	*	4	1
23		Total EDU	1,776	629	1,147	256,950			EDU	176	398	333	10	1	918	229
24		Total Flow	397,350	141,525	258,075				FLOW	39,500	88,950	73,950	2,025	-	204,525	51,300
25	Valley Township (d)															
26	1-15956-117-3H	Hillview	525	242	283	42,450	Y	16	R	55	80	80	88	*	283	-
27	1-15956-119-3H	Meadow Brook	88	-	88	-	Y	16	R	-	-	-	-	*	-	-
28	1-15956-134-3U	Oak Crest (Dague)	188	-	181	40,725	Y	16	R	53	60	68	-	*	181	-
29	1-15956-118-3H	Valley Crossing IV	49	-	49	-	Y	-	R	-	-	-	-	*	-	-
30	1-15956-123-3J	Timbertane	46	31	15	3,375	Y	-	R	15	-	-	-	*	15	-
31	1-15956-126-3J	Round Hill (Buckthorn Area)	230	-	230	51,750	Y	-	R	60	60	60	50	*	230	-
32	1-15956-127-3J	Hanscom Subdivision	1	-	1	225	Y	-	R	1	-	-	-	*	1	-
33	1-15956-124-3J	Lambert Subdivision	3	-	3	675	Y	-	R	3	-	-	-	*	3	-
34		Highlands Corp. Center Phase I, II, III	90	27	63	14,175	Y	16	C	50	13	-	-	*	63	-
35	1-15956-132-3J	Woodland Point (Risbon)	9	-	9	2,025	Y	-	C	9	-	-	-	*	9	-
36	1-15956-125-3J	Valley Suburban (Stolzrus Commercial)	340	-	340	76,500	Y	-	C	100	100	100	40	*	340	-
37	1-15956-128-3U	Valley Farm & Mt. Airy Road	81	-	81	18,225	Y	16	R	20	20	20	21	*	81	-
38		Terry Middleton	1	-	1	225	Y	-	R	1	-	-	-	*	1	-
39		London Tract	14	-	14	3,150	P	-	R	14	-	-	-	*	14	-
40		Bone Tract (Keystone Foods Portion)	20	-	20	4,500	P	-	R	20	-	-	-	*	20	-
41		Albert Koenig	1	-	1	225	P	-	R	1	-	-	-	*	1	-
42		Total EDU	1,686	444	1,242	258,225			EDU	402	333	328	179	-	1,242	-
43		Total Flow	339,750	81,750	258,350				FLOW	86,100	68,925	67,800	35,175	-	258,000	-
44	Calm Township (d)															
45	1-15912-186-3J	Hillview (aka Hill Farm)	99	-	99	14,850	Y	26	R	-	-	49	50	*	99	-
46		Southwoods (Weiss)	20	-	20	4,500	P	54	R	10	10	-	-	*	20	-
47	1-15912-159-E	Loew/Southdown (Ducca/Haron)	300	-	300	67,500	P	54	R	-	25	30	30	*	115	185
48		Total EDU	419	-	419	86,850			EDU	10	35	79	80	30	234	185
49		Total Flow	86,850	-	14,850				FLOW	2,250	7,875	14,100	14,250	6,750	45,225	41,625
50	West Brandywine Township (d)															
51		Monacy Manor	42	-	42	9,450	Y	46	R	42	-	-	-	*	42	-
52		Freedom Village	223	190	33	4,950	Y	46	R	48	-	-	-	*	48	-
53		YMCA	67	19	48	10,800	Y	46	C	20	20	8	-	*	48	-
54		Brandywine Hospital	416	210	206	46,350	Y	46	C	50	50	50	56	*	206	-
55		CASD	100	32	68	15,300	Y	46	C	-	-	-	-	*	68	-
56		Nunemaker Subdivision	2	-	2	450	Y	46	R	2	-	-	-	*	2	-
57		MSI	13	-	13	2,925	Y	46	R	-	-	-	-	*	13	-
58		West Brandywine Twp MA	547	255	292	65,700	Y	46	R/C	-	83	100	59	50	292	-
59		Total EDU	1,410	708	704	159,925			EDU	162	153	158	115	131	719	-
60		Total Flow	300,525	144,600	155,925				FLOW	32,850	34,425	35,550	25,875	29,475	158,175	-
61	1-15930-113-X	Siti Crook property	1	-	1	225	P	-	R	1	-	-	-	*	1	-
62		Total EDU	1	-	1	225			EDU	1	-	-	-	-	1	-
63		Total Flow	225	-	225				FLOW	225	-	-	-	-	225	-
64	Sadsbury Township (d)															
65	1-15947-086-3H	Sadsbury Village	149	149	-	-	Y	-	R	-	-	-	-	*	-	-
66	1-15947-079-E	Quarry Ridge	185	165	-	-	Y	-	R	-	-	-	-	*	-	-
67	1-15947-088-3H	AIM Business Park - Bellaire	132	41	91	20,475	Y	-	R	40	40	11	-	*	91	-
68	1-15947-094-3J	Octofaro Glen	44	44	-	-	Y	-	R	-	-	-	-	*	-	-
69	1-15947-092-3J	Morris Farm	12	11	1	225	Y	-	C	1	-	-	-	*	1	-
70	1-15947-104-3J	Sadsbury Park	461	-	461	103,725	Y	-	R	75	110	135	141	*	461	-
71		Bone Tract (Sadsbury Portion)	20	-	20	4,500	Y	-	C	10	10	-	-	*	20	-
72		D&S Developers	25	-	25	5,625	Y	-	C	25	-	-	-	*	25	-

74	Lafayette Square	60		60	13,500	Y		R	30	30	*	*	*	60	-	
75	Pomeroy Partnership	2		2	450	Y		R	2	*	*	*	*	2	-	
76																
77	Total EDU	1,070	410	660	148,500				EDU	183	190	146	141	680	-	
78	Total Flow	240,750	92,250	148,500					FLOW	41,175	42,750	32,850	31,725	148,500	-	
79	<b>East Fallowfield Township</b>															
80	1-15918-159-3H	Stone Creek (Robins Cove)	53	36	17	3,825	Y	37	R	8	9	*	*	17	-	
81	1-15918-194-3J	Harkins Farm	21		21	4,725	Y	37	R	12	9	*	*	21	-	
82		Brinton Station	87	87			Y	37	R	*	*	*	*		-	
83		Branford Village	247	247			Y		R	*	*	*	*		-	
84		Brook Crossing	166	166			Y		R	*	*	*	*		-	
85	1-15918-207-3I	North Woods (Thompson North)	27		27	6,075	Y	37	R	20	7	*	*	27	-	
86	1-15918-208-3I	Mendenhall Tract	74		74	16,650	Y	37	R	20	30	24	*	74	-	
87	1-15918-211-3J	Providence Hill (Chen Tract)	218	48	170	38,250	Y	37	R	70	70	30	*	170	-	
88	1-15918-196-3J	Manchester Farms (Thompson South)	112	50	62	13,950	Y	37	R	24	38	*	*	62	-	
89	1-15918-213-3J	Ridgecrest (Martin)	72		72	16,200	P	37	R		25	25	*	50	22	
90																
91	Total EDU	1,077	634	443	99,675				EDU	154	188	79	-	421	22	
92	Total Flow	242,325	142,650	99,675					FLOW	34,650	42,300	17,775	-	94,725	4,950	
93	<b>Parkesburg Borough</b>															
94	1-15807-051-3J	Harkins Property	10		10	2,250	Y		R	10	*	*	*	10	-	
95	1-15807-037-3H	Parkesburg Knoll	171	83	88	38,475	Y		R	40	35	13	*	88	-	
96	1-15807-050-3J	Crystal Springs Expansion (Heritage)	250		250	56,250	Y/P		R	50	100	100	*	250	-	
97	1-15807-046-3H	Lindale Village	31		31	6,975	Y		R	10	21	*	*	31	-	
98		Davis Tract	366		366	82,350	Y/P		R	100	125	141	*	366	-	
99		MK Builders	3		3	675	Y		R	3	*	*	*	3	-	
100		Phillips Site	4		4	900	P		R	4	*	*	*	4	-	
101		Library Site	131		131	29,475	P		R		131	*	*	131	-	
102		Minch Park East	1		1	225	P		R	1	*	*	*	1	-	
103		HDC Site	92		92	20,700	P		R/C		92	*	*	92	-	
104																
105	Total EDU	1,059	83	976	238,275				EDU	218	504	254	-	976	-	
106	Total Flow	238,275	18,675	219,600					FLOW	49,050	113,400	57,150	-	219,600	-	
107	<b>West Cain Township</b>															
108	1-15961-554-3Hrev	Cainshire West	124	39	85	27,900	Y		R	37	48	*	*	85	-	
109	1-15961-554-3Hrev	Sandy Hill	87	63	24	19,575	Y		R	16	8	*	*	24	-	
110																
111	Total EDU	211	102	109	47,475				EDU	53	56	-	-	109	-	
112	Total Flow	47,475	22,950	24,525					FLOW	11,925	12,600	-	-	24,525	-	
113	<b>West Sadsbury Township</b>															
114																
115																
116																
117	Total EDU	-	-	-	-				EDU	-	-	-	-	-	-	
118	Total Flow	-	-	-	-				FLOW	-	-	-	-	-	-	
119																
120																
121																
122	Total EDU	PROJECTED EDUS		REMAINING EDUS					Summary							
123	Total Flow	TOTAL	ACTIVE	TOTAL	FLOW				#1	CURRENT	2006	2007	2008	2009	2010	
124		8,709	3,008	5,701	1,282,725				TOTAL EDU'S	1,308	1,573	1,321	494	131	4,827	
125		1,959,525	676,800	1,282,725					TOTAL FLOW	286,575	347,550	286,800	102,300	29,475	1,052,700	
126									TOTAL PROJECTED WWTP FLOW	3,330,372	3,616,947	3,964,497	4,251,297	4,353,597	4,383,072	
127																
128																
129																
130																
131																

EDU = 225.0

(a) Status Legend: 0=Completed, 1=Under Construction, 2=Under Agreement,

3=Under PAWC Plan Review, 4=Initial Planning, 5=Speculative

(b) Signed by PAWC, does not indicate approval by DEP

(c) \* indicates project completion. Other developments are projected to extend beyond 5 years.

(d) Municipal agreements will be governed the CMP.

#2

PROJECTED EDU'S WITH PM SIGNED BY PAW AND PENDING PROJECTS

TOTAL EDU'S	1,359	1,656	1,376	524	161	5,276	436
TOTAL FLOW	297,825	411,225	299,175	109,050	36,225	1,153,500	97,875
TOTAL PROJECTED WWTP FLOW	3,330,372	3,828,197	4,039,422	4,338,597	4,447,647	4,483,872	4,581,747

\*P\* - Indicates PAWC has not signed planning modules and is requesting approval by DEP to move the projects from Table A3 to A2, and upon approval PAWC will then sign the planning modules.

Apartments= 225

Senior Housing= 150

**CONNECTION MANAGEMENT PLAN - REPORTING 2nd Quarter 2006 Data REVISED: July 2006**
**PROJECTED NEW CONNECTIONS**

PLEASE NOTE - CMP WAS SUBMITTED BY PAWC BUT NOT APPROVED BY DEP

**TABLE A3**

LINE	DEP Code No.	NAME	TOTAL EQ. EDU's	EDUS EQ. ACTIVE	EDUS REMAINING	EST. GPD REMAINING	PLANNING (b) MODULE	EETL MH	TYPE	PROJECTED NEW CONNECTIONS (c)					TOTAL IN 5 YEARS	TOTAL BEYOND 2010
										2006	2007	2008	2009	2010		
1	City of Coatesville															
2	1-15001-036-3IJ	Cambria Terrace	69	1	68	15,300	Y	16	R	9	28	22	9	.	68	.
3	1-15001-029-3H	Penn Crossing	78	78	-	-	Y	40	R	.	.	.	.	.	.	.
4	1-15001-023-3H	Millview	187	-	-	-	Y	.	R	.	.	.	.	.	.	.
5	1-15001-032-3J	Millview Apartments	350	350	-	-	Y	.	R	.	.	.	.	.	.	.
6		Cox II	11	11	-	-	Y	37	R	.	.	.	.	.	.	.
7	1-15001-037-3IJ	Bond House (Mount Pleasant Street)	13	-	13	2,925	Y	x	R	13	.	.	.	.	13	.
		Brandywine View	638	-	638	143,550	Y	x	R	60	175	175	150	78	638	.
		Puker Office Building 1	25	-	25	5,625	Y	.	C	.	10	15	.	.	25	.
		Marriott Hotel & Restaurant	40	-	40	9,000	Y	.	C	.	40	.	.	.	40	.
11		Chetty Towers 1 - Residential	60	-	60	13,500	Y	x	R	40	20	.	.	.	60	.
12		Chetty Towers 1 - Commercial	10	-	10	2,250	Y	x	C	10	.	.	.	.	10	.
13		Chetty Towers 2 - Residential	150	-	150	33,750	Y	x	R	.	60	90	.	.	150	.
14		Chetty Towers 2 - Commercial	25	-	25	5,625	Y	x	C	.	5	20	.	.	25	.
15		Chetty Tower 3 - Residential	325	-	325	73,125	.	x	R	.	.	.	.	50	50	275
16		Chetty Tower 3 - Commercial	66	-	66	14,850	.	x	C	.	.	.	.	.	66	.
17		Chetty Tower 4 - Residential	48	-	48	10,800	.	x	R	.	.	.	.	.	48	.
18		Chetty Tower 4 - Commercial	6	-	6	1,350	.	x	C	.	.	.	.	.	6	.
19		Chetty Tower 5 - Residential	195	-	195	43,875	.	x	R	.	.	.	.	50	50	145
20		Chetty Tower 5 - Commercial	34	-	34	7,650	.	x	C	.	.	.	.	.	34	.
21		Chetty Tower 6 - Residential	85	-	85	19,125	.	x	R	.	.	.	.	.	85	.
22		Chetty Tower 6 - Commercial	9	-	9	2,025	.	x	C	.	.	.	.	.	9	.
23		Flats Tract - Residential	950	-	950	213,750	.	.	R	.	75	80	150	150	455	495
24		Flats Tract - Commercial	90	-	90	20,250	.	.	C	.	10	15	20	45	90	.
25		Pulver Office Building 2	25	-	25	5,625	.	.	C	.	.	.	25	.	25	.
26		Pulver Office Building 3	25	-	25	5,625	.	.	C	.	.	.	.	15	15	10
27		Pulver Office Building 4	25	-	25	5,625	.	.	C	.	.	.	.	15	15	10
28		Pulver Office Building 5	12	-	12	2,700	.	.	C	.	.	.	.	6	6	6
29		Pulver Office Building 6	12	-	12	2,700	.	.	C	.	.	.	.	6	6	6
30		129-133 ELH - Residential	32	-	32	7,200	.	x	R	.	32	.	.	.	32	.
31		129-133 ELH - Commercial	3	-	3	675	.	x	C	.	3	.	.	.	3	.
32		ChesPenn - Residential	15	-	15	3,375	Y	x	R	.	5	10	.	.	15	.
33		ChesPenn - Commercial	4	-	4	900	Y	x	C	.	4	.	.	.	4	.
34		701 ELH - Residential	4	-	4	900	Y	x	R	4	.	.	.	.	4	.
35		701 ELH - Commercial	3	-	3	675	Y	x	C	3	.	.	.	.	3	.
36		731-ELH - Residential	6	-	6	1,350	Y	x	R	6	.	.	.	.	6	.
37		731-ELH - Commercial	3	-	3	675	Y	x	C	3	.	.	.	.	3	.
		Cansler Tower East - Residential	65	-	65	14,625	.	x	R	.	.	.	.	30	30	35
		Cansler Tower East - Commercial	9	-	9	2,025	.	x	C	.	.	.	.	5	5	4
		Cansler Tower West - Residential	40	-	40	9,000	.	x	R	.	.	.	.	20	20	20
		Cansler Tower West - Commercial	6	-	6	1,350	.	x	C	.	.	.	.	3	3	3
42		Regional Recreation Complex	20	-	20	4,500	.	.	C	.	20	.	.	.	20	.
43		Steel Heritage Museum	20	-	20	4,500	.	x	C	.	.	.	20	.	20	.
44		G.O. Carlson/Mittal Steel Tract	30	-	30	6,750	.	x	C	.	10	20	.	.	30	.
45		Train Station	5	-	5	1,125	.	.	C	.	.	.	5	.	5	.
48		Williams Tract	80	-	80	18,000	Y	x	R	30	50	.	.	.	80	.
49		City Request Other	60	-	60	13,500	.	x	R	10	10	10	10	10	50	10
		<b>Total EDU</b>	<b>3,968</b>	<b>627</b>	<b>3,341</b>	<b>751,725</b>			<b>EDU</b>	<b>188</b>	<b>557</b>	<b>457</b>	<b>389</b>	<b>483</b>	<b>2,074</b>	<b>1,267</b>
		<b>Total Flow</b>	<b>892,800</b>	<b>141,075</b>	<b>751,725</b>				<b>FLOW</b>	<b>42,300</b>	<b>124,950</b>	<b>102,075</b>	<b>87,525</b>	<b>108,675</b>	<b>465,525</b>	<b>285,075</b>
50	Valley Township (d)															
51	1-15956-117-3H	Hillview	525	230	295	68,375	Y	16	R	67	60	80	66	.	295	.
52	1-15956-119-3H	Meadow Brook	68	68	-	-	Y	16	R	.	.	.	.	.	.	.
53	1-15956-134-3IJ	Oak Crest (Dague)	188	-	188	42,300	Y	16	R	60	60	68	.	.	188	.
54	1-15956-118-3H	Valley Crossing IV	49	49	-	-	Y	.	R	.	.	.	.	.	.	.
55	1-15956-123-3J	Timberlane	46	18	28	6,300	Y	.	R	28	.	.	.	.	28	.
56	1-15956-126-3J	Round Hill (Buckthorn Area)	230	-	230	51,750	Y	.	R	60	60	60	50	.	230	.
57	1-15956-127-3J	Hanscom Subdivision	1	-	1	225	Y	.	R	1	.	.	.	.	1	.
58	1-15956-124-3J	Lambert Subdivision	3	-	3	675	Y	.	R	3	.	.	.	.	3	.
59		Highlands Corp. Center Phase I, II, III	90	27	63	14,175	Y	16	C	50	13	.	.	.	63	.
60	1-15956-132-3J	Woodland Point (Risbon)	9	-	9	2,025	Y	.	C	9	.	.	.	.	9	.
61	1-15956-125-3J	Valley Suburban (Stoltzfus Commercial)	340	-	340	76,500	Y	.	C	100	100	100	40	.	340	.
62	1-15956-128-3IJ	Valley Farm & Mt. Airy Road	81	-	81	18,225	Y	16	R	20	20	20	21	.	81	.
63		Tarry Middleton	1	-	1	225	Y	.	R	1	.	.	.	.	1	.
64		Rainbow	30	-	30	6,750	.	.	R	.	.	.	15	15	30	.



65	London Tract	14	-	14	3,150	P	16	R	14	-	-	-	-	14	-	
66	Bone Tract (Valley Portion)	430	-	430	96,750	-	-	R	30	50	50	50	50	230	200	
67	Bone Tract (Keystone Foods Portion)	20	-	20	4,500	P	-	C	20	-	-	-	-	-	-	
68	Airport	111	-	111	24,975	-	-	C	-	10	20	20	20	70	41	
69	Green Trees	80	-	80	18,000	-	-	R	-	14	13	20	20	67	13	
70	M & S Development, Valley Rd	18	-	18	4,050	-	-	R	-	-	6	12	-	18	-	
71	CASD	200	-	200	45,000	-	-	C	-	-	-	50	50	100	100	
72	Heavy Residential	250	-	250	56,250	-	16	R	-	-	-	50	50	100	150	
73	Township Request Other	75	-	75	16,875	-	-	R	15	15	15	15	15	75	-	
74		Total EDU	2,879	412	2,467	555,075	-	-	EDU	478	422	432	411	220	1,963	504
75		Total Flow	647,775	92,700	555,075	-	-	FLOW	102,525	88,950	91,200	87,375	49,500	419,550	113,400	
76	<b>Cain Township (d)</b>															
77	1-15912-186-3J Hillview (aka Hill Farm)	99	-	99	22,275	Y	26	R	-	-	49	50	-	99	-	
78	Southwoods (Weiss)	18	-	18	4,050	P	54	R	9	-	-	-	-	18	-	
79	1-15912-159-E Loew/Southdown (Ducca/Haron)	300	-	300	67,500	P	54	R	23	50	50	50	50	223	77	
80	Cain Road	40	-	40	9,000	-	-	R	-	-	-	40	-	40	-	
81	Township Flow Diverted from DARA	952	-	952	214,200	-	-	R	-	-	-	250	250	500	452	
	Township Request Other	608	-	608	136,800	-	54	R	50	75	65	85	85	380	228	
		Total EDU	2,017	-	2,017	453,825	-	-	EDU	82	134	184	475	385	1,260	757
		Total Flow	453,825	-	453,825	-	-	FLOW	18,450	30,150	37,725	103,125	86,625	276,075	170,325	
85	<b>West Brandywine Township (d)</b>															
86	Monacy Manor	42	-	42	9,450	Y	46	R	42	-	-	-	-	42	-	
87	Freedom Village	223	190	33	4,950	Y	46	R	48	-	-	-	-	48	-	
88	YMCA	67	19	48	10,800	Y	46	C	20	20	8	-	-	48	-	
89	West Brandywine Hospital	416	210	206	46,350	Y	46	C	50	50	50	56	-	206	-	
90	CASD	100	32	68	15,300	Y	46	C	-	-	-	-	68	68	-	
91	Nunemaker Subdivision	2	-	2	450	Y	46	R	2	-	-	-	-	2	-	
91	MSI	13	-	13	2,925	-	-	R	-	-	-	-	13	13	-	
86	Culbertson Residential	178	-	178	40,050	-	46	R	-	10	45	45	45	145	33	
87	Culbertson Commercial	33	-	33	7,425	-	46	C	-	-	-	15	18	33	-	
88	Swinehart Residential	115	-	115	25,875	-	46	R	-	7	36	36	36	115	-	
89	Beaver Creek Apartments	260	-	260	58,500	-	46	R	-	-	36	30	60	90	170	
90	Beaver Creek Commercial	30	-	30	6,750	-	46	C	-	-	-	-	15	15	15	
91	Janiec Residential	32	-	32	7,200	-	46	R	-	-	-	32	-	32	-	
92	Janiec Commercial	2	-	2	450	-	46	C	-	-	-	2	-	2	-	
93	West Brandywine Twp MA	173	-	173	38,925	-	46	R/C	-	-	-	-	73	73	100	
94		Total EDU	1,686	-	823	185,175	-	-	EDU	162	87	139	216	328	932	318
95		Total Flow	379,350	-	185,175	-	-	FLOW	32,850	19,575	31,275	48,600	73,800	206,100	71,550	
96	<b>Highland Township</b>															
97	Boor Property	58	-	58	13,050	-	-	R	-	-	-	15	15	30	28	
98	Genterra (Meadow Ridge)	82	-	82	18,450	Y	-	R	-	-	-	20	20	40	42	
99	Township Request Other	75	-	75	16,875	-	-	R	-	-	-	1	-	1	74	
100		Total EDU	215	-	215	48,375	-	-	EDU	-	-	-	38	35	71	144
101		Total Flow	48,375	-	48,375	-	-	FLOW	-	-	-	8,100	7,875	15,975	32,400	
102	<b>Sadsbury Township (d)</b>															
103	1-15947-086-3H Sadsbury Village	149	149	-	-	Y	-	R	-	-	-	-	-	-	-	
104	1-15947-079-E Quarry Ridge	165	165	-	-	Y	-	R	-	-	-	-	-	-	-	
	1-15947-088-3H AIM Business Park - Bellaire	132	41	91	20,475	Y	-	C	40	40	11	-	-	91	-	
	1-15947-094-3J Octoraro Glen	44	44	-	-	Y	-	R	-	-	-	-	-	-	-	
	1-15947-092-3J Morris Farm	12	11	1	225	Y	-	C	1	-	-	-	-	1	-	
108	1-15947-104-3J Sadsbury Park	461	-	461	103,725	Y	-	R	75	110	135	141	-	461	-	
109	Bone Tract (Sadsbury Portion)	40	-	40	9,000	Y	-	C	19	21	-	-	-	40	-	
110	D&S Developers	25	-	25	5,625	Y	-	C	25	-	-	-	-	25	-	
111	Lafayette Square	60	-	60	13,500	Y	-	R	30	30	-	-	-	60	-	
112	Pomeroy Partnership	2	-	2	450	Y	-	R	2	-	-	-	-	2	-	
113	Township Request Other	828	-	828	186,300	-	-	R	88	83	91	100	100	482	366	
114		Total EDU	1,918	410	1,508	339,300	-	-	EDU	280	284	237	241	100	1,142	366
115		Total Flow	431,550	92,250	339,300	-	-	FLOW	63,000	63,900	53,325	54,225	22,500	256,950	82,350	
116	<b>East Fallowfield Township</b>															
117	1-15918-159-3H Stone Creek (Robins Cove)	53	25	28	6,300	Y	37	R	19	9	-	-	-	28	-	
118	1-15918-194-3J Harkins Farm	21	-	21	4,725	Y	37	R	12	9	-	-	-	21	-	
119	Brinton Station	87	87	-	-	Y	37	R	-	-	-	-	-	-	-	
120	Branford Village	247	247	-	-	Y	-	R	-	-	-	-	-	-	-	
121	Brook Crossing	166	166	-	-	Y	-	R	-	-	-	-	-	-	-	
122	1-15918-207-3I North Woods (Thompson North)	27	-	27	6,075	Y	37	R	20	7	-	-	-	27	-	
123	1-15918-208-3I Mendenhall Tract	74	-	74	16,650	Y	37	R	20	30	24	-	-	74	-	
124	1-15918-211-3I Providence Hill (Chen Tract)	218	39	179	40,275	Y	37	R	79	70	30	-	-	179	-	
125	1-15918-213-3J Ridgecrest (Martin)	72	-	72	16,200	P	37	R	-	-	-	25	25	50	22	
126	1-15918-196-3J Manchester Farms (Thompson South)	112	44	68	15,300	Y	37	R	30	38	-	-	-	68	-	
127	1-15918-212-3J Scott Farm	78	-	78	17,550	Y	-	R	-	-	-	25	25	50	28	
128	Beagle Club	181	-	181	40,725	-	-	R	-	-	-	70	70	140	41	
129	Etteleson Development	32	-	32	7,200	-	-	R	-	-	-	-	10	10	22	
130	Cardinal Drive Area	85	-	85	19,125	-	37	R	20	25	40	-	-	85	-	
131	Bonsall Farm	20	-	20	4,500	-	-	R	-	-	-	20	-	20	-	



**APPENDIX B**

**CONNECTION MANAGEMENT PLAN - EETL  
EETL HYDRAULIC MODEL USING MAY 2002 METERED FLOWS**
**TABLE B1**

Upstream Manhole	Upstream Invert Elevation	Downstream Manhole	Downstream Invert Elevation	Pipe Diameter	Pipe Length	Pipe Slope	n	Nominal Capacity	Metered ADF	Metered ADF +	Metered ADF +	Metered ADF +	Metered ADF +	Metered ADF +	Metered ADF +	Peak Calculated	Peak Calculated	Peak Calculated	Peak Calculated	Peak Calculated	Available Capacity	% of capacity used	
									ADF (2002)	Proj. ADF (2005)	Proj. ADF (2007)	Proj. ADF (2008)	Proj. ADF (2009)	Proj. ADF (2010)	Flow (2005)	Flow (2007)	Flow (2008)	Flow (2009)	Flow (2010)	Flow (Beyond 2010)			
54	374.33	53	370.85	10	200.66	0.0171	0.013	2,925,559	141,000	143,250	151,125	157,875	164,625	171,375	213,000	401,100	423,150	442,050	460,950	479,850	596,400	1,408,160	29.7%
53	370.89	52	365.07	10	186.32	0.0098	0.013	1,518,480	142,000	144,683	152,636	159,454	166,271	173,089	215,130	405,111	427,362	446,371	465,380	484,389	602,384	1,408,160	39.7%
52	368.07	51	366.03	10	198.53	0.0153	0.013	1,896,480	143,000	146,129	155,248	161,048	167,334	174,620	217,281	409,152	431,655	450,933	470,215	489,493	608,388	1,408,160	32.1%
51	366.03	50	364.05	10	211.77	0.0093	0.013	1,478,520	144,000	147,591	155,704	162,859	169,613	176,568	219,454	413,254	435,972	455,445	474,917	494,390	614,472	1,408,160	22.2%
50	364.05	49	363.66	10	540.00	0.0192	0.013	2,124,360	145,000	149,067	157,261	164,265	171,309	178,334	221,649	417,386	440,332	459,999	479,999	499,334	620,616	1,408,160	39.2%
49	363.66	48	360.94	10	308.00	0.0089	0.013	1,447,200	146,000	150,557	158,834	165,928	173,023	180,117	223,865	421,560	444,735	464,599	484,463	504,327	626,822	1,408,160	43.3%
48	360.94	47	344.92	10	288.00	0.0135	0.013	1,782,000	147,000	152,063	160,422	167,547	174,723	181,918	226,104	425,796	449,182	469,245	489,308	509,370	633,091	1,408,160	35.5%
47	348.92	46	344.4	10	299.00	0.0094	0.013	1,406,900	148,000	153,963	162,276	169,293	176,500	183,737	228,365	430,333	453,674	473,937	494,201	514,464	639,422	1,408,160	45.5%
46	344.4	45	341.35	12	2.2	0.0227	0.013	3,757,320	378,000	410,100	452,400	494,700	537,225	580,550	1,146,280	1,159,763	1,279,387	1,399,012	1,491,275	1,593,719	1,711,435	344,885	83.2%
45	344.35	44	342.8	12	229.47	0.0068	0.013	2,056,320	380,000	414,201	456,924	499,647	542,568	585,186	611,227	1,159,763	1,279,387	1,399,012	1,491,275	1,593,719	1,711,435	344,885	78.3%
44	342.8	43	340.53	12	283.85	0.0080	0.013	2,230,200	400,000	422,485	466,062	509,640	543,250	586,569	623,451	1,182,550	1,304,975	1,426,992	1,521,101	1,625,564	1,745,664	484,636	27.3%
43	340.53	42	336.65	12	172.85	0.0224	0.013	3,732,480	500,000	506,982	569,275	611,568	651,900	696,683	748,142	1,419,850	1,565,570	1,712,380	1,825,321	1,950,713	2,094,796	1,637,684	56.1%
42	336.65	41	332.4	12	252.64	0.0168	0.013	3,232,440	510,000	512,052	564,888	617,684	658,419	703,650	755,623	1,433,745	1,581,630	1,729,514	1,843,574	1,970,220	2,115,744	1,116,696	65.5%
41	332.4	40	329.57	12	282.28	0.0108	0.013	2,930,920	520,000	522,929	576,165	630,037	671,588	717,723	770,735	1,462,420	1,613,262	1,764,104	1,890,445	2,009,624	2,158,059	432,861	83.3%
40	329.57	39	327.22	15	263.7	0.0089	0.013	4,254,920	575,000	537,739	587,980	642,638	685,019	732,077	786,190	1,491,666	1,645,527	1,799,386	1,918,954	2,049,817	2,201,220	2,063,700	51.6%
39	327.22	38	325.24	15	181.84	0.0061	0.013	3,531,520	600,000	555,114	612,371	669,529	713,780	762,825	819,168	1,554,319	1,714,640	1,874,961	1,995,619	2,203,672	2,352,354	413,616	41.6%
38	325.24	37	323.81	18	71.01	0.0061	0.013	5,742,360	625,000	578,428	638,991	697,753	743,769	794,863	1,619,600	1,786,651	1,953,702	2,082,564	2,226,617	2,390,006	2,568,817	3,352,354	83.1%
37	323.81	36	323.62	18	31.27	0.0061	0.013	5,742,360	800,000	869,780	954,350	1,014,425	1,074,050	1,083,275	1,129,850	2,435,300	2,672,180	2,840,390	2,901,740	3,033,170	3,163,590	2,578,780	79.0%
36	323.62	35	323.5	18	183.6	0.0061	0.013	5,742,360	868,000	876,448	963,894	1,024,569	1,057,321	1,094,108	1,141,149	2,459,653	2,698,902	2,866,794	2,961,057	3,063,502	3,195,216	2,547,144	55.5%
35	324.5	34	323.35	18	188.43	0.0061	0.013	5,742,360	875,000	887,232	973,832	1,034,815	1,068,996	1,105,499	1,152,960	2,484,250	2,725,891	2,897,482	2,990,688	3,094,137	3,227,168	2,512,192	56.2%
34	323.35	33	322.29	18	179.79	0.0061	0.013	5,742,360	890,000	896,104	983,268	1,045,163	1,078,777	1,116,099	1,164,096	2,509,092	2,753,150	2,926,457	3,020,575	3,125,078	3,256,440	2,482,920	56.8%
33	322.29	32	321.06	18	194.79	0.0061	0.013	5,742,360	885,000	898,350	1,044,600	1,106,175	1,138,800	1,175,025	1,221,800	2,663,390	2,914,860	3,097,290	3,188,640	3,290,070	3,420,580	2,321,880	59.6%
32	321.06	31	320.25	18	133.03	0.0061	0.013	5,742,360	895,000	903,142	1,049,223	1,111,706	1,144,494	1,180,900	1,227,708	2,686,797	2,939,504	3,112,776	3,204,583	3,306,520	3,436,582	2,304,778	59.9%
31	320.25	30	319.63	18	252.72	0.0157	0.013	9,212,400	905,000	907,857	1,055,072	1,117,284	1,180,216	1,243,817	2,710,281	2,954,202	3,128,347	3,223,053	3,324,700	3,454,770	3,623,054	2,574,770	37.3%
30	319.63	29	318.63	18	189.36	0.0035	0.013	4,349,160	915,000	972,797	1,080,347	1,122,851	1,155,968	1,192,739	1,240,016	2,723,822	2,968,973	3,143,882	3,236,709	3,339,664	3,472,044	877,116	79.8%
29	318.63	28	314.32	18	175.24	0.0075	0.013	6,366,600	920,000	977,661	1,085,649	1,128,465	1,161,747	1,196,702	1,246,216	2,737,451	2,983,618	3,158,923	3,252,837	3,356,947	3,486,404	2,877,196	54.6%
28	314.32	27	312.82	18	224.34	0.0067	0.013	6,017,760	930,000	987,590	1,107,332	1,134,107	1,167,596	1,204,696	1,242,447	2,751,139	2,998,737	3,175,500	3,269,157	3,373,148	3,506,851	2,510,908	59.3%
27	312.82	26	310.51	18	572.28	0.0040	0.013	4,849,450	935,000	987,462	1,106,337	1,139,778	1,173,394	1,210,719	1,258,709	2,764,884	3,013,731	3,191,378	3,285,503	3,390,014	3,524,306	1,125,014	75.8%
26	310.51	25	309.17	18	148.12	0.0090	0.013	6,974,500	945,000	1,018,360	1,144,800	1,173,805	1,213,630	1,249,875	1,311,490	2,851,380	3,092,080	3,285,870	3,386,220	3,499,690	3,671,640	3,303,000	52.6%
25	309.17	24	308.39	18	184.05	0.0047	0.013	5,040,360	954,000	1,028,534	1,155,646	1,185,280	1,225,787	1,262,374	1,324,413	2,879,894	3,123,809	3,318,729	3,432,002	3,534,847	3,708,356	3,332,004	73.6%
24	308.39	23	308	18	159.69	0.0024	0.013	3,601,800	1,000,000	1,038,819	1,126,802	1,197,113	1,238,044	1,274,897	1,320,693	3,155,047	3,351,516	3,466,524	3,569,893	3,745,440	1,143,640	104.0%	
23	308	22	306.23	18	165.7	0.0093	0.013	7,990,200	1,328,000	1,426,100	1,556,225	1,664,525	1,704,650	1,740,675	1,833,600	3,993,080	4,357,430	4,660,670	4,773,020	4,874,450	5,190,080	1,800,120	73.2%
22	306.23	21	304.78	18	263.9	0.0044	0.013	4,877,280	1,328,000	1,426,100	1,556,225	1,664,525	1,704,650	1,740,675	1,833,600	3,993,080	4,357,430	4,660,670	4,773,020	4,874,450	5,190,080	3,120,000	106.4%
21	304.78	20	303.99	18	323.69	0.0037	0.013	4,472,280	1,328,000	1,426,100	1,556,225	1,664,525	1,704,650	1,740,675	1,833,600	3,993,080	4,357,430	4,660,670	4,773,020	4,874,450	5,190,080	717,000	116.0%
20	303.99	19A (saphon in)	301.24	18	301.36	0.0078	0.013	6,432,860	1,328,000	1,426,100	1,556,225	1,664,525	1,704,650	1,740,675	1,833,600	3,993,080	4,357,430	4,660,670	4,773,020	4,874,450	5,190,080	1,302,880	79.9%
19A (saphon in)	301.2	19B (saphon out)	302.4	16	138	0.013	0.013	8,400,000	1,328,000	1,426,100	1,556,225	1,664,525	1,704,650	1,740,675	1,833,600	3,993,080	4,357,430	4,660,670	4,773,020	4,874,450	5,190,080	2,909,920	81.8%
19B (saphon out)	300.1	18	299.1	24	438.00	0.0023	0.013	7,993,480	1,328,000	1,426,100	1,556,225	1,664,525	1,704,650	1,740,675	1,833,600	3,993,080	4,357,430	4,660,670	4,773,020	4,874,450	5,190,080	2,905,680	82.7%
18	299.1	17	298.79	24	64.00	0.0033	0.013	9,095,760	1,328,000	1,426													

CONNECTION MANAGEMENT PLAN - REPORTING 2nd Quarter 2006 Data REVISED: July 2006

TABLE B2

East End Trunk Line Allocation until Expansion is Complete from MH 21 to MH 20

Township	Development	Total Connections (1)	Connections Allowed (2)
<b>City of Coatesville</b>			
	Brandywine View	638	235
	Chetty Towers 1 - Residential	60	60
	Chetty Towers 1 - Commercial	10	10
	ChesPenn - Residential	15	5
	ChesPenn - Commercial	4	4
	701 ELH - Residential	4	4
	701 ELH - Commercial	3	3
	731 ELH - Residential	6	6
	731 ELH - Commercial	3	3
<b>West Brandywine Township</b>			
	Monacy Manor	42	42
	Freedom Village	223	48
	YMCA	67	40
	Brandywine Hospital	416	100
	CASD	100	0
	Nunemaker Subdivision	2	2
	MSI	13	0
	West Brandywine Twp MA	547	83
<b>East Fallowfield Township</b>			
	Stone Creek (Robins Cove)	53	17
	Harkins Farm	21	21
	North Woods (Thompson North)	27	27
	Mendenhall Tract	74	50
	Providence Hill (Chen Tract)	218	140
	Manchester Farms (Thompson South)	112	62
	Ridgecrest (Martin)	72	25
<b>Caln Township</b>			
	Hillview (aka Hill Farm)	99	0
	Southwoods (Weiss)	20	20
	Loew/Southdown (Ducca/Haron)	300	25
<b>Total Connections</b>		<b>2730</b>	<b>1032</b>
<b>Total Connections Available</b>			<b>1197</b>

NOTE (1) - Total projected new connections, both pre and post plant expansion from Table A2 upstream of critical section.  
 (2) - Connection allowed prior to completion of EETL replacement of Manhole 21 to Manhole 20



## Pennsylvania Department of Environmental Protection

2 East Main Street  
Norristown, PA 19401  
August 2, 2006

Southeast Regional Office

484-250-5970  
Fax: 484-250-5971

Mr. David R. Kaufman  
Pennsylvania-American Water Co.  
Coatesville District  
4 Wellington Blvd.  
Wyomissing, PA 19610

Re: Chapter 94 Wasteload Management Program  
Corrective Action Plan &  
Connection Management Plan  
2nd Quarter 2006, Revised July 2006  
Coatesville WWTF  
Chester County

Dear Mr. Kaufman:

This is in response to the 2<sup>nd</sup> Quarter 2006 Report revised July 2006 proposing changes to the Corrective Action Plan (CAP) and Connection Management Plan (CMP).

The CMP states "With approval from the Department, we have modified the unit flow rate for senior housing and all other dwelling units from 262.5 gpd/EDU to 150 and 225 gpd/EDU, respectively." It was the intention of the Department in our letter of June 21, 2006 that all dwelling units be rated at 225 gpd/EDU, including senior housing. The lower flow rate of 225 gpd/EDU recognizes the existence of some lower unit uses, such as senior housing.

PAWC has determined that there is a projected hydraulic overload of the East End Trunk Line between manholes 24 and 20 and also in the main trunk line to the wastewater treatment plant between manholes 10 and 9 based on adjusted 2002 metering data. The overloads are projected for 2008 and 2009 respectively. These restrictions in the conveyance system are more restrictive than the available capacity in the wastewater treatment facility.

The following Corrective Action Plans proposed by PAWC are approved:

1. For manhole segments 24- 20, PAWC plans upgrade of the interceptor from manhole 19A through 46, excluding manhole segments 30-39.
  - a. Submission of the Water Quality Management permit application on June 19, 2006.
  - b. Receive bids for construction August 14, 2006.
  - c. Award construction contracts – September 2006.
  - d. Issue Notice to Proceed by end of September 2006.
  - e. Construction timeframe – October 2006 to March 2007.



Mr. David R. Kaufman

-2-

August 2, 2006

- f. Completion of project by mid-March 2007.
2. For manhole segments 9-10, PAWC plans to upgrade this section in conjunction with the expansion of the Coatesville WWTP. Specifically, a new interceptor will be constructed from manhole 16 to the proposed new head works of the treatment facility. The following action items are underway with regards to this project.
- PAWC has completed plan and profile drawing of the proposed improvement.
  - PAWC will submit the Part II Permit by August 2006 for this upgrade.
  - Receive bids for construction February 2007.
  - Start construction in conjunction with the treatment facility expansion in June 2007.
  - Estimated completion of construction is March 2008 in conjunction with the treatment plant expansion.

PAWC has stated that 1197 EDU's are available in the critical manhole segments 21- 20. As such connections for projects tributary to this critical segment are limited as follows:

City of Coatesville Projects	Connections Allowed
Brandywine View	235
Chetty Towers 1 - Residential	60
Chetty Towers 1 - Commercial	10
ChesPenn - Residential	5
ChesPenn - Commercial	4
701 ELH - Residential	4
701 ELH - Commercial	3
731 ELH - Residential	6
731 ELH - Commercial	3

West Brandywine Township Projects	Connections Allowed
Monarch Manor	42
Freedom Village	48
MMCA	40
Brandywine Hospital	100
CASD	0
Nunemaker Subdivision	2
MSI	0
West Brandywine Twp MA	83

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<b>East Fallowfield Township Projects</b>	<b>Connections Allowed</b>
Stone Creek (Robins Cove)	17
Harkins Farm	21
North Woods (Thompson North)	27
Mendenhall Tract	50
Providence Hill (Chen Tract)	140
Manchester Farms (Thompson South)	62
Ridgecrest (Martin)	25

<b>Cain Township Projects</b>	<b>Connections Allowed</b>
Hillview (aka Hill Farm)	0
Southwoods (Weiss)	20
Loew/Southdown (Ducca/Haron)	25

Manhole segments 9-10 serve all sewage flows tributary to the wastewater treatment facility. Connections of all other projects are limited as follows:

<b>City of Coatesville Projects</b>	<b>Connections Allowed</b>
Camden Terrace	66
Bond House (Mount Pleasant Street)	13
Pulver Office Building 1	25
Marriott Hotel & Restaurant	40
Chetty Towers 2 - Residential	150
Chetty Towers 2 - Commercial	25
Williams Tract	80
Coatesville VoTech	2

<b>Sadsbury Township Projects</b>	<b>Connections Allowed</b>
AIM Business Park- Bellaire	91
Morris Farm	1
Sadsbury Park	320
Bone Tract (Sadsbury Portion)	20
D&S Developers	25
Lafayette Square	60
Pomeroy Partnership	2

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<b>Valley Township Projects</b>	<b>Connections Allowed</b>
Hillview	215
Oak Crest (Dague)	181
Timberlane	15
Round Hill (Buckthorn Area)	180
Harscom Subdivision	1
Lambert Subdivision	3
Highlands Corp. Center Phase I, II, III	63
Woodland Point (Risbon)	9
Valley Suburban (Stoltzfus Commercial)	300
Valley Farm & Mt. Airy Road	60
Terry Middleton	1
London Tract	14
Bone Tract (Keystone Foods Portion)	20
Albert Koenig	1

<b>Highland Township Project</b>	<b>Connections Allowed</b>
Siti Crook property	1

<b>Farkesburg Borough Projects</b>	<b>Connections Allowed</b>
Harcins Property	10
Parkeburg Knoll	88
Crystal Springs Expansion (Heritage)	250
Lindale Village	31
Davis Tract	366
MK Builders	3
Phillips Site	4
Library Site	131
Minch Park East	1
HDC Site	92

<b>West Caln Township Projects</b>	<b>Connections Allowed</b>
Calnsire West	85
Sandy Hill	24

No additional projects may be added to the CMP without removing or reducing the allocations for the projected listed above. For example, West Brandywine Township Municipal Authority may

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allocate its 83 connections to proposed projects and have the projects added to the list by reducing the authority's allocation to be consistent with the connections being allocated to the project.

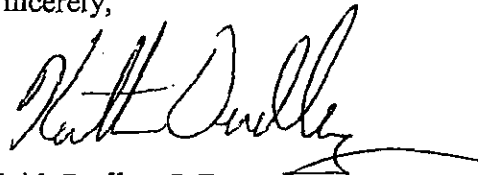
The current limitation on connections based on the projected hydraulic overloads in the conveyance system may be re-evaluated once PAWC has obtained current metered flow information from which to update the projections. From your letter of July 24, 2005, PAWC expects the metering and data evaluation effort to be completed by September 2006 and the information will be included in a future CMP quarterly report.

Please note that each municipality's Act 537 Plan Update Revision, which is intended to place projects within the expanded sewer service area, must be received by the Department prior to submission of the individual planning modules.

Pennsylvania American Water Company is responsible for administering the connections as listed above in accordance with the requirements of Chapter 94 of the rules and regulations.

If you would like to meet and discuss the contents of this letter, or if you have any questions, please call me at 484-250-5190 or Ms. Donna Ulan Smith at 484-250-5179.

Sincerely,



Keith Dudley, P.E.  
Section Chief  
Municipal Planning and Finance

cc: Gerald A. DeBulko, P.E. - PAWC  
Joe Feola - DEP  
John Kennedy - DEP  
Kevin Gallagher - DEP  
Jenifer Fields - DEP  
Donna Ulan Smith - DEP  
Adam Bram - OCC, DEP  
Re

**COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**In the Matter of:**

Pennsylvania - American Water Company                   :   WQ/Sewage/Act 537 Planning/Chapter 94  
Coatesville, Chester County                               :   Violation of the Clean Streams Law

**CONSENT ORDER AND AGREEMENT**

This Consent Order and Agreement ("COA") is entered into this    day of            2005, by and between the Commonwealth of Pennsylvania, Department of Environmental Protection ("Department"), and Pennsylvania - American Water Company ("PA-American").

**FINDINGS**

The Department has found and determined the following:

A.    The Department is the agency with the duty and authority to administer and enforce the Clean Streams Law, the Act of June 22, 1937, P.L. 1987, as amended, 35 P.S. § 691.1 et seq., and the rules and regulations promulgated thereunder.

B.    PA-American is a Pennsylvania Business Corporation with a business address of 800 West Hershey Park Drive, Hershey, PA 17033 and a mailing address of 100 Cheshire Court, Suite 104, Coatesville, PA 19320.

C.    PA-American owns and operates the Coatesville Wastewater Treatment Plant ("Plant"), which is located in South Coatesville Borough, Chester County. The Plant includes the facility, the collection system, pumping stations, and all other parts of the sewage facilities system that are operated and owned by PA-American.

D.    The Plant currently receives sewage flows from nine municipalities: City of Coatesville, Valley Township, Caln Township, West Brandywine Township, Sadsbury Township, East Fallowfield Township, Parkesburg Borough, West Caln Township, and West Sadsbury Township.

E.    On March 15, 2001, the Department approved the nine municipalities' official Sewage Facilities Plan ("Act 537 Plan") for the transfer to Pa-American of ownership and operation of the Plant and for connections to the Plant of approved projects within the sewer service area, pursuant to the Pennsylvania Sewage Facilities Act, Act of January 24, 1996, P.L. 1535, as amended, 35 P.S. § 750.1 et seq. ("Sewage Facilities Act" or "Act 537").

F. On May 6, 2002, the Department issued NPDES Permit No. PA0026859 to PA-American for the discharge of treated sewage into the West Branch of the Brandywine Creek ("Permit"). The Permit sets PA-American's average annual flow rate at 3.85 million gallons per day ("MGD") and establishes an average maximum monthly flow rate of 4.6 MGD.

G. On January 13, 2004, the Department issued NPDES Permit Amendment No. PA0026859A1, which revised certain effluent limitations in the Permit.

H. Based on Title 25, Chapter 94, Municipal Wasteload Management, 25 Pa. Code. § 94.12, PA American is required to submit a Municipal Wasteload Management Report ("Chapter 94 Report") to the Department on an annual basis.

I. The purpose of the Chapter 94 Report is to provide an annual review of sewage facilities and ensure adequate time to address operational or maintenance problems or to plan and construct additions as needed. An additional purpose of submitting the Chapter 94 Report is to identify existing and projected overload conditions within a sewage facility.

J. Title 25, Chapter 94, Section 22, 25 Pa. Code 94.22, requires that if a Chapter 94 Report shows, or the Department determines that a facility, or portion of a facility, becomes hydraulically or organically overloaded, the facility's permittee must (1) submit a report or corrective action plan ("CAP"), as defined by 25 Pa. Code § 94.1, that details steps for the permittee to take that will prevent the overload in the manner set forth in Section 94.22, and (2) limit all new connections to and extensions of the facility based upon remaining available capacity under the CAP or report.

K. Chapter 94 Reports submitted by Coatesville Borough Municipal Sewer Authority for year 2000 and by PA-American for years 2001, 2002, 2003, and 2004 have all identified a projected hydraulic overload based on anticipated connections.

L. In response to the projected overloads in the above mentioned reports, the City of Coatesville Authority submitted a Corrective Action Plan (CAP) with its 2000 Chapter 94 Report on April 9, 2001 providing its plan to prepare an Act 537 Plan Update for municipal adoption and permitting for an expansion of the Plant. The CAP includes the regular quarterly submission of connection management plans ("CMPs") by which PA-American is to limit connections. The current CMP, dated November 2005, was approved by the Department on November 18, 2005 (as attached hereto, as Exhibit "A"). Through the November 2005 CMP, the Department approved connections at the Plant, totaling an annual average flow rate of 3.811 MGD through 2009.

M. The Chapter 94 Reports and CMPs submitted by PA-American provide a status of the Act 537 Plan preparation and a schedule of sewage connection based on remaining available capacity.

N. The 2004 Chapter 94 Report and CMPs submitted in 2005 project a hydraulic overload based, in part, on new land developments for which Pa-American has certified to municipalities for revisions to their Act 537 Plans, through planning modules, the existence of available capacity in the Plant, as required by Section 5 of Act 537, 35 P.S. § 750.5 and the rules and regulations thereunder.

O. A review of PA-American's Chapter 94 Reports and CMPs by the Department has revealed that from 2004 to 2005 PA-American has approved connections to the Plant that are not consistent with the Act 537 Plans adopted by the nine municipalities and approved by the Department.

P. PA-American has not limited connections to the Plant from the nine municipalities and for various sewage projects based upon remaining available capacity.

Q. In August, 2005, PA-American submitted a plant re-rate report (prepared by Buchart-Horn, Inc.) to the Department.

R. In response to the August, 2005 re-rate report, the Department acknowledges the treatment plant can process a flow of 4.86 MGD.

S. The Department regards the 4.86 MGD flow number as a maximum monthly average limit. Applying the 5-year average peaking factor of 1.059 to the maximum monthly average limit, results in an annual average treatment capacity of 4.6 MGD.

T. Due to the impending plant expansion, the Department is willing to accept individual planning modules to justify incremental increases in treatment capacity for connections from the planned sewage service area to the Plant, allowing connections above the 3.85 MGD NPDES permitted flow.

U. The condition described in Paragraph O is a violation of Pa. Code Title 25, Chapter 94, Section 22(1), 25 Pa. Code § 94.22(1)

V. The condition described in Paragraph P is a violation of Pa. Code Title 25, Chapter 94, Section 22(2), 25 Pa. Code § 94.22(2).

W. The violations described in Paragraphs O and P hereof, constitute unlawful conduct under Section 611 of the Clean Streams Law, 35 P.S. § 691.611; a statutory nuisance under Section 601 of the Clean Streams Law, 35 P.S. § 691.601; and subject PA-American to civil penalty liability under Section 605 of the Clean Streams Law, 35 P.S. § 691.605.

### ORDER

After full and complete negotiation of all matters set forth in this COA and upon mutual exchange of covenants contained herein, the parties desiring to avoid litigation and intending to be legally bound, it is hereby ORDERED by the Department and AGREED to by PA-American as follows:

1. **Authority.** This COA is an Order of the Department authorized and issued pursuant to Sections 5 and 610 of the Clean Streams Law, 35 P.S. §§ 691.5, 691.610; and Section 1917-A of the Administrative Code, 71 P.S. § 510.7.
2. **Findings.**
  - a. PA-American agrees that the findings in paragraphs A. through T are true and correct and, in any matter or proceeding involving PA-American and the Department, PA-American shall not challenge the accuracy or validity of these findings.
  - b. The parties do not authorize any other persons to use the findings in the COA in any matter or proceeding.
3. **Corrective Actions.**
  - a. PA-American agrees to the following schedule to comply with Chapter 94, initiate necessary sewage facilities planning, and to make needed expansions of its Plant:
    1. As part of its Chapter 94 CAP or report for potentially hydraulically overloaded condition, PA-American shall submit updated CMPs on a quarterly basis, (January 15, April 15, July 15, and October 15), with contents and in a format substantially similar to Exhibit "A," which shall include, but not be limited to, the status of the corrective actions, number of connections made during the quarter, a chart evaluating the contract evaluations to each municipality, a chart listing all projects that have received certification of capacity for planning module revision and the allocations per year, and a chart of all projected connections by municipality, until the Department conducts a final inspection and approves the operation of the expanded Plant.
    2. PA-American will only commit capacity at the Plant and/or allocate, approve, and allow connections to the Plant according to the schedule provided in Table A2 of its current CMP, referenced in Paragraph L (Findings), that has been approved by the Department and in future Department-approved CMPs consistent with Department-approved Act 537 planning.
    3. PA-American will submit an NPDES Part 1 amendment application for expanded flows by March 31, 2006.
    4. PA-American will submit a WQM Part 2 application for construction of the Plant expansion by March 31, 2006.

5. Provided that PA-American is in receipt of all necessary permits for the construction of the Plant by December 31, 2006, PA-American will award all necessary construction contracts for construction of the expanded Plant by January 30, 2007.
6. PA-American will complete construction of the expanded Plant within 24 months of the issuance of all permits necessary for the construction of the expanded Plant.
  - b. PA-American shall submit quarterly status reports to the Department, which will describe in detail the progress made on the corrective actions set forth in Paragraph 3.a.(3,4,5, and 6).
  - c. During the term of this COA, the Department shall allow PA-American to commit capacity and allocate, approve, and make new connections under the current and future CMP's up to the flow limit allowed by the then current Department-approved Act 537 planning. As of the date of this COA, the Department has approved connections at the Plant totaling an annual average flow rate of 3.811 MGD.
  - d. The Department will review for approval quarterly CMPs submitted by PA-American that may allocate total flows treated at the Plant up to an average annual flow rate of 4.6 MGD. Upon DEP approval of the Act 537 Update Revision for the expansion of the Plant, Table A2 of the CMP may show allocations beyond 4.6 MGD, provided such allocations are projected to connect after the completion of the Plant expansion. The Department will approve submitted CMPs only if Pennsylvania-American is in compliance with all terms and conditions of this COA, including, but not limited to, the construction schedule set forth in Paragraph 3.a.
4. **Civil Penalty Settlement.** Upon execution of this COA, PA-American shall pay a civil penalty of **TWO THOUSAND FIVE HUNDRED DOLLARS (\$2,500.00)**. This payment is in settlement of the Department's claim for civil penalties for the violations set forth in Paragraph 5, above, covering the period from 2004 to 2005. The payment shall be made by corporate check or the like made payable to "The Commonwealth of Pennsylvania Clean Water Fund" and sent to Mr. Stephen Piller, PA Department of Environmental Protection, Southeast Regional Office, 2 East Main Street, Norristown, PA 19401.
5. **Stipulated Civil Penalties.** In the event PA-American fails to comply in a timely manner with the provisions of this COA, PA-American shall be in violation of this COA and, in addition to other applicable remedies, shall pay a civil penalty in the amount determined under the following schedule:
  - a. Beginning November 15, 2005, and continuing the 15<sup>th</sup> of each month thereafter, PA-American will report on a monthly basis, to the Department, a rolling annual average flow calculated for the previous twelve-month period (e.g, the first submission should be an average of monthly average flows from November 1, 2004 through October 31, 2005). If

for any month this rolling 12-month average flow exceeds 3.85 MGD or the then-current Department-approved Act 537 flows, PA-American will pay a penalty of **ONE THOUSAND DOLLARS (\$1,000.00)** per month for each monthly exceedance.

- b. For each and every violation of effluent parameters contained in PA-American's NPDES Permit No. PA0026859, PA-American shall pay penalties as set forth below:
  - 1. For the parameters of Biochemical Oxygen Demand (CBOD5), Total Suspended Solids (TSS), Ammonia as N (NH3-N), Phosphorus as P, and Copper (Total), as reported in PA-American's monthly discharge monitoring reports (DMRs)

$$\text{Violation Factor} = \text{Reported Value} \div \text{Permit Limit}$$

<u>Violation Factor</u>	<u>Penalty</u>
Greater than 1.0 but less than 1.5	\$2,000.00
Greater than 1.5 but less than 2.0	\$3,000.00
Greater than 2.0	\$4,000.00

- 2. Notwithstanding the penalty amounts set forth in the preceding table each and every violation of NPDES limits for pH, Fecal Coliform, Total Residual Chlorine and Dissolved Oxygen, PA-American shall pay a penalty of **TWO THOUSAND DOLLARS (\$2,000.00)**.
- c. For each day of noncompliance with the Corrective Actions, including, but not limited to CMP submissions, connections, and milestone schedule dates specified in Paragraph 3.a.1, 3.a.2, 3.a.3, 3.a.4, 3.a.5, and 3.b of the COA, PA-American shall pay a penalty of **TWO HUNDRED FIFTY DOLLARS (\$250.00)**.
- d. For each month of noncompliance with the construction completeness milestone schedule date specified in Paragraph 3.a.6 of the COA, PA-American shall pay a penalty of **FIFTEEN THOUSAND DOLLARS (\$15,000.00)**.
- e. Stipulated civil penalties shall be due automatically and without notice. Stipulated civil penalties for all violations shall be payable on or before the twenty-eighth (28<sup>th</sup>) day of each succeeding month. The payment shall be by corporate check or the like, made payable to "The Commonwealth of Pennsylvania Clean Water Fund" and sent to Mr. Stephen Piller, PA Department of Environmental Protection, Southeast Regional Office, 2 East Main Street, Norristown, PA 19401.
- f. Any payment under this paragraph shall neither waive PA-American's duty to meet its obligations under this COA nor preclude the Department from commencing an action to compel PA-American's compliance with the terms and conditions of this COA. The payment only resolves PA-American's liability for civil penalties arising from the violation of the COA for which the payment is made.

**6. Additional Remedies.**

- a. *In the event PA-American fails to comply with any provision of this COA, the Department may, in addition to the remedies prescribed herein, pursue any remedy available for a violation of an order of the Department, including any action to enforce this COA.*
- b. *The remedies provided by this paragraph and Paragraphs 5 are cumulative and the exercise of one does not preclude the exercise of any other. The failure of the Department to pursue any remedy shall not be deemed to be a waiver of that remedy. The payment of a stipulated civil penalty, however, shall preclude any further assessment of civil penalties for the violation for which the stipulated civil penalty is paid.*

7. **Reservation of Rights.** *The Department reserves the right to require additional measures to achieve compliance with applicable law. PA-American reserves the right to challenge any action that the Department may take to require those measures.*

8. **Liability of Operator.** *PA-American shall be liable for any violations of the COA, including those caused by, contributed to, or allowed by its officers, agents, employees or contractors. Except as provided in Paragraph 9 (Transfer of Ownership), PA-American also shall be liable for any violation of this COA caused by, contributed to, or allowed by its successors and assigns.*

**9. Transfer of Ownership.**

- a. *The duties and obligations under this COA shall not be modified, diminished, terminated or otherwise altered by transfer of any legal or equitable interest in the Plant or any part thereof.*
- b. *If PA-American intends to transfer any legal or equitable interest in the Plant which is affected by this COA, PA-American shall serve a copy of this COA upon the prospective transferee of the legal and equitable interest at least thirty (30) days prior to the contemplated transfer and shall simultaneously inform the Southeast Regional Office of such intent.*
- c. *The Department, in its sole discretion, may agree to modify or terminate PA-American's duties and obligations under this COA upon transfer of the Plant. PA-*

American waives any right that it may have to challenge the Department's decision in that regard.

10. **Correspondence with Department.** All correspondence with the Department in the Southeast Region concerning this COA shall be addressed to:

Stephen Piller  
Environmental Compliance Specialist  
DEP, Southeast Regional Office  
2 E. Main Street  
Norristown, PA 19401

11. **Correspondence with PA American.** All correspondence with PA-American concerning this COA shall be addressed to:

Nick Rowe  
Pennsylvania-American Water Company  
Vice President, Service Delivery  
800 West Hershey Park Drive  
Hershey, PA 17033

PA-American shall notify the Department whenever there is a change in the contact person's name, title, or address. Service of any notice or any legal process for any purpose under this COA, including its enforcement, may be made by mailing a copy by first-class mail to the above address.

12. **Severability.** The paragraphs of this COA shall be severable and should any part hereof be declared invalid or unenforceable, the remainder shall continue in full force and effect between the parties.
13. **Entire Agreement.** This COA shall constitute the entire integrated agreement of the parties. No prior or contemporaneous communications or prior drafts shall be relevant or admissible for purposes of determining the meaning or extent of any provisions herein in any litigation or any other proceeding.
14. **Attorney Fees.** The parties shall bear their respective attorney fees, expenses, and other costs in the prosecution or defense of this matter or any related matters, arising prior to execution of this COA.



EXHIBIT A



**Pennsylvania  
American Water**  
COATESVILLE DISTRICT  
CHESTER COUNTY

**CONNECTION MANAGEMENT PLAN  
WASTEWATER TREATMENT PLANT  
AND  
EAST END TRUNK LINE**

**REVISED: November 2005**

PREPARED BY:  
PENNSYLVANIA - AMERICAN WATER COMPANY  
COATESVILLE DISTRICT  
GERALD A. DeBALKO, P.E.  
4 WELLINGTON BLVD.  
WYOMISSING, PA 19610  
T: (610) 670-7789 EXT 127  
F: (610) 678-6057

**CONNECTION MANAGEMENT PLAN  
WASTEWATER TREATMENT PLANT (WWTP)**

&

**EAST END TRUNK LINE (EETL)**

REVISED: November 2005

**SUMMARY OF MANAGEMENT PLAN GOALS FOR WWTP**

PAW has shown in Appendix A on Table A2 the projected new connections to the system from 2005 to 2009 with planning modules signed by PAW. Table A3 shows the projects with module approval as well as the proposed projects with out planning module approval. The projections are based on the EDU's as determined by the tributary municipalities and PAW through on-going discussions, currently signed Planning Modules, and PAW and developer estimates of build out. On Table A3, sheet 2 of 2, there are three summary blocks showing the total projected EDU's. Summary #1 form shows the total projected EDU's and Summary #2 totals the EDU's with planning modules signed by PAW.<sup>1</sup> It should be noted that Summary #1 are very aggressive projections. PAW anticipates that the actual number of new EDU's constructed will fall between these two projections, and based on historical growth of the system most likely towards Summary #2. In addition, the projections are based on 262.5 gpd per edu, which is high for new residential construction, near term flows in new construction will not produce this much flow per edu. Summary #3 shows the difference between Summary #1, the aggressive EDU projection, and Summary #2, or the remaining EDU's not yet signed by PAWC.

As shown in Table 1, PAW currently has the capacity to accept 3,059 new EDU's under Act 537 Planning. Based on Act 537 planning, Table A2 Summary #1 shows the total projected EDU's with modules signed by PAW within the currently approved sewer service area to be 2,906 by the end of 2009. Table A3 Summary #3 shows projected EDU's not signed by PAW, which lists projects flows not currently approved by DEP for connection as part of the CMP. In accordance with Act 537 and Chapter 94, PAW will not commit capacity or allow connections for any projects in Summary #3 until such flows are approved by DEP in a revised CMP that lists the projects under Table A2.

**CORRECTIVE ACTIONS TO ADDRESS PROJECTED HYDRAULIC OVER LOAD:**

PAW is currently underway with Act 537 planning. The Act 537 plan has been distributed and reviewed by the contributing municipalities and county agencies. PAW anticipates sending final plan in October 2005 to all municipalities for approval. PAW expects to have the 537 plan to DEP for review by the 4<sup>th</sup> Quarter of 2005. Approval of this plan by DEP will address any limitations under the existing ACT 537 planning. In addition, PAWC has submitted a re-rating study to DEP which shows the organic and hydraulic capacity of the facility to be 4.86 MGD.

Once the Act 537 plan is approved by DEP, PAW can move forward with plans to expand capacity at WWTP to address any limitations at the plant. PAW has already started design engineering of expanded capacity, specifically land requirements and plant layout. PAW anticipates having the WWTP expanded capacity online by 2008.

<sup>1</sup> These totals exclude projects signed by PAW for projects outside of the Act 537 Approved sewer service area for which it is prohibited from allocating, approve or making connections until such time as the Act 537 Planning is approved for sewer service area and treatment plant expansion.

**SUMMARY OF MANAGEMENT PLAN GOALS FOR EETL**

- PAW has agreements in place has to fund the upgrade of this critical section and EDUs are allocated in accordance with this agreement as shown in Table B2. DEP issued to PAW the Part II Permit on April 27, 2005 for this upgrade. The construction schedule is as follows: Construction bids opened on March 1, 2005.
- Construction contracts were awarded on October 18, 2005.
- Notice to Proceed Issued on November 15, 2005.
- Estimated completion of construction is April 15, 2006.

PAW has shown on Table A2, indicated by column labeled EETL MH, the projected new connections to the East End Trunk Line (EETL) from 2005 to 2009. Table B1 is a snapshot of the EETL hydraulic model using system flows as monitored in May 2002. The projected EDU's are based on the EDU's as submitted by the contributing municipalities, currently signed Planning Modules, and PAW and developer estimates of build out.

As shown in the table above, PAW currently has the capacity to accept 142 new EDU's through the critical section of the EETL. Table A2 Sheet 2 of 2 indicates a total of 612 new EDU's in 2005 that will flow through this critical section. Although the projections exceed capacity, most projected do not have planning modules signed by PAW and with the remaining projected EDU's PAW has agreements with the municipalities and developers that limit flow until EETL is upgraded to provide needed capacity.

**CONNECTION MANAGEMENT PLAN - REVISED: November 2005**  
**WASTEWATER TREATMENT PLANT (WWTP) CAPACITY PROJECTIONS**

TABLE 1

CAPACITY BASED ON ACT 537 PLANNING		
Line/Note		
A	ANNUAL AVERAGE FLOW PER ACT 537	3.85 mgd
B	5 YEAR ANNUAL AVERAGE FLOW	3.047 mgd
C	AVAILABLE CAPACITY PROJECTED AT ANNUAL AVERAGE FLOW	0.803 mgd
D	AVAILABLE EDUS BASED ON ANNUAL AVERAGE FLOW	3,059 edu
1	PERMITTED 3-MONTH MAXIMUM FLOW PER NPDES PERMIT	4.600 mgd
2	5 YEAR MAXIMUM 3-MONTH AVERAGE FLOW	3.226 mgd
3	5-YEAR AVERAGE PEAKING FACTOR: 3-MONTH MAXIMUM TO ANNUAL AVERAGE	1.059 mgd

Note

All referenced tables are located in Appendix

EDU = 262.5 gpd/edu

(a) Annual Average Flow per 1995 ACT 537 Plan

(b) Calculated using the running 5 Year Equivalent Base Flows from Table A1.

(c) Calculated as Line A - Line B

(d) Calculated as (Line C \* 1,000,000) divided by (262.5 gpd/edu)

(1) 4.60 mgd is the Maximum Month Flow per the NPDES permit which is used to help determine hydraulic loading at WWTP. Hydraulic overload does not occur until the maximum month average is exceeded for 3 consecutive months.

(2) 2005 3MM from Table A1

(3) 5 Year Peak factor from Table A1.

CONNECTION MANAGEMENT PLAN - REVISED: November 2005

EAST END TRUNK LINE (EETL) CAPACITY PROJECTIONS

TABLE 2

CAPACITY BASED ON MOST CRITICAL SECTION		
Line/Note		
1	HYDRAULIC PEAK CAPACITY AT CRITICAL SECTION (MH# 18 to MH# 16)	3,823,000 gpd
2	EETL AVERAGE DAILY FLOW	1,328,000 gpd
3	EETL PEAK DAILY FLOW	3,718,400 gpd
4	AVAILABLE CAPACITY AS PEAK FLOW	104,600 gpd
5	AVAILABLE CAPACITY AS AVERAGE FLOW	37,357 gpd
6	AVAILABLE EDUS AT AVERAGE FLOW	142 edu
7	NUMBER OF CONNECTIONS MADE	75 edu

Notes

- All referenced tables are located in Appendix
- (1) Critical Section as Indicated on Table B1
  - (2) Average Daily Flow as indicated in Table B1 for critical section, Average Daily Flow values as indicated on Table B1 are obtained from the I&I Program's May 2002 metering of basins.
  - (3) Peak Daily Flow as indicated on Table B1 for critical section.
  - (4) Available Capacity as indicated on Table B1 for critical section.
  - (5) Calculated by removing peaking factors from Peak Flow on Line 4.
  - (6) Calculated as Line 5 divided by 262.5 gpd/EDU

APPENDIX A

**CONNECTION MANAGEMENT PLAN - REVISED: November 2005**  
**WASTEWATER TREATMENT PLANT FLOWS**

TABLE A1

MONTH	YEAR	MONTHLY FLOW AVERAGE (MGD)				2005			
		2000	2001	2002	2003	2004	MONTHLY FLOW AVERAGE (MGD)	3 MONTH MAXIMUM (MGD)	RAIN TOTAL (in.)
Annual Average		3.85 MGD							
3 Consecutive Month Maximum		4.6 MGD							
JANUARY		2.485	2.204	2.985	3.546	3.776	-	4.76	
FEBRUARY		2.803	2.076	3.195	3.749	3.652	-	1.97	
MARCH		2.862	2.248	4.011	3.183	3.688	3.705	4.14	
APRIL		2.864	2.264	3.421	3.315	4.337	3.892	4.37	
MAY		2.771	2.599	3.204	3.296	3.402	3.809	2.19	
JUNE		2.757	2.511	4.501	3.251	3.124	3.621	2.02	
JULY		2.500	2.377	3.449	3.118	3.530	3.352	9.26	
AUGUST		2.233	2.358	3.698	3.422	3.171	3.275	2.80	
SEPTEMBER		2.197	2.364	4.258	3.408	2.905	3.202	2.92	
OCTOBER	2.397	2.084	2.65	3.719	3.288				
NOVEMBER	2.157	2.054	2.763	4.072	3.268				
DECEMBER	2.471	2.077	3.126	4.296	3.371				
AVERAGE	2.342	2.474	2.462	3.733	3.351	AVERAGE	3.509	-	3.83
3 Month MAX	2.342	2.843	2.846	4.029	3.493	3 MTH. MAX.	4.337	3.802	9.26

Number of Connections During Quarter 2005	
1st Quarter	309
2nd Quarter	310
3rd Quarter	158
4th Quarter	
Total for Year	

January to September

October to December

5 YEAR FLOW HISTORY		
ANNUAL AVERAGE	3 MONTH MAXIMUM	PEAKING FACTOR

2005	3.509	3.802	1.083
2004	3.351	3.493	1.042
2003	3.733	4.029	1.079
2002	2.462	2.846	1.156
2001	2.474	2.843	1.149
2000	2.342	2.342	1.187

RUNNING 5 YEAR AVERAGE		
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3.047      3.226      1.059

	Act 537 Approved Contracted Allocation	Chapter 94 Flow 2004	2005	2006	2007	2008	2009
City of Coatesville	*	1,679,591	1,707,679	1,767,266	1,933,429	1,999,054	2,132,666
Valley Township	550,000	594,160	662,935	756,123	848,785	998,935	1,082,935
Cain Township	167,000	185,074	269,337	361,212	459,649	560,974	624,237
West Brandywine Township	345,000	164,653	205,341	272,278	370,716	473,091	564,966
Sadsbury Township	410,750	71,862	85,512	154,812	216,237	278,450	341,712
West Sadsbury Township	*	41,951	42,476	47,989	48,251	48,514	61,901
East Fallowfield Township	*	74,607	86,945	146,007	205,070	243,395	263,345
Borough of Parkesburg	*	451,416	464,279	499,191	541,454	573,741	607,866
West Cain Township	*	3,289	12,739	32,952	47,127	48,439	49,752
Veterans Hospital	*	74,271	74,271	74,271	74,271	74,271	74,271

	Act 537 Approved Contracted Allocation	Chapter 94 Flow 2004	2005	2006	2007	2008	2009
City of Coatesville	*	1,679,591	1,691,929	1,700,066	1,705,841	1,706,891	1,708,204
Valley Township	550,000	594,160	658,735	732,760	802,060	907,848	930,948
Cain Township	167,000	185,074	185,074	185,074	185,074	197,937	211,062
West Brandywine Township	345,000	164,653	164,653	164,653	164,653	164,653	164,653
Sadsbury Township	410,750	71,862	78,687	113,337	147,462	185,787	222,800
West Sadsbury Township	*	41,951	41,951	41,951	41,951	41,951	41,951
East Fallowfield Township	*	74,607	92,195	144,695	178,820	186,957	186,957
Borough of Parkesburg	*	451,416	462,441	479,504	495,254	506,541	519,666
West Cain Township	*	3,289	11,427	30,327	43,189	43,189	43,189
Veterans Hospital	*	74,271	74,271	74,271	74,271	74,271	74,271

	Allocation	Contracted Capacity
City of Coatesville	2,391,490	
Valley Township		1,540,000
Cain Township		800,000
West Brandywine Township		345,000 (1)
Sadsbury Township		410,750
West Sadsbury Township	111,951	
East Fallowfield Township	329,232	
Borough of Parkesburg	633,416	
West Cain Township	251,089	
Veterans Hospital	74,271	
Highland Township	58,438	
Totals:	3,847,887	3,095,750 6,943,637

NOTE (1) Draft Sewer Agreement 4/25/05 pending with requested amounts of 473,000 gpd and 835,000 gpd post plant



81	Total Flow	247,550	16,488	227,063	FLOW	8,138	16,000	12,603	-	-	39,000	187,103
82	WWTW	-	-	-	R	-	-	-	-	-	-	-
83		-	-	-		-	-	-	-	-	-	-
84		-	-	-		-	-	-	-	-	-	-
85		-	-	-		-	-	-	-	-	-	-
86	Total EDU	-	-	-	EDU	-	-	-	-	-	-	-
87	Total Flow	-	-	-	FLOW	-	-	-	-	-	-	-
88		-	-	-		-	-	-	-	-	-	-
89		-	-	-		-	-	-	-	-	-	-
90		-	-	-		-	-	-	-	-	-	-
91		-	-	-		-	-	-	-	-	-	-
92		-	-	-		-	-	-	-	-	-	-
93		-	-	-		-	-	-	-	-	-	-
94		-	-	-		-	-	-	-	-	-	-
95		-	-	-		-	-	-	-	-	-	-
96		-	-	-		-	-	-	-	-	-	-
97		-	-	-		-	-	-	-	-	-	-
98		-	-	-		-	-	-	-	-	-	-
99		-	-	-		-	-	-	-	-	-	-
100		-	-	-		-	-	-	-	-	-	-
101		-	-	-		-	-	-	-	-	-	-
102		-	-	-		-	-	-	-	-	-	-
103		-	-	-		-	-	-	-	-	-	-

95 EDU = 202.5  
 96 (a) Status Legend: 0=Completed, 1=Under Construction, 2=Under Agreement,  
 97 3=Under PAWC Plan Review, 4=Initial Planning, 5=Speculative  
 98 (b) Signed by PAWC, does not indicate approval by DEP  
 99 (c) \* Indicate perfect completion. Other developments are projected to extend beyond 5 years.  
 100 (d) Municipal agreements will be governed by CMP.  
 101  
 102  
 103

CONNECTION MANAGEMENT PLAN - REVISED: November 2005  
PROJECTED NEW CONNECTIONS

TABLE A3

LINE	DEP Code No.	NAME	TOTAL EDU	EDUS PD ACTIVE	EDUS REMAINING	EST. GPD REMAINING (PD & GPD/EDU)	PLANNING (B) MODULE	EETL MH	TYPE	PROJECTED NEW CONNECTIONS (G)					TOTAL IN YEARS	TOTAL BEYOND 2009
										2005	2006	2007	2008	2009		
1	1-15001-006-01	Centella Terrace	68	-	68	18,113	Y	16	R	10	28	22	4	-	-	
2	1-15001-029-3H	Penn Crossing	78	78	-	-	Y	40	R	-	-	-	-	5	59	
3	1-15001-023-3H	Millview	107	107	-	-	Y	40	R	-	-	-	-	-	-	
4	1-15001-032-3J	Millview Apartments	350	373	27	7,088	Y	37	R	27	-	-	-	-	-	
5	1-15001-032-3J	Oak II	11	11	-	-	Y	37	R	-	-	-	-	-	-	
6	1-10001-037-3J	Band House (Mount Pleasant Street)	13	-	13	3,412	Y	37	R	10	3	-	-	-	-	
7		Brandywine View	860	-	860	147,000	-	-	R	-	110	150	150	150	13	
8		Market and Office Complex	26	-	26	8,663	-	-	C	-	10	16	-	-	28	
9		Cherry Towers 1 - Residential	80	-	80	15,750	-	-	R	-	10	50	-	-	-	
10		Cherry Towers 1 - Commercial	20	-	20	5,250	-	-	R	-	10	50	-	-	-	
11		Cherry Towers 2 - Residential	150	-	150	29,375	-	-	D	-	5	15	-	-	20	
12		Cherry Towers 2 - Commercial	50	-	50	13,125	-	-	C	-	10	140	-	-	150	
13		City Revitalization - Residential	4,042	-	4,042	1,061,025	-	-	H	0	28	36	53	294	50	
14		City Revitalization - Commercial	410	-	410	107,825	-	-	C	80	5	10	25	83	392	
15		City Request Other	90	-	90	15,750	-	-	R	10	10	10	10	10	150	
16		Total EDU	6,835	540	6,295	1,440,078	-	-	EDU	107	227	633	250	200	1,720	
17		Total Flow	1,697,318	157,230	1,440,078	-	-	FLOW	28,006	59,588	166,183	63,825	133,813	433,075	987,000	
18	VALLEY CREEK (D)										107	227	633	250	200	1,720
19	VALLEY CREEK (D)										28,006	59,588	166,183	63,825	133,813	433,075
20	1-15056-117-3H	Millview	825	204	321	84,233	Y	18	R	44	80	80	80	37	321	
21	1-15056-110-3H	Meadow Brook	68	68	-	-	Y	18	R	-	-	-	-	-	-	
22	1-15056-184-3J	Dark Creek (Dupue)	188	-	188	49,350	Y	18	R	35	60	50	53	-	188	
23	1-15056-118-3H	Valley Crossing IV	49	49	-	-	Y	18	R	-	-	-	-	-	-	
24	1-15056-123-3J	Timberline	46	-	46	12,075	Y	18	R	22	24	-	-	-	46	
25	1-15056-128-3J	Round Hill (Buckhorn Area)	230	-	230	60,275	Y	18	R	33	80	80	60	45	230	
26	1-15056-127-3J	Herscov Subdivision	1	-	1	253	Y	18	R	1	-	-	-	-	1	
27	1-15056-124-3J	Lambert Subdivision	3	-	3	758	Y	18	R	1	-	-	-	-	3	
28		Highlands Corp. Center Phase I, II, III	90	27	63	18,538	Y	18	D	3	2	-	-	-	3	
29	1-15056-132-3J	Woodland Point (Ribbon)	9	-	9	2,263	Y	18	C	47	2	-	-	-	49	
30	1-15056-125-3J	Valley Suburban (Bluffs Commercial)	340	-	340	89,260	Y	18	O	3	6	-	-	-	9	
31	1-15056-126-3J	Valley Farm & Mt. Airy Road	51	-	51	21,269	Y	18	R	20	20	50	205	-	340	
32		Tony Middleton	1	-	1	269	Y	18	R	1	-	-	-	-	1	
33		Rainbow	30	-	30	7,875	-	-	R	-	-	-	-	-	-	
34		London Tract	14	-	14	3,875	-	-	R	-	-	-	15	15	30	
35		Bone Tract (Valley Portion)	450	-	450	118,125	-	-	R	8	8	-	-	-	14	
36		Alport	111	-	111	29,138	-	-	C	-	50	50	50	50	200	
37		Green Trees	80	-	80	21,000	-	-	R	-	10	10	20	20	50	
38		M & S Development, Valley Rd	16	-	16	4,725	-	-	R	-	-	-	14	14	47	
39		CABD	200	-	200	52,500	-	-	C	-	-	-	50	50	100	
40		Heater Residential	250	-	250	65,625	-	-	R	-	-	-	50	50	100	
41		Township Request Other	70	-	70	18,375	-	-	R	10	15	15	15	15	70	
42		Total EDU	2,874	388	2,486	697,625	-	-	EDU	362	355	353	672	320	1,862	
43		Total Flow	754,425	98,600	655,825	157,625	-	-	FLOW	68,775	63,188	62,983	159,183	84,000	488,775	
44	CANYON CREEK (D)										362	355	353	672	320	1,862
45	CANYON CREEK (D)										68,775	63,188	62,983	159,183	84,000	488,775
46	1-15112-188-3J	Millview (aka Hill Farm)	69	-	69	25,068	Y	26	R	-	-	-	49	50	99	
47		Bonhwoods (Welch)	16	-	16	4,200	-	-	R	-	-	-	-	18	16	
48		Lower Birchdown	300	-	300	78,750	-	-	R	50	50	50	50	40	200	
49		Cahn Road	40	-	40	10,500	-	-	H	-	-	-	-	40	40	
50		Township Flow Diverted from DARA	952	-	952	249,000	-	-	R	250	250	250	202	-	952	
51		Township Request Other	908	-	908	159,000	-	-	R	21	50	75	85	85	318	
52		Total EDU	2,015	-	2,015	528,938	-	-	EDU	321	350	375	300	241	1,617	
53		Total Flow	628,938	-	628,938	159,000	-	-	FLOW	84,293	91,875	98,438	101,325	63,283	439,163	
54	VALLEY CREEK (D)										321	350	375	300	241	1,617
55	VALLEY CREEK (D)										84,293	91,875	98,438	101,325	63,283	439,163
56		Cherry Subdivision	2	-	2	525	-	-	R	-	-	-	-	-	2	
57		Cullen Road Residential	178	-	178	46,728	-	-	R	-	10	60	80	-	2	
58		Cullen Road Commercial	33	-	33	8,863	-	-	C	-	0	33	48	-	178	
59		Driveway Residential	115	-	115	30,188	-	-	R	-	0	40	30	-	33	
60		Beaver Creek Residential	290	-	290	88,250	-	-	R	-	5	40	40	30	115	
61		Beaver Creek Commercial	3	-	3	758	-	-	C	-	0	30	80	80	190	
62		Jenico Residential	32	-	32	8,400	-	-	C	-	0	0	0	3	3	
63		Jenico Commercial	2	-	2	525	-	-	C	-	0	0	0	0	32	
64		Township Request Other	1,951	805	1,146	353,325	-	-	R/C	168	238	211	177	106	970	
65		Total EDU	2,576	805	1,771	517,368	-	-	EDU	165	235	211	177	106	970	
66		Total Flow	678,200	189,815	488,385	117,258	-	-	FLOW	40,688	66,638	58,438	102,375	91,875	400,313	
67	Meadow Ridge (D)										165	235	211	177	106	970
68	Meadow Ridge (D)										40,688	66,638	58,438	102,375	91,875	400,313
69		Blue Property	50	-	50	15,225	-	-	R	-	-	-	-	15	43	
70		Carleton (Meadow Ridge)	82	-	82	21,925	Y	-	R	-	-	-	-	-	82	
71		Township Request Other	79	-	79	19,858	-	-	R	1	-	-	-	-	74	
72		Total EDU	213	-	213	56,438	-	-	EDU	1	-	-	-	-	1	
73		Total Flow	56,438	-	56,438	15,438	-	-	FLOW	203	-	-	-	15	190	
74	BEECHWOOD (D)										1	-	-	-	-	1
75	BEECHWOOD (D)										203	-	-	-	-	190
76	1-15047-085-2H	Sandbury Village	140	140	-	-	-	-	R	-	-	-	-	-	-	
77	1-15047-079-2E	Quarry Ridge	165	165	-	-	Y	-	R	-	-	-	-	-	-	

74	1-19047-069-3H	AM Parkers Park - Bakers	132	41	91	23,888	Y	C	10	40	30	15	-	-	91	-
75	1-15047-004-3J	Oxleys Glen	44	22	22	5,775	Y	R	8	17	-	-	-	-	22	-
76	1-15047-092-3J	Maple Farm	12	11	-	282	Y	C	1	-	-	-	-	-	1	-
77	1-15047-104-3J	Sedisbury Park	461	-	461	121,075	-	-	10	75	100	135	241	-	481	-
78		Sons Tract (Sedisbury Portion)	40	-	40	10,200	-	-	-	19	21	-	-	-	40	-
79		D&S Developers	25	-	25	6,653	-	-	-	25	-	-	-	-	25	-
80		Township Request Other	826	-	826	217,250	-	-	25	88	83	91	100	-	388	-
81		Total EDU	1,658	388	1,468	365,950	-	-	52	264	234	237	241	-	1,028	-
82		Total Flow	471,220	101,650	365,330	-	-	-	13,650	60,300	81,425	62,213	83,203	200,650	115,500	-
83	1-15018-150-3H	Stone Creek (Robins Cove)	53	-	53	7,350	Y	R	3	16	0	-	-	-	19	-
84	1-15018-194-3J	North Farm	25	25	-	5,513	Y	R	3	9	0	-	-	-	21	-
85		Brick Station	87	87	-	-	Y	R	-	-	-	-	-	-	-	-
86		Brook Crossing	247	247	-	-	Y	R	-	-	-	-	-	-	-	-
87		North Woods (Thompson North)	160	160	-	-	Y	R	-	-	-	-	-	-	-	-
88	1-15018-207-3L	Mendenhall Tract	27	-	27	7,088	Y	R	5	15	7	-	-	-	27	-
89	1-15018-209-3L	Brook Crossing	74	-	74	19,429	Y	R	-	20	30	24	-	-	74	-
90	1-15018-211-3U	Providence Hill (Chen Tract)	218	23	195	61,185	Y	R	20	85	73	7	-	-	195	-
91	1-15018-213-3U	Ridgewood (Martin)	72	-	72	19,900	Y	R	11	45	27	-	-	-	72	-
92	1-15018-189-3J	Manchester Farms (Thompson South)	112	29	83	21,788	Y	R	-	-	-	-	-	-	-	-
93	1-15018-212-3J	South Farm	76	-	76	20,475	Y	R	-	-	-	-	-	-	-	-
94		George Club	161	-	161	47,613	-	-	-	-	-	-	70	71	161	-
95		Ellicott Development	32	-	32	8,400	-	-	-	-	-	-	-	-	-	-
96		Central Drive Area	85	-	85	22,913	-	-	-	-	-	-	-	-	-	-
97		Township Request Other	100	-	100	20,290	-	-	5	5	5	5	5	-	25	-
98		Total EDU	1,654	677	976	266,200	-	-	47	225	225	146	78	719	267	-
99		Total Flow	407,063	161,483	252,200	-	-	-	12,328	59,063	59,063	38,325	19,950	138,738	87,493	-
100	1-15007-001-3J	Maple Property	10	-	10	2,825	Y	R	19	30	30	13	-	-	10	-
101	1-15007-007-3H	Parkview Row	171	83	88	44,868	Y	R	22	30	30	30	50	100	88	-
102	1-15007-002-3J	Crested Springs Extension (Heritage)	250	-	250	85,825	Y	R	-	10	21	-	-	-	250	-
103	1-15007-040-3H	Lincoln Village	31	-	31	9,075	-	-	-	80	75	75	75	-	31	-
104		Devin Tract	308	-	308	90,975	-	-	-	5	-	-	-	-	-	-
105		Barbours Subdivision (Streetsburg Rd)	4	4	-	1,050	-	-	-	-	-	-	-	-	-	-
106		Dale Farms Subdivision	3	-	3	785	-	-	-	-	-	-	-	-	-	-
107		Township Request Other	258	5	251	67,200	-	-	7	5	5	5	5	-	27	-
108		Total EDU	1,597	52	909	266,368	-	-	49	133	161	123	150	27	224	-
109		Total Flow	298,389	24,150	262,238	-	-	-	12,883	34,913	42,283	32,285	31,926	150,490	106,788	-
110	1-15001-354-3H	Cedarvale West	124	21	103	32,350	Y	R	26	35	42	-	-	-	103	-
111	1-15001-354-3H	Sandy Hill	87	36	51	22,816	Y	R	5	37	7	-	-	-	51	-
112	1-15001-333-3	Country Meadows (Lawrence)	171	-	171	44,888	Y	R	-	-	-	-	-	-	-	-
113	1-15001-324-3J	Crane Tract	642	-	642	142,274	Y	R	-	-	-	-	-	-	-	-
114		Township Request Other	80	-	80	15,750	-	-	5	5	5	5	5	-	80	-
115		Total EDU	684	68	926	258,308	-	-	36	77	54	5	5	25	177	-
116		Total Flow	258,308	18,485	242,813	-	-	-	9,420	20,213	14,125	1,313	1,313	48,483	100,350	-
117	Maple Property	600	-	600	157,500	-	-	-	-	-	-	-	50	50	600	-
118	Barbours Development	20	-	20	5,250	-	-	-	-	20	-	-	-	-	20	-
119	Township Request Other	10	-	10	2,625	-	-	-	2	1	-	-	-	-	10	-
120		Total EDU	630	-	630	165,375	-	-	2	21	1	1	1	1	6	-
121		Total Flow	165,375	-	165,375	-	-	-	625	5,313	263	263	13,388	19,950	694	-
122		Summary														
123		PROJECTED EDUS														
124		TOTAL	18,878	2,688	17,191	4,512,838										
125		ACTIVE	5,218,238	705,600	4,812,638											
126		REMAINING EDUS														
127		TOTAL														
128		TOTAL EDU	1,032	1,007	2,411	2,110	1,636	9,398							7,193	
129		TOTAL FLOW	270,900	500,588	653,875	508,725	2,468,975	2,045,693							7,590,104	
130		TOTAL PROJECTED WWTP FLOW	3,047,467	3,316,387	3,616,954	4,457,642	6,006,717	6,514,442								
131		Summary														
132		#1														
133		TOTAL EDUS	434	742	890	676	324	2,698							1,633	
134		TOTAL FLOW	113,215	205,275	178,600	177,450	87,675	762,825							271,193	
135		TOTAL PROJECTED WWTP FLOW	3,047,467	3,161,592	3,268,667	3,545,167	3,722,817	3,810,282							4,081,454	
136		#2														
137		TOTAL EDUS	508	1,125	1,731	1,434	1,604	6,492							6,793	
138		TOTAL FLOW	156,975	293,313	454,388	378,425	421,060	1,704,190							1,774,660	
139		TOTAL PROJECTED WWTP FLOW	106,975	452,288	608,675	1,283,100	1,704,150	3,476,690								
140		#3														
141		TOTAL EDUS	518	825	1,343	847	591	3,711								
142		TOTAL FLOW	135,975	219,583	244,125	222,338	155,138	874,136								
143		REMAINING CAPACITY THRU CRITICAL SECTION	104,000	(47,813)	(204,475)	(508,600)	(488,813)	(604,798)								

EDU = 282.5  
 (a) Status Legend: 0=Completed, 1=Under Construction, 2=Under Agreement, 3=Under PAWC Plan Review, 4=Initial Planning, 9=Speculative  
 (b) Signed by PAWC, does not indicate approval by DEP  
 (c) \* indicates project completion. Other developments are projected to extend beyond 5 years.  
 (d) Municipal agreements will be governed the OMP.

APPENDIX B

CONNECTION MANAGEMENT PLAN - EETL  
EETL HYDRAULIC MODEL USING MAY 2002 METERED FLOWS

TABLE B1

Upstream Manhole	Upstream Invert Elevation	Downstream Manhole	Downstream Invert Elevation	Pipe Diameter	Pipe Length	Pipe Slope	n	Pipe Capacity	Metered ADF (2002)	Metered ADF + Proj. ADF	Peak Calculated Flow	Available Capacity	% of capacity used
				In.	ft.	ft./ft.		gpd.	gpd	gpd	gpd.	gpd.	
54	374.33	53	370.89	10	200.68	0.0171	0.015	1,609,000	141,000	141,000	394,800	1,214,200	24.5%
53	370.89	52	369.07	10	186.32	0.0098	0.015	1,218,000	142,000	142,000	397,600	820,400	32.6%
52	369.07	51	366.03	10	198.53	0.0153	0.015	1,522,000	143,000	143,000	400,400	1,121,600	26.3%
51	366.03	50	364.05	10	211.77	0.0093	0.015	1,187,000	144,000	144,000	403,200	783,800	34.0%
50	364.05	49	353.68	10	540.00	0.0192	0.016	1,706,000	145,000	145,000	406,000	1,299,000	23.8%
49	353.68	48	350.94	10	308.00	0.0089	0.016	1,161,000	146,000	146,000	408,800	752,200	35.2%
48	350.94	47	346.92	10	298.00	0.0135	0.015	1,430,000	147,000	147,000	411,600	1,018,400	28.8%
47	346.92	46	345.29	10	299.00	0.0055	0.015	913,000	148,000	148,000	414,400	498,600	45.4%
46	345.29	45	343.36	12	265.00	0.0073	0.015	1,710,000	375,000	375,000	1,050,000	660,000	61.4%
45	343.36	44	341.43	12	265.00	0.0073	0.015	1,710,000	380,000	380,000	1,084,000	646,000	62.2%
44	341.43	43	337.58	12	177.00	0.0218	0.015	2,955,000	400,000	400,000	1,120,000	1,835,000	37.9%
43	337.58	42	333.38	12	257.00	0.0163	0.015	2,555,000	500,000	500,000	1,400,000	1,155,000	54.8%
42	333.38	41	330.46	12	267.00	0.0109	0.015	2,089,000	510,000	510,000	1,428,000	661,000	68.4%
41	330.46	40	328.01	12	267.00	0.0092	0.015	1,919,000	525,000	525,000	1,470,000	449,000	76.6%
40	328.01	39	327.29	15	100.00	0.0072	0.015	3,079,000	575,000	575,000	1,610,000	1,469,000	52.3%
39	327.29	38	326.81	15	66.00	0.0073	0.015	3,100,000	600,000	600,000	1,680,000	1,420,000	54.2%
38	326.81	37	324.73	18	93.50	0.0222	0.015	8,790,000	625,000	625,000	1,750,000	7,040,000	19.9%
37	324.73	36	323.63	18	188.00	0.0059	0.015	4,532,000	800,000	800,000	2,240,000	2,292,000	49.4%
36	323.63	35	322.36	18	192.50	0.0066	0.015	4,793,000	869,000	869,000	2,433,200	2,359,800	50.8%
35	322.36	34	321	18	184.00	0.0074	0.015	5,075,000	875,000	875,000	2,450,000	2,625,000	48.3%
34	321	33	319.77	18	198.50	0.0062	0.015	4,646,000	880,000	880,000	2,464,000	2,181,000	53.0%
33	319.77	32	318.91	18	137.00	0.0063	0.015	4,883,000	895,000	895,000	2,478,000	2,205,000	52.9%
32	318.91	31	317.13	18	267.00	0.0069	0.015	4,901,000	895,000	895,000	2,506,000	2,395,000	51.1%
31	317.13	30	316.11	18	293.00	0.0035	0.015	3,490,000	905,000	905,000	2,534,000	956,000	72.6%
30	316.11	29	314.96	18	164.88	0.0070	0.015	4,936,000	915,000	915,000	2,562,000	2,374,000	51.9%
29	314.96	28	314.43	18	106.25	0.0050	0.015	4,172,000	920,000	920,000	2,576,000	1,596,000	61.7%
28	314.43	27	313.89	18	106.25	0.0051	0.015	4,213,000	930,000	930,000	2,604,000	1,609,000	61.8%
27	313.89	26	311.38	18	558.36	0.0045	0.015	3,958,000	935,000	935,000	2,618,000	1,340,000	66.1%
26	311.38	25	310.08	18	145.50	0.0089	0.015	5,566,000	945,000	945,000	2,646,000	2,920,000	47.5%
25	310.08	24	309.37	18	168.00	0.0042	0.015	3,823,000	954,000	954,000	2,671,200	1,151,800	69.9%
24	309.37	23	308.5	18	157.69	0.0055	0.015	4,375,000	1,000,000	1,000,000	2,800,000	1,675,000	64.0%
23	308.5	22	306.83	18	179.10	0.0093	0.015	5,690,000	1,328,000	1,328,000	3,718,400	1,971,600	65.3%
22	306.83	21	305.52	18	268.10	0.0049	0.015	4,130,000	1,328,000	1,328,000	3,718,400	411,600	90.0%
21	305.52	20	304.09	18	294.55	0.0049	0.015	4,130,000	1,328,000	1,328,000	3,718,400	411,600	90.0%
20	304.09	19	302.65	18	294.55	0.0049	0.015	4,130,000	1,328,000	1,328,000	3,718,400	411,600	90.0%
19	302.65	18	302.10	18	100.00	0.0049	0.015	4,130,000	1,328,000	1,328,000	3,718,400	411,600	90.0%
18	302.10	17	300.99	18	276.83	0.0042	0.015	3,823,000	1,328,000	1,328,000	3,718,400	104,600	97.3%
17	300.99	16	299.82	18	276.83	0.0042	0.015	3,823,000	1,328,000	1,328,000	3,718,400	104,600	97.3%
16	299.82	15	292.36	18	644.53	0.0088	0.015	5,534,000	1,834,000	1,834,000	5,135,200	398,800	92.8%
15	292.36	14	291.59	30	235.53	0.0033	0.015	13,234,000	2,747,000	2,747,000	7,691,600	5,542,400	58.1%
14	291.59	13	291.03	30	241.13	0.0023	0.015	11,048,000	2,747,000	2,747,000	7,691,600	3,356,400	69.6%
13	291.03	12	290.87	30	130.14	0.0028	0.015	12,190,000	2,747,000	2,747,000	7,691,600	4,498,400	63.1%
12	290.87	11	290.36	30	119.03	0.0028	0.015	11,747,000	2,747,000	2,747,000	7,691,600	4,055,400	65.5%
11	290.36	10	290.11	30	89.23	0.0028	0.015	12,190,000	2,747,000	2,747,000	7,691,600	4,498,400	63.1%

Upstream Manhole	Upstream Invert Elevation	Downstream Manhole	Downstream Invert Elevation	Pipe Diameter	Pipe Length	Pipe Slope	n	Pipe Capacity	Metered ADF (2002)	Metered ADF + Proj. ADF	Peak Calculated Flow	Available Capacity	% of capacity used
				in.	ft.	ft./ft.		gpd.	gpd	gpd	gpd.	gpd.	
10	290.11	9	289.82	30	200.85	0.0014	0.015	8,620,000	2,747,000	2,747,000	7,691,600	928,400	89.2%
9	289.82	8	289.44	30	144.60	0.0026	0.015	11,747,000	2,747,000	2,747,000	7,691,600	4,056,400	65.5%
8	289.44	7	288.51	30	298.70	0.0031	0.015	12,827,000	2,747,000	2,747,000	7,691,600	5,135,400	60.0%
7	288.51	6	288.03	30	193.26	0.0025	0.015	11,519,000	2,747,000	2,747,000	7,691,600	3,827,400	68.8%
6	288.03	5	287.57	30	270.36	0.0017	0.015	9,498,000	2,747,000	2,747,000	7,691,600	1,806,400	81.0%
5	287.57	4	287.26	30	86.94	0.0032	0.015	13,032,000	2,747,000	2,747,000	7,691,600	5,340,400	59.0%

Notes:

- 1 The calculated pipe slopes have been rounded off to four decimal places.
- 2 The pipe capacity is calculated by the Mannings equation.
- 3 The peak calculated flow equals the metered flow times 1.12 (seasonal peaking factor) times 2.5 (regulatory peaking factor) = 2.8
- 4 Flow figures for trunk line are from the May 2002 Flow Monitoring of the basins. The plant average monthly flow for May was 2,559 mgd versus a 2002 average annual flow of 2,596, therefore since data was close an adjustment to the May monitoring data was not necessary.

CONNECTION MANAGEMENT PLAN - REVISED: November 2005

TABLE B2

East End Trunk Line Allocation until Expansion is Complete from MH 16 to MH 18

Township	Development	Connections Allowed	Connections Made
<b>City of Coatesville</b>			
	Penn Crossing	10	
	Cox II	11	
<b>Valley Township</b>			
<b>Cain Township</b>			
	Southwoods (Weiss)		
	Hill Farm	0	
	Twp flow diverted from DARA		
	Twp other Request	0	
<b>West Brandywine Township</b>			
	Township Other Request	5	
<b>East Fallowfield Township</b>			
	Robins Cove	40	25
	Harkins Farm	0	
	North Woods (Thompson North)	0	
	Mendenhall Tract	0	
	Chen Tract	40	23
	Ridgecrest (Martin)	0	
	Hunters Ridge (Thompson South)	40	27
<b>West Cain Township</b>			
<b>Total Connections</b>		<b>146</b>	<b>75</b>
<b>Total Connections Available</b>		<b>147</b>	

⇒ Cain will not be permitted any additional until EETL upgrade is completed

A-230073 F0011

EXECUTED CO&A

DOCUMENT FOLDER

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the Matter of:

Pennsylvania - American Water Company : WQ/Sewage/Act 537 Planning/Chapter 94  
Coatesville, Chester County : Violation of the Clean Streams Law

CONSENT ORDER AND AGREEMENT

This Consent Order and Agreement ("COA") is entered into this <sup>30<sup>th</sup></sup> day of <sup>November</sup> 2005, by and between the Commonwealth of Pennsylvania, Department of Environmental Protection ("Department"), and Pennsylvania - American Water Company ("PA-American").

FINDINGS

The Department has found and determined the following:

A. The Department is the agency with the duty and authority to administer and enforce the Clean Streams Law, the Act of June 22, 1937, P.L. 1987, as amended, 35 P.S. § 691.1 et seq., and the rules and regulations promulgated thereunder.

B. PA-American is a Pennsylvania Business Corporation with a business address of 800 West Hershey Park Drive, Hershey, PA 17033 and a mailing address of 100 Cheshire Court, Suite 104, Coatesville, PA 19320.

C. PA-American owns and operates the Coatesville Wastewater Treatment Plant ("Plant"), which is located in South Coatesville Borough, Chester County. The Plant includes the facility, the collection system, pumping stations, and all other parts of the sewage facilities system that are operated and owned by PA-American.

D. The Plant currently receives sewage flows from nine municipalities: City of Coatesville, Valley Township, Caln Township, West Brandywine Township, Sadsbury Township, East Fallowfield Township, Parkesburg Borough, West Caln Township, and West Sadsbury Township.

E. On March 15, 2001, the Department approved the nine municipalities' official Sewage Facilities Plan ("Act 537 Plan") for the transfer to Pa-American of ownership and operation of the Plant and for connections to the Plant of approved projects within the sewer service area, pursuant to the Pennsylvania Sewage Facilities Act, Act of January 24, 1996, P.L. 1535, as amended, 35 P.S. § 750.1 et seq. ("Sewage Facilities Act" or "Act 537").

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F. On May 6, 2002, the Department issued NPDES Permit No. PA0026859 to PA-American for the discharge of treated sewage into the West Branch of the Brandywine Creek ("Permit"). The Permit sets PA-American's average annual flow rate at 3.85 million gallons per day ("MGD") and establishes an average maximum monthly flow rate of 4.6 MGD.

G. On January 13, 2004, the Department issued NPDES Permit Amendment No. PA0026859A1, which revised certain effluent limitations in the Permit.

H. Based on Title 25, Chapter 94, Municipal Wasteload Management, 25 Pa. Code. § 94.12, PA American is required to submit a Municipal Wasteload Management Report ("Chapter 94 Report") to the Department on an annual basis.

I. The purpose of the Chapter 94 Report is to provide an annual review of sewage facilities and ensure adequate time to address operational or maintenance problems or to plan and construct additions as needed. An additional purpose of submitting the Chapter 94 Report is to identify existing and projected overload conditions within a sewage facility.

J. Title 25, Chapter 94, Section 22, 25 Pa. Code 94.22, requires that if a Chapter 94 Report shows, or the Department determines that a facility, or portion of a facility, becomes hydraulically or organically overloaded, the facility's permittee must (1) submit a report or corrective action plan ("CAP"), as defined by 25 Pa. Code § 94.1, that details steps for the permittee to take that will prevent the overload in the manner set forth in Section 94.22, and (2) limit all new connections to and extensions of the facility based upon remaining available capacity under the CAP or report.

K. Chapter 94 Reports submitted by Coatesville Borough Municipal Sewer Authority for year 2000 and by PA-American for years 2001, 2002, 2003, and 2004 have all identified a projected hydraulic overload based on anticipated connections.

L. In response to the projected overloads in the above mentioned reports, the City of Coatesville Authority submitted a Corrective Action Plan (CAP) with its 2000 Chapter 94 Report on April 9, 2001 providing its plan to prepare an Act 537 Plan Update for municipal adoption and permitting for an expansion of the Plant. The CAP includes the regular quarterly submission of connection management plans ("CMPs") by which PA-American is to limit connections. The current CMP, dated November 2005, was approved by the Department on November 18, 2005 (as attached hereto, as Exhibit "A"). Through the November 2005 CMP, the Department approved connections at the Plant, totaling an annual average flow rate of 3.811 MGD through 2009.

M. The Chapter 94 Reports and CMPs submitted by PA-American provide a status of the Act 537 Plan preparation and a schedule of sewage connection based on remaining available capacity.

N. The 2004 Chapter 94 Report and CMPs submitted in 2005 project a hydraulic overload based, in part, on new land developments for which Pa-American has certified to municipalities for revisions to their Act 537 Plans, through planning modules, the existence of available capacity in the Plant, as required by Section 5 of Act 537, 35 P.S. § 750.5 and the rules and regulations thereunder.

O. A review of PA-American's Chapter 94 Reports and CMPs by the Department has revealed that from 2004 to 2005 PA-American has approved connections to the Plant that are not consistent with the Act 537 Plans adopted by the nine municipalities and approved by the Department.

P. PA-American has not limited connections to the Plant from the nine municipalities and for various sewage projects based upon remaining available capacity.

Q. In August, 2005, PA-American submitted a plant re-rate report (prepared by Buchart-Horn, Inc.) to the Department.

R. In response to the August, 2005 re-rate report, the Department acknowledges the treatment plant can process a flow of 4.86 MGD.

S. The Department regards the 4.86 MGD flow number as a maximum monthly average limit. Applying the 5-year average peaking factor of 1.059 to the maximum monthly average limit, results in an annual average treatment capacity of 4.6 MGD.

T. Due to the impending plant expansion, the Department is willing to accept individual planning modules to justify incremental increases in treatment capacity for connections from the planned sewage service area to the Plant, allowing connections above the 3.85 MGD NPDES permitted flow.

U. The condition described in Paragraph O is a violation of Pa. Code Title 25, Chapter 94, Section 22(1), 25 Pa. Code § 94.22(1)

V. The condition described in Paragraph P is a violation of Pa. Code Title 25, Chapter 94, Section 22(2), 25 Pa. Code § 94.22(2).

W. The violations described in Paragraphs O and P hereof, constitute unlawful conduct under Section 611 of the Clean Streams Law, 35 P.S. § 691.611; a statutory nuisance under Section 601 of the Clean Streams Law, 35 P.S. § 691.601; and subject PA-American to civil penalty liability under Section 605 of the Clean Streams Law, 35 P.S. § 691.605.

### ORDER

After full and complete negotiation of all matters set forth in this COA and upon mutual exchange of covenants contained herein, the parties desiring to avoid litigation and intending to be legally bound, it is hereby ORDERED by the Department and AGREED to by PA-American as follows:

1. Authority. This COA is an Order of the Department authorized and issued pursuant to Sections 5 and 610 of the Clean Streams Law, 35 P.S. §§ 691.5, 691.610; and Section 1917-A of the Administrative Code, 71 P.S. § 510.7.

2. Findings.

- a. PA-American agrees that the findings in paragraphs A. through T are true and correct and, in any matter or proceeding involving PA-American and the Department, PA-American shall not challenge the accuracy or validity of these findings.
- b. The parties do not authorize any other persons to use the findings in the COA in any matter or proceeding.

3. Corrective Actions.

a. PA-American agrees to the following schedule to comply with Chapter 94, initiate necessary sewage facilities planning, and to make needed expansions of its Plant:

1. As part of its Chapter 94 CAP or report for potentially hydraulically overloaded condition, PA-American shall submit updated CMPs on a quarterly basis, (January 15, April 15, July 15, and October 15), with contents and in a format substantially similar to Exhibit "A," which shall include, but not be limited to, the status of the corrective actions, number of connections made during the quarter, a chart evaluating the contract evaluations to each municipality, a chart listing all projects that have received certification of capacity for planning module revision and the allocations per year, and a chart of all projected connections by municipality, until the Department conducts a final inspection and approves the operation of the expanded Plant.
2. PA-American will only commit capacity at the Plant and/or allocate, approve, and allow connections to the Plant according to the schedule provided in Table A2 of its current CMP, referenced in Paragraph L (Findings), that has been approved by the Department and in future Department-approved CMPs consistent with Department-approved Act 537 planning.
3. PA-American will submit an NPDES Part 1 amendment application for expanded flows by March 31, 2006.
4. PA-American will submit a WQM Part 2 application for construction of the Plant expansion by March 31, 2006.

5. Provided that PA-American is in receipt of all necessary permits for the construction of the Plant by December 31, 2006, PA-American will award all necessary construction contracts for construction of the expanded Plant by January 30, 2007.
6. PA-American will complete construction of the expanded Plant within 24 months of the issuance of all permits necessary for the construction of the expanded Plant.
  - b. PA-American shall submit quarterly status reports to the Department, which will describe in detail the progress made on the corrective actions set forth in Paragraph 3.a.(3,4,5, and 6).
  - c. During the term of this COA, the Department shall allow PA-American to commit capacity and allocate, approve, and make new connections under the current and future CMP's up to the flow limit allowed by the then current Department-approved Act 537 planning. As of the date of this COA, the Department has approved connections at the Plant totaling an annual average flow rate of 3.811 MGD.
  - d. The Department will review for approval quarterly CMPs submitted by PA-American that may allocate total flows treated at the Plant up to an average annual flow rate of 4.6 MGD. Upon DEP approval of the Act 537 Update Revision for the expansion of the Plant, Table A2 of the CMP may show allocations beyond 4.6 MGD, provided such allocations are projected to connect after the completion of the Plant expansion. The Department will approve submitted CMPs only if Pennsylvania-American is in compliance with all terms and conditions of this COA, including, but not limited to, the construction schedule set forth in Paragraph 3.a.
4. **Civil Penalty Settlement.** Upon execution of this COA, PA-American shall pay a civil penalty of TWO THOUSAND FIVE HUNDRED DOLLARS (\$2,500.00). This payment is in settlement of the Department's claim for civil penalties for the violations set forth in Paragraph W, above, covering the period from 2004 to 2005. The payment shall be made by corporate check or the like made payable to "The Commonwealth of Pennsylvania Clean Water Fund" and sent to Mr. Stephen Piller, PA Department of Environmental Protection, Southeast Regional Office, 2 East Main Street, Norristown, PA 19401.
5. **Stipulated Civil Penalties.** In the event PA-American fails to comply in a timely manner with the provisions of this COA, PA-American shall be in violation of this COA and, in addition to other applicable remedies, shall pay a civil penalty in the amount determined under the following schedule:
  - a. Beginning December 15, 2005, and continuing the 15<sup>th</sup> of each month thereafter, PA-American will report on a monthly basis, to the Department, a rolling annual average flow calculated for the previous twelve-month period (e.g. the first submission should be an average of monthly average flows from December 1, 2004 through November 30, 2005). If

for any month this rolling 12-month average flow exceeds 3.85 MGD or the then-current Department-approved Act 537 flows, PA-American will pay a penalty of ONE THOUSAND DOLLARS (\$1,000.00) per month for each monthly exceedance.

- b. For each and every violation of effluent parameters contained in PA-American's NPDES Permit No. PA0026859, PA-American shall pay penalties as set forth below:
1. For the parameters of Biochemical Oxygen Demand (CBOD5), Total Suspended Solids (TSS), Ammonia as N (NH3-N), Phosphorus as P, and Copper (Total), as reported in PA-American's monthly discharge monitoring reports (DMRs)

$$\text{Violation Factor} = \text{Reported Value} \div \text{Permit Limit}$$

<u>Violation Factor</u>	<u>Penalty</u>
Greater than 1.0 but less than 1.5	\$2,000.00
Greater than 1.5 but less than 2.0	\$3,000.00
Greater than 2.0	\$4,000.00

2. Notwithstanding the penalty amounts set forth in the preceding table each and every violation of NPDES limits for pH, Fecal Coliform, Total Residual Chlorine and Dissolved Oxygen, PA-American shall pay a penalty of TWO THOUSAND DOLLARS (\$2,000.00).
- c. For each day of noncompliance with the Corrective Actions, including, but not limited to CMP submissions, connections, and milestone schedule dates specified in Paragraph 3.a.1, 3.a.2, 3.a.3, 3.a.4, 3.a.5, and 3.b of the COA, PA-American shall pay a penalty of TWO HUNDRED FIFTY DOLLARS (\$250.00).
- d. For each month of noncompliance with the construction completeness milestone schedule date specified in Paragraph 3.a.6 of the COA, PA-American shall pay a penalty of FIFTEEN THOUSAND DOLLARS (\$15,000.00).
- e. Stipulated civil penalties shall be due automatically and without notice. Stipulated civil penalties for all violations shall be payable on or before the twenty-eighth (28<sup>th</sup>) day of each succeeding month. The payment shall be by corporate check or the like, made payable to "The Commonwealth of Pennsylvania Clean Water Fund" and sent to Mr. Stephen Piller, PA Department of Environmental Protection, Southeast Regional Office, 2 East Main Street, Norristown, PA 19401.
- f. Any payment under this paragraph shall neither waive PA-American's duty to meet its obligations under this COA nor preclude the Department from commencing an action to compel PA-American's compliance with the terms and conditions of this COA. The payment only resolves PA-American's liability for civil penalties arising from the violation of the COA for which the payment is made.

6. Additional Remedies.

- a. In the event PA-American fails to comply with any provision of this COA, the Department may, in addition to the remedies prescribed herein, pursue any remedy available for a violation of an order of the Department, including any action to enforce this COA.
- b. The remedies provided by this paragraph and Paragraphs 5 are cumulative and the exercise of one does not preclude the exercise of any other. The failure of the Department to pursue any remedy shall not be deemed to be a waiver of that remedy. The payment of a stipulated civil penalty, however, shall preclude any further assessment of civil penalties for the violation for which the stipulated civil penalty is paid.

7. **Reservation of Rights.** The Department reserves the right to require additional measures to achieve compliance with applicable law. PA-American reserves the right to challenge any action that the Department may take to require those measures.

8. **Liability of Operator.** PA-American shall be liable for any violations of the COA, including those caused by, contributed to, or allowed by its officers, agents, employees or contractors. Except as provided in Paragraph 9 (Transfer of Ownership), PA-American also shall be liable for any violation of this COA caused by, contributed to, or allowed by its successors and assigns.

9. **Transfer of Ownership.**

- a. The duties and obligations under this COA shall not be modified, diminished, terminated or otherwise altered by transfer of any legal or equitable interest in the Plant or any part thereof.
- b. If PA-American intends to transfer any legal or equitable interest in the Plant which is affected by this COA, PA-American shall serve a copy of this COA upon the prospective transferee of the legal and equitable interest at least thirty (30) days prior to the contemplated transfer and shall simultaneously inform the Southeast Regional Office of such intent.
- c. The Department, in its sole discretion, may agree to modify or terminate PA-American's duties and obligations under this COA upon transfer of the Plant. PA-

American waives any right that it may have to challenge the Department's decision in that regard.

10. **Correspondence with Department.** All correspondence with the Department in the Southeast Region concerning this COA shall be addressed to:

Stephen Piller  
Environmental Compliance Specialist  
DEP, Southeast Regional Office  
2 E. Main Street  
Norristown, PA 19401

11. **Correspondence with PA American.** All correspondence with PA-American concerning this COA shall be addressed to:

Nick Rowe  
Pennsylvania-American Water Company  
Vice President, Service Delivery  
800 West Hershey Park Drive  
Hershey, PA 17033

PA-American shall notify the Department whenever there is a change in the contact person's name, title, or address. Service of any notice or any legal process for any purpose under this COA, including its enforcement, may be made by mailing a copy by first-class mail to the above address.

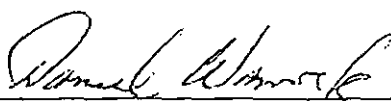
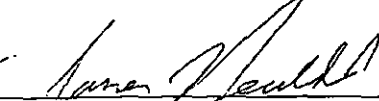
12. **Severability.** The paragraphs of this COA shall be severable and should any part hereof be declared invalid or unenforceable, the remainder shall continue in full force and effect between the parties.
13. **Entire Agreement.** This COA shall constitute the entire integrated agreement of the parties. No prior or contemporaneous communications or prior drafts shall be relevant or admissible for purposes of determining the meaning or extent of any provisions herein in any litigation or any other proceeding.
14. **Attorney Fees.** The parties shall bear their respective attorney fees, expenses, and other costs in the prosecution or defense of this matter or any related matters, arising prior to execution of this COA.

15. **Modifications.** No changes, additions, modifications, or amendments of this COA shall be effective unless they are set out in writing and signed by the parties hereto.
16. **Titles.** A title used at the beginning of any paragraph of this COA is provided solely for the purpose of identification and shall not be used to interpret that paragraph.
17. **Termination.** The obligations of both parties set forth in Paragraphs 3-11 under this COA shall terminate when PA-American has demonstrated three consecutive months of complete compliance with the NPDES Permit No. PA0026859 for the newly expanded Plant, as contemplated in this COA.
18. **Decisions under Consent Order.** Any decision the Department makes under the provisions of this Consent Order and Agreement is intended to be neither a final action under 25 Pa. Code Section 1021.2, nor an adjudication under 2 Pa.C.S. Section 101. Any objection that PA-American may have to the decision will be preserved until the Department enforces this Consent Order and Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this COA to be executed by their duly authorized representatives. The undersigned representatives of PA-American certify under penalty of law, as provided by 18 Pa. C.S. § 4904, that they are authorized to execute this COA on behalf of PA-American; that PA-American consents to the entry of this COA and the foregoing Findings as an ORDER of the Department; and that PA-American hereby knowingly waives its rights to appeal this COA and the foregoing Findings, which rights may be available under Section 4 of the Environmental Hearing Board Act, the Act of July 13, 1988, P.L. 530, No. 1988-94, 35 P.S. § 7514; the Administrative Agency Law, 2 Pa. C.S. § 103(a); and Chapters 5A and 7A, or any other provision of law.

FOR PENNSYLVANIA - AMERICAN,  
WATER COMPANY:

FOR THE COMMONWEALTH OF PENNSYLVANIA,  
DEPARTMENT OF ENVIRONMENTAL PROTECTION:

	<i>11/28/05</i>		<i>11/30/05</i>
Daniel Warnock	Date	James Newbold	Date
President		Program Manager, Water Management Program	

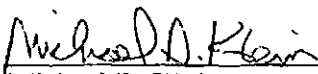
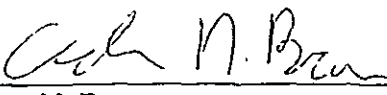
	<i>11-29-05</i>		<i>11/30/05</i>
Michael D. Klein	Date	Adam N. Bram	Date
Counsel for Pennsylvania - American		Assistant Counsel	

EXHIBIT A



COATESVILLE DISTRICT  
CHESTER COUNTY

**CONNECTION MANAGEMENT PLAN  
WASTEWATER TREATMENT PLANT  
AND  
EAST END TRUNK LINE**

**REVISED: November 2005**

PREPARED BY:  
PENNSYLVANIA - AMERICAN WATER COMPANY  
COATESVILLE DISTRICT  
GERALD A. DeBALKO, P.E.  
4 WELLINGTON BLVD.  
WYOMISSING, PA 19610  
T: (610) 670-7789 EXT 127  
F: (610) 678-6057

# CONNECTION MANAGEMENT PLAN WASTEWATER TREATMENT PLANT (WWTP)

&

## EAST END TRUNK LINE (EETL)

REVISED: November 2005

### SUMMARY OF MANAGEMENT PLAN GOALS FOR WWTP

PAW has shown in Appendix A on Table A2 the projected new connections to the system from 2005 to 2009 with planning modules signed by PAW. Table A3 shows the projects with module approval as well as the proposed projects with out planning module approval. The projections are based on the EDU's as determined by the tributary municipalities and PAW through on-going discussions, currently signed Planning Modules, and PAW and developer estimates of build out. On Table A3, sheet 2 of 2, there are three summary blocks showing the total projected EDU's. Summary #1 form shows the total projected EDU's and Summary #2 totals the EDU's with planning modules signed by PAW.<sup>1</sup> It should be noted that Summary #1 are very aggressive projections. PAW anticipates that the actual number of new EDU's constructed will fall between these two projections, and based on historical growth of the system most likely towards Summary #2. In addition, the projections are based on 262.5 gpd per edu, which is high for new residential construction, near term flows in new construction will not produce this much flow per edu. Summary #3 shows the difference between Summary #1, the aggressive EDU projection, and Summary #2, or the remaining EDU's not yet signed by PAWC.

As shown in Table 1, PAW currently has the capacity to accept 3,059 new EDU's under Act 537 Planning. Based on Act 537 planning, Table A2 Summary #1 shows the total projected EDU's with modules signed by PAW within the currently approved sewer service area to be 2,906 by the end of 2009. Table A3 Summary #3 shows projected EDU's not signed by PAW, which lists projects flows not currently approved by DEP for connection as part of the CMP. In accordance with Act 537 and Chapter 94, PAW will not commit capacity or allow connections for any projects in Summary #3 until such flows are approved by DEP in a revised CMP that lists the projects under Table A2.

#### CORRECTIVE ACTIONS TO ADDRESS PROJECTED HYDRAULIC OVER LOAD:

PAW is currently underway with Act 537 planning. The Act 537 plan has been distributed and reviewed by the contributing municipalities and county agencies. PAW anticipates sending final plan in October 2005 to all municipalities for approval. PAW expects to have the 537 plan to DEP for review by the 4<sup>th</sup> Quarter of 2005. Approval of this plan by DEP will address any limitations under the existing ACT 537 planning. In addition, PAWC has submitted a re-rating study to DEP which shows the organic and hydraulic capacity of the facility to be 4.86 MGD.

Once the Act 537 plan is approved by DEP, PAW can move forward with plans to expand capacity at WWTP to address any limitations at the plant. PAW has already started design engineering of expanded capacity, specifically land requirements and plant layout. PAW anticipates having the WWTP expanded capacity online by 2008.

<sup>1</sup> These totals exclude projects signed by PAW for projects outside of the Act 537 Approved sewer service area for which it is prohibited from allocating, approve or making connections until such time as the Act 537 Planning is approved for sewer service area and treatment plant expansion.

### SUMMARY OF MANAGEMENT PLAN GOALS FOR EETL

- PAW has agreements in place has to fund the upgrade of this critical section and EDUs are allocated in accordance with this agreement as shown in Table B2. DEP issued to PAW the Part II Permit on April 27, 2005 for this upgrade. The construction schedule is as follows: Construction bids opened on March 1, 2005.
- Construction contracts were awarded on October 18, 2005.
- Notice to Proceed issued on November 15, 2005.
- Estimated completion of construction is April 15, 2006.

PAW has shown on Table A2, indicated by column labeled EETL MH, the projected new connections to the East End Trunk Line (EETL) from 2005 to 2009. Table B1 is a snapshot of the EETL hydraulic model using system flows as monitored in May 2002. The projected EDU's are based on the EDU's as submitted by the contributing municipalities, currently signed Planning Modules, and PAW and developer estimates of build out.

As shown in the table above, PAW currently has the capacity to accept 142 new EDU's through the critical section of the EETL. Table A2 Sheet 2 of 2 indicates a total of 612 new EDU's in 2005 that will flow through this critical section. Although the projections exceed capacity, most projected do not have planning modules signed by PAW and with the remaining projected EDU's PAW has agreements with the municipalities and developers that limit flow until EETL is upgraded to provide needed capacity.

CONNECTION MANAGEMENT PLAN - REVISED: November 2005  
 WASTEWATER TREATMENT PLANT (WWTP) CAPACITY PROJECTIONS

TABLE 1

CAPACITY BASED ON ACT 537 PLANNING		
Line/Note		
A	ANNUAL AVERAGE FLOW PER ACT 537	3.85 mgd
B	5 YEAR ANNUAL AVERAGE FLOW	3.047 mgd
C	AVAILABLE CAPACITY PROJECTED AT ANNUAL AVERAGE FLOW	0.803 mgd
D	AVAILABLE EDUS BASED ON ANNUAL AVERAGE FLOW	3,059 edu
1	PERMITTED 3-MONTH MAXIMUM FLOW PER NPDES PERMIT	4.600 mgd
2	5 YEAR MAXIMUM 3-MONTH AVERAGE FLOW	3.226 mgd
3	5-YEAR AVERAGE PEAKING FACTOR: 3-MONTH MAXIMUM TO ANNUAL AVERAGE	1.059 mgd

Note

- All referenced tables are located in Appendix
- EDU = 262.5 gpd/edu
- (a) Annual Average Flow per 1995 ACT 537 Plan
  - (b) Calculated using the running 5 Year Equivalent Base Flows from Table A1.
  - (c) Calculated as Line A - Line B
  - (d) Calculated as (Line C \* 1,000,000) divided by (262.5 gpd/edu)
  - (1) 4.60 mgd is the Maximum Month Flow per the NPDES permit which is used to help determine hydraulic loading at WWTP. Hydraulic overload does not occur until the maximum month average is exceeded for 3 consecutive months.
  - (2) 2005 3MM from Table A1
  - (3) 5 Year Peak factor from Table A1.

CONNECTION MANAGEMENT PLAN - REVISED: November 2005

EAST END TRUNK LINE (EETL) CAPACITY PROJECTIONS

TABLE 2

CAPACITY BASED ON MOST CRITICAL SECTION		
Line/Note		
1	HYDRAULIC PEAK CAPACITY AT CRITICAL SECTION (MH# 18 to MH# 16)	3,823,000 gpd
2	EETL AVERAGE DAILY FLOW	1,328,000 gpd
3	EETL PEAK DAILY FLOW	3,718,400 gpd
4	AVAILABLE CAPACITY AS PEAK FLOW	104,600 gpd
5	AVAILABLE CAPACITY AS AVERAGE FLOW	37,357 gpd
6	AVAILABLE EDUS AT AVERAGE FLOW	142 edu
7	NUMBER OF CONNECTIONS MADE	75 edu

Note

- All referenced tables are located in Appendix  
*Critical Section as Indicated on Table B1*
- (1) *Critical Section as Indicated on Table B1*
- (2) Average Daily Flow as indicated in Table B1 for critical section. Average Daily Flow values as indicated on Table B1 are obtained from the I&I Program's May 2002 metering of basins.
- (3) Peak Daily Flow as indicated on Table B1 for critical section.
- (4) Available Capacity as indicated on Table B1 for critical section.
- (5) Calculated by removing peaking factors from Peak Flow on Line 4.
- (6) Calculated as Line 5 divided by 262.5 gpd/EDU

APPENDIX A

**CONNECTION MANAGEMENT PLAN - REVISED: November 2005  
WASTEWATER TREATMENT PLANT FLOWS**

TABLE A1

MONTH	YEAR	MONTHLY FLOW AVERAGE (MGD)					2005		
		2000	2001	2002	2003	2004	MONTHLY FLOW AVERAGE (MGD)	3 MONTH MAXIMUM (MGD)	RAIN TOTAL (In.)
Annual Average		3.85 MGD							
3 Consecutive Month Maximum		4.6 MGD							
JANUARY		2.485	2.204	2.965	3.546	3.776	--	4.76	
FEBRUARY		2.803	2.076	3.195	3.749	3.652	--	1.97	
MARCH		2.862	2.248	4.011	3.183	3.688	3.705	4.14	
APRIL		2.864	2.264	3.421	3.315	4.337	3.892	4.37	
MAY		2.771	2.599	3.204	3.296	3.402	3.809	2.19	
JUNE		2.757	2.511	4.501	3.251	3.124	3.621	2.02	
JULY		2.500	2.377	3.449	3.118	3.530	3.352	9.26	
AUGUST		2.233	2.358	3.896	3.422	3.171	3.275	2.80	
SEPTEMBER		2.197	2.364	4.266	3.408	2.905	3.202	2.92	
OCTOBER	2.397	2.084	2.65	3.719	3.288				
NOVEMBER	2.157	2.054	2.763	4.072	3.269				
DECEMBER	2.471	2.077	3.126	4.296	3.371				
AVERAGE	2.342	2.474	2.462	3.733	3.351	3.509	--	3.83	
3 Month MAX	2.342	2.843	2.846	4.029	3.493	4.337	3.802	9.26	

AVERAGE	3.509	--	3.83
3 MTH. MAX.	4.337	3.802	9.26

Number of Connections During Quarter 2005	
1st Quarter	309
2nd Quarter	310
3rd Quarter	158
4th Quarter	
Total for Year	

January to September

October to December

5 YEAR FLOW HISTORY		
ANNUAL AVERAGE	3 MONTH MAXIMUM	PEAKING FACTOR

2005	3.509	3.802	1.083
2004	3.351	3.493	1.042
2003	3.733	4.029	1.079
2002	2.462	2.846	1.156
2001	2.474	2.843	1.149
2000	2.342	2.342	1.187

RUNNING 5 YEAR AVERAGE		
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3.047	3.226	1.059
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Table A3 Projects and Chapter 94 Flows

	Act 537 Approved Contracted Allocation	Chapter 94 Flow 2004	2005	2006	2007	2008	2009
City of Coatesville	*	1,679,591	1,707,679	1,767,266	1,933,429	1,999,054	2,132,666
Valley Township	550,000	594,160	662,935	756,123	848,785	998,935	1,082,935
Caln Township	167,000	185,074	269,337	361,212	459,649	560,974	624,237
West Brandywine Township	345,000	164,653	205,341	272,278	370,716	473,091	564,966
Sadsbury Township	410,750	71,862	85,512	154,812	216,237	278,450	341,712
West Sadsbury Township	*	41,951	42,476	47,989	48,251	48,514	61,901
East Fallowfield Township	*	74,607	86,945	146,007	205,070	243,395	263,345
Borough of Parkesburg	*	451,416	464,279	499,191	541,454	573,741	607,866
West Caln Township	*	3,289	12,739	32,952	47,127	48,439	49,752
Veterans Hospital	*	74,271	74,271	74,271	74,271	74,271	74,271

Table A2 and Chapter 94 Flows

	Act 537 Approved Contracted Allocation	Chapter 94 Flow 2004	2005	2006	2007	2008	2009
City of Coatesville	*	1,679,591	1,691,929	1,700,066	1,705,841	1,706,891	1,708,204
Valley Township	550,000	594,160	658,735	732,760	802,060	907,848	930,948
Caln Township	167,000	185,074	185,074	185,074	185,074	197,937	211,062
West Brandywine Township	345,000	164,653	164,653	164,653	164,653	164,653	164,653
Sadsbury Township	410,750	71,862	78,687	113,337	147,462	185,787	222,800
West Sadsbury Township	*	41,951	41,951	41,951	41,951	41,951	41,951
East Fallowfield Township	*	74,607	92,195	144,895	178,820	186,957	186,957
Borough of Parkesburg	*	451,416	462,441	479,504	495,254	506,541	519,666
West Caln Township	*	3,289	11,427	30,327	43,189	43,189	43,189
Veterans Hospital	*	74,271	74,271	74,271	74,271	74,271	74,271

Contract and Planning Allocations For WWTF Expansion

	Allocation	Contracted Capacity
City of Coatesville	2,391,490	
Valley Township		1,540,000
Caln Township		800,000
West Brandywine Township		345,000 (1)
Sadsbury Township		410,750
West Sadsbury Township	111,951	
East Fallowfield Township	329,232	
Borough of Parkesburg	633,416	
West Caln Township	251,089	
Veterans Hospital	74,271	
Highland Township	56,438	
Totals:	3,847,887	3,095,750 6,943,637

NOTE (1) Draft Sewer Agreement 4/25/05 pending with requested amounts of 473,000 gpd and 835,000 gpd post plant

CONNECTION MANAGEMENT PLAN - REVISED: November 2005  
 PROJECTED NEW CONNECTIONS WITH SIGNED PLANNING MODULES

TABLE A2

EST. GPD

LINE	DEP Code No.	NAME	TOTAL EQ. EDU's	EDUS EQ. ACTIVE	EDUS REMAINING	REMAINING (2005 GPD/EDU)	PLANNING (S) MODULE	EFTL MH	TYPE	PROJECTED NEW CONNECTIONS (e)					TOTAL IN 5 YEARS	TOTAL BEYOND 2000
										2005	2000	2007	200A	2000		
1	1-15001-03H-3U	Cambridge Terrace	65	-	65	18,413	Y	10	R	10	28	22	4	5	89	-
2	1-15001-02B-3U	Farm Crossing	78	78	-	-	-	-	-	-	-	-	-	-	-	-
3	1-15001-023-3U	Millview	107	187	-	-	Y	40	R	-	-	-	-	-	-	-
4	1-15001-032-3J	Millview Apartments	350	323	27	7,088	Y	-	R	-	-	-	-	-	-	-
5	1-15001-032-3J	Cox II	11	11	-	-	Y	-	R	27	-	-	-	-	-	-
6	1-15001-037-3U	Bowl House (Mount Pleasant Street)	13	-	13	3,413	Y	37	R	-	-	-	-	-	-	-
7	1-15001-037-3U	Bowl House (Mount Pleasant Street)	13	-	13	3,413	Y	37	R	-	-	-	-	-	-	-
8	1-15001-037-3U	Bowl House (Mount Pleasant Street)	13	-	13	3,413	Y	37	R	-	-	-	-	-	-	-
9	1-15001-037-3U	Bowl House (Mount Pleasant Street)	13	-	13	3,413	Y	37	R	-	-	-	-	-	-	-
10	1-15001-037-3U	Bowl House (Mount Pleasant Street)	13	-	13	3,413	Y	37	R	-	-	-	-	-	-	-
11	1-15050-117-3H	Millview	705	399	100	28,813	Y	47	EDU FLOW	10	3	-	-	-	13	-
12	1-15050-117-3H	Millview	185,450	157,238	28,013	28,813	Y	47	EDU FLOW	12,338	8,138	5,775	1,050	1,313	28,013	-
13	1-15050-118-3H	Meadow Brook	575	204	371	84,283	Y	18	R	44	-	-	-	-	-	-
14	1-15050-134-3U	Oak Crest (Dague)	89	88	-	-	Y	10	R	-	80	80	80	37	321	-
15	1-15050-118-3H	Valley Crossing IV	188	-	188	49,350	Y	10	R	-	-	-	-	-	-	-
16	1-15050-123-3J	Timberlane	40	40	-	-	Y	-	R	35	50	50	53	-	188	-
17	1-15050-128-3J	Round Hill (Buckham Area)	40	-	40	12,075	Y	-	R	-	-	-	-	-	-	-
18	1-15050-127-3J	Hanscom Subdivision	230	-	230	60,375	Y	22	R	22	24	-	-	-	-	-
19	1-15050-124-3J	Lambert Subdivision	1	-	1	203	Y	35	R	35	50	50	50	45	48	-
20	1-15050-124-3J	Lambert Subdivision	3	-	3	786	Y	1	R	1	-	-	-	-	230	-
21	1-15050-132-3J	Highlands Corn. Center Phase I, II, III	60	27	33	18,538	Y	3	R	3	-	-	-	-	1	-
22	1-15050-125-3J	Woodland Park (Ribson)	9	-	9	2,203	Y	10	C	47	2	14	-	-	3	-
23	1-15050-128-3U	Valley Farms & Mt. Airy Road	340	-	340	89,250	Y	3	C	3	0	-	-	-	03	-
24	1-15050-128-3U	Valley Farms & Mt. Airy Road	81	-	81	21,283	Y	35	C	35	50	50	205	-	0	-
25	1-15050-128-3U	Tony Middleton	1	-	1	283	Y	18	R	10	20	20	15	0	340	-
26	1-15050-128-3U	Tony Middleton	1	-	1	283	Y	18	R	1	20	20	15	0	81	-
27	1-15012-188-3J	Millview (aka HB Farm)	1,851	368	1,283	338,788	Y	240	EDU FLOW	64,575	74,025	89,300	105,788	23,108	1,203	-
28	1-15012-188-3J	Millview (aka HB Farm)	430,300	98,000	338,788	338,788	Y	240	EDU FLOW	64,575	74,025	89,300	105,788	23,108	338,788	-
29	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
30	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
31	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
32	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
33	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
34	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
35	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
36	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
37	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
38	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
39	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
40	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
41	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
42	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
43	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
44	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
45	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
46	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
47	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
48	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
49	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
50	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
51	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
52	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
53	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
54	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
55	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
56	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
57	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
58	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
59	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
60	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
61	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
62	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
63	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
64	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
65	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
66	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
67	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
68	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
69	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
70	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
71	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
72	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
73	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
74	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
75	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
76	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
77	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
78	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
79	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y	28	R	-	-	-	48	50	98	-
80	1-15012-188-3J	Millview (aka HB Farm)	99	-	99	25,988	Y									

01		Total Flow	242,550	15,488	227,063		FLOW	8,130	19,000	12,003	-	-	39,000	187,103	
02	Wald-Saddle Brook Township						R	-	-	-	-	-	-	-	
03															
04															
05															
06		Total EDU					EDU								
07		Total Flow					FLOW								
08															
09			PROJECTED EDUS		REMAINING EDUS		Summary								
10			TOTAL	ACTIVE	TOTAL	FLOW	#1	CURRENT					TOTAL	TOTAL	
11		Total EDU	8,013	2,074	3,030	1,033,088		12,005	459	782	655	876	334	2,008	
12		Total Flow	1,578,413	544,425	1,033,988			120,486	205,276	171,038	177,650	87,876	782,825	271,183	
13			TOTAL PROJECTED WWTP FLOW				3,047,467		3,167,954	3,373,229	3,545,187	3,722,917	3,810,292	3,810,292	4,081,454

05 EDU = 282.5  
06 (a) Status Legend: 0=Completed, 1=Under Construction, 2=Under Agreement,  
07 3=Under PAWC Plan Review, 4=Initial Planning, 5=Speculative  
08 (b) Shaded by PAWC, does not indicate approval by DEP  
09 (c) \* Indicates project completion. Other developments are projected to reach beyond 5 years.  
10 (d) Municipal waterworks will be governed by the CMP.  
11  
12  
13

CONNECTION MANAGEMENT PLAN - REVISED: November 2005  
PROJECTED NEW CONNECTIONS

TABLE A3

LINE	DEP Code No.	NAME	TOTAL EQ. EDUs	EDUs EQ. ACTIVE	EDUs REMAINING	EST. CPD REMAINING (82.5 GPO/EDU)	PLANNING (M) MODULE	EETL MH	TYPE	PROJECTED NEW CONNECTIONS (c)					TOTAL IN 5 YEARS	TOTAL BEYOND 2009
										2005	2006	2007	2008	2009		
1	1-15001-030-0U	City of Coatesville	0	0	0	0										
2	1-15001-030-0U	Gambles Terrace	0	0	0	0										
3	1-15001-030-0H	Pawn Crossing	78	78	0	18,113	Y	16	R	10	20	22	4	5	0	
4	1-15001-030-0H	Milview	187	187	0	0	Y	40	R	10	10	10	10	10	0	
5	1-15001-032-0U	Milview Apartments	350	323	27	7,088	Y	40	R	10	10	10	10	10	0	
6	1-15001-032-0U	Cox II	11	11	0	0	Y	40	R	10	10	10	10	10	0	
7	1-15001-032-0U	Road Access Mount Pleasant Street	13	13	0	0	Y	37	R	10	10	10	10	10	0	
8		Brookside View	560	560	0	3,413	Y	40	R	10	10	10	10	10	0	
9		Market and Office Complex	25	25	0	147,000	Y	40	R	10	10	10	10	10	0	
10		Christ Towers 1 - Residential	60	60	0	15,750	Y	40	R	10	10	10	10	10	0	
11		Christ Towers 1 - Commercial	20	20	0	5,250	Y	40	R	10	10	10	10	10	0	
12		Christ Towers 2 - Residential	150	150	0	30,375	Y	40	R	10	10	10	10	10	0	
13		Christ Towers 2 - Commercial	50	50	0	13,125	Y	40	R	10	10	10	10	10	0	
14		City Revitalization - Residential	4,042	4,042	0	1,061,025	Y	40	R	10	10	10	10	10	0	
15		City Revitalization - Commercial	410	410	0	107,625	Y	40	R	10	10	10	10	10	0	
16		City Request Other	10	10	0	15,750	Y	40	R	10	10	10	10	10	0	
17		Total EDU	6,085	500	6,466	1,440,075				107	227	633	250	690	1,720	3,760
18		Total Flow	1,597,312	157,238	1,440,075					28,088	50,568	105,163	65,625	133,613	453,075	887,000
19	Valley Township (d)									EDU FLOW						
20	1-15056-117-0H	Milview	525	204	321	64,283	Y	10	R	44	80	80	60	37	321	
21	1-15056-110-0H	Meadow Brook	89	89	0	0	Y	10	R	35	50	50	50	50	188	
22	1-15056-134-0U	Oak Crest (Deque)	180	48	108	49,350	Y	10	R	22	24	24	24	24	40	
23	1-15056-118-0H	Valley Crossing IV	48	48	0	0	Y	10	R	35	50	50	50	50	0	
24	1-15056-173-0U	Timberlane	46	46	0	12,075	Y	10	R	22	24	24	24	24	40	
25	1-15056-126-0U	Round Hill (Duckthorn Area)	230	230	0	60,375	Y	10	R	35	50	50	50	50	45	230
26	1-15056-127-0U	Hancock Subdivision	1	1	0	700	Y	10	R	1	1	1	1	1	1	
27	1-15056-124-0U	Lumber Subdivision	3	3	0	788	Y	10	R	1	1	1	1	1	1	
28		Highlands Corp. Center Phase I, II, III	0	27	0	10,578	Y	10	C	47	2	14	14	14	0	
29	1-15056-132-0U	Woodland Point (Ristow)	0	0	0	2,303	Y	10	C	3	6	6	6	6	0	
30	1-15056-126-0U	Valley Suburban (Statton Commercial)	340	340	0	89,250	Y	10	C	35	50	50	50	50	0	
31	1-15056-126-0U	Valley Farms & Mt. Airy Road	81	81	0	21,263	Y	16	R	20	20	20	20	20	340	
32		Tony Middleman	1	1	0	203	Y	16	R	1	1	1	1	1	0	
33		Rainbow	30	30	0	7,875	Y	16	R	1	1	1	1	1	0	
34		London Tract	14	14	0	3,675	Y	16	R	1	1	1	1	1	0	
35		Bono Tract (Valley Pardon)	450	450	0	118,125	Y	16	R	0	8	8	8	8	15	30
36		Alvont	111	111	0	29,138	Y	16	R	0	50	50	50	50	14	
37		Green Tract	0	0	0	21,000	Y	16	C	0	10	20	20	20	200	250
38		M & S Development, Valley Rd	18	18	0	4,725	Y	16	R	0	14	13	13	13	47	61
39		CASD	200	200	0	62,500	Y	16	R	0	0	0	0	0	12	33
40		Henry Residential	250	250	0	65,625	Y	16	R	0	0	0	0	0	100	100
41		Township Request Other	70	70	0	18,375	Y	16	R	10	15	15	15	15	70	200
42		Total EDU	2,874	208	2,666	657,825				262	355	353	372	320	1,802	644
43		Total Flow	734,425	96,000	638,425					88,775	93,188	97,663	150,150	84,000	488,715	160,050
44	Camden Township (d)									EDU FLOW						
45	1-15012-186-0U	Milview (aka Hill Farm)	96	96	0	25,088	Y	25	R	0	0	0	40	50	90	
46		Southwoods (Mober)	10	10	0	4,200	Y	25	R	0	0	0	10	10	10	
47		Low/Southdown	300	300	0	78,750	Y	25	R	50	50	50	50	50	250	50
48		Cain Road	48	48	0	10,500	Y	25	R	0	0	0	0	0	40	40
49		Township Flow Diverted from DARA	052	052	0	248,000	Y	25	R	220	250	250	202	40	052	
50		Township Request Other	608	608	0	150,000	Y	25	R	21	60	75	85	85	310	282
51		Total EDU	2,015	2,015	0	628,038				321	350	375	308	241	1,673	342
52		Total Flow	528,938	528,938	0					84,263	91,815	88,438	101,325	63,283	430,183	89,775
53	West Branch Township (d)									EDU FLOW						
54		Numerical Subdivision	2	2	0	525	Y	48	R	0	0	0	0	0	2	
55		Culbertson Residential	178	178	0	48,725	Y	48	R	0	10	60	60	48	178	
56		Culbertson Commercial	33	33	0	8,663	Y	48	C	0	0	0	0	0	33	
57		Swinehart Residential	115	115	0	30,188	Y	48	R	0	0	0	0	0	115	
58		Beaver Creek Residential	260	260	0	68,250	Y	48	R	0	0	0	0	0	260	
59		Beaver Creek Commercial	3	3	0	788	Y	48	R	0	0	0	0	0	3	
60		Jankic Residential	32	32	0	8,400	Y	48	C	0	0	0	0	0	32	70
61		Jankic Commercial	2	2	0	525	Y	48	C	0	0	0	0	0	2	
62		Township Request Other	1,851	605	1,246	353,215	Y	48	C	155	238	211	177	188	070	370
63		Total EDU	2,576	605	1,971	517,388				155	238	211	177	188	070	370
64		Total Flow	678,200	158,813	519,388					40,608	68,838	65,438	102,375	81,875	400,313	117,075
65	Highland Township (d)									EDU FLOW						
66		Boor Property	5	5	0	15,225	Y	48	R	0	0	0	0	0	5	43
67		Conforms (Meadow Ridge)	82	82	0	21,525	Y	48	R	0	0	0	0	0	15	82
68		Township Request Other	75	75	0	10,888	Y	48	R	1	1	1	1	1	1	74
69		Total EDU	215	215	0	66,438				1	1	1	1	1	1	82
70		Total Flow	68,438	68,438	0					203	203	203	203	203	10	188
71	Sadsbury Township (d)									EDU FLOW						
72	1-15047-066-0H	Sadsbury Village	148	148	0	0	Y	40	R	0	0	0	0	0	4,200	52,238
73	1-15047-070-0E	Osney Ridge	165	165	0	0	Y	40	R	0	0	0	0	0	0	0

74	1-15047-085-3H	AIM Business Park - Boffino	132	41	81	23,888	Y													
75	1-15047-084-3J	Glenn Farm	44	22	22	8,775	Y													
76	1-15047-082-3J	Monte Farm	12	11	1	253	Y													
77	1-15047-104-3J	Sabbury Park	481		1	121,013	Y													
78		Bone Tract (Sabbury Portion)	40		40	10,500	-													
79		D&S Developments	25		25	8,663	-													
80		Township Request Other	878		878	217,350	-													
81		Total EDU	1,856	388	1,468	385,390														
82		Total Flow	487,200	101,850	385,350	385,390														
83	East Fairfields Township																			
84	1-15018-158-3H	Stone Creek (Robins Cove)	33	25	28	7,358	Y													
85	1-15018-104-3J	Harkins Farm	21		21	5,513	Y													
86		Arbiter Station	87		87	24,700	Y													
87		Franklin Village	247		247	67,000	Y													
88		Bank Crossing	186		186	52,000	Y													
89	1-15018-207-3H	North Woods (Thompson North)	27		27	7,000	Y													
90	1-15018-208-3H	Meadowhill Tract	74		74	19,475	Y													
91	1-15018-211-3J	Providence Hill (Chen Tract)	218	23	195	51,188	Y													
92	1-15018-213-3J	Ridgeway (Martin)	72		72	18,000	Y													
93	1-15018-106-3J	Manchaster Farms (Thompson South)	112	28	83	21,788	Y													
94	1-15018-212-3J	South Farm	78		78	20,475	Y													
95		Basile Club	181		181	47,813	-													
96		Elletson Development	32		32	8,400	-													
97		Cardinal Drive Area	85		85	22,313	-													
98		Township Request Other	100		100	20,256	-													
99		Total EDU	1,533	377	1,156	290,200														
100		Total Flow	407,663	161,483	246,180	246,200														
101	Parkersburg Borough																			
102	1-15807-051-3J	Harkins Property	10		10	2,825	Y													
103	1-15807-037-3H	Parkersburg Knoll	171	53	88	44,888	Y													
104	1-15807-050-3J	Cypress Springs Extension (Horizon)	250		250	69,825	Y													
105	1-15807-048-3H	Lindale Village	31		31	8,138	Y													
106		Davis Tract	366		366	90,075	-													
107		Borbaull Subdivision (Sabbury Rd)	4	4	0	1,050	-													
108		Daleanna Subdivision	3		3	788	-													
109		Township Request Other	258	5	253	67,200	-													
110		Total EDU	1,091	62	1,029	248,388														
111		Total Flow	286,368	24,150	262,218	262,388														
112	West Elm Township																			
113	1-15081-554-3Hew	Calvin West	124	21	103	32,550	Y													
114	1-15081-513-3	Country Meadows (Lawrence)	87	38	49	22,838	Y													
115	1-15081-024-3J	Green Tract	171		171	44,888	Y													
116		Township Request Other	642		642	142,375	Y													
117		Total EDU	60		60	15,750	-													
118		Total Flow	954	59	895	258,300														
119	West Sabbury Township																			
120	1-15018-104-3J	West Property	600		600	157,500	Y													
121		Summer Development	20		20	6,250	-													
122		Township Request Other	10		10	2,825	-													
123		Total EDU	630		630	166,575														
124		Total Flow	165,375		165,375	165,375														
125		Total EDU	525		525	145,426														
126		Total Flow	133,888		133,888	133,888														
127		Total EDU	10,879	2,888	17,101	4,512,838														
128		Total Flow	5,218,238	705,800	4,512,438	4,512,838														

		PROJECTED EDUS		REMAINING EDUS		Summary		EDU		EDU		EDU		EDU		EDU		EDU		EDU	
		TOTAL	ACTIVE	TOTAL	FLOW	#1	INCURRENT	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
129	TOTAL PROJECTED WWTP FLOW	3,047,467	3,318,387	3,818,854	4,451,842	5,005,717	5,514,442	6,023,182	6,531,917	7,040,652	7,549,387	8,058,122	8,566,857	9,075,592	9,584,327	10,093,062	10,601,797	11,110,532	11,619,267	12,128,002	12,636,737

EDU = 202.5

(a) Status Legend: 0=Completed, 1=Under Construction, 2=Under Agreement, 3=Under PAWC Plan Review, 4=Initial Planning, 5=Speculative

(b) Signed by PAWC, does not indicate approval by DEP

(c) \* indicates project completion. Other developments are projected to extend beyond 5 years.

(d) Municipal agreements will be governed the CMP.

		REMAINING EDUS NOT SIGNED BY PAWC		REMAINING EDUS NOT SIGNED BY PAWC		REMAINING EDUS NOT SIGNED BY PAWC		REMAINING EDUS NOT SIGNED BY PAWC		REMAINING EDUS NOT SIGNED BY PAWC		REMAINING EDUS NOT SIGNED BY PAWC		REMAINING EDUS NOT SIGNED BY PAWC		REMAINING EDUS NOT SIGNED BY PAWC		REMAINING EDUS NOT SIGNED BY PAWC		REMAINING EDUS NOT SIGNED BY PAWC	
		TOTAL	ACTIVE	TOTAL	FLOW	#1	INCURRENT	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
130	TOTAL PROJECTED WWTP FLOW	188,975	452,288	641,263	829,576	1,017,889	1,206,202	1,394,515	1,582,828	1,771,141	1,959,454	2,147,767	2,336,080	2,524,393	2,712,706	2,901,019	3,089,332	3,277,645	3,465,958	3,654,271	3,842,584

		REMAINING EDUS NOT SIGNED BY PAWC		REMAINING EDUS NOT SIGNED BY PAWC		REMAINING EDUS NOT SIGNED BY PAWC		REMAINING EDUS NOT SIGNED BY PAWC		REMAINING EDUS NOT SIGNED BY PAWC		REMAINING EDUS NOT SIGNED BY PAWC		REMAINING EDUS NOT SIGNED BY PAWC		REMAINING EDUS NOT SIGNED BY PAWC		REMAINING EDUS NOT SIGNED BY PAWC		REMAINING EDUS NOT SIGNED BY PAWC	
		TOTAL	ACTIVE	TOTAL	FLOW	#1	INCURRENT	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15
131	TOTAL PROJECTED WWTP FLOW	104,000	(47,913)	(264,475)	(500,000)	(600,000)	(699,015)	(798,030)	(897,045)	(996,060)	(1,095,075)	(1,194,090)	(1,293,105)	(1,392,120)	(1,491,135)	(1,590,150)	(1,689,165)	(1,788,180)	(1,887,195)	(1,986,210)	(2,085,225)

APPENDIX B

**CONNECTION MANAGEMENT PLAN - EETL  
EETL HYDRAULIC MODEL USING MAY 2002 METERED FLOWS**

**TABLE B1**

Upstream Manhole	Upstream Invert Elevation	Downstream Manhole	Downstream Invert Elevation	Pipe Diameter	Pipe Length	Pipe Slope	n	Pipe Capacity	Metered ADF (2002)	Metered ADF + Proj. ADF	Peak Calculated Flow	Available Capacity	% of capacity used
				in.	ft.	ft./ft.		gpd.	gpd	gpd	gpd.	gpd.	
54	374.33	53	370.89	10	200.68	0.0171	0.015	1,609,000	141,000	141,000	394,800	1,214,200	24.5%
53	370.89	52	369.07	10	186.32	0.0098	0.015	1,218,000	142,000	142,000	397,600	820,400	32.6%
52	369.07	51	366.03	10	198.53	0.0153	0.015	1,522,000	143,000	143,000	400,400	1,121,600	26.3%
51	366.03	50	364.05	10	211.77	0.0093	0.015	1,187,000	144,000	144,000	403,200	783,800	34.0%
50	364.05	49	353.68	10	540.00	0.0192	0.015	1,705,000	145,000	145,000	406,000	1,299,000	23.8%
49	353.68	48	350.94	10	308.00	0.0089	0.015	1,161,000	146,000	146,000	408,800	752,200	35.2%
48	350.94	47	346.92	10	298.00	0.0135	0.015	1,430,000	147,000	147,000	411,600	1,018,400	28.8%
47	346.92	46	345.29	10	299.00	0.0055	0.015	913,000	148,000	148,000	414,400	498,600	45.4%
46	345.29	45	343.36	12	265.00	0.0073	0.015	1,710,000	375,000	375,000	1,050,000	660,000	61.4%
45	343.36	44	341.43	12	265.00	0.0073	0.015	1,710,000	380,000	380,000	1,064,000	646,000	62.2%
44	341.43	43	337.58	12	177.00	0.0218	0.015	2,955,000	400,000	400,000	1,120,000	1,835,000	37.9%
43	337.58	42	333.38	12	257.00	0.0163	0.015	2,555,000	500,000	500,000	1,400,000	1,155,000	54.8%
42	333.38	41	330.46	12	267.00	0.0109	0.015	2,089,000	510,000	510,000	1,428,000	661,000	68.4%
41	330.46	40	328.01	12	267.00	0.0092	0.015	1,919,000	525,000	525,000	1,470,000	449,000	76.6%
40	328.01	39	327.29	15	100.00	0.0072	0.015	3,079,000	575,000	575,000	1,610,000	1,469,000	52.3%
39	327.29	38	326.81	15	66.00	0.0073	0.015	3,100,000	600,000	600,000	1,680,000	1,420,000	54.2%
38	326.81	37	324.73	18	93.50	0.0222	0.015	8,790,000	625,000	625,000	1,750,000	7,040,000	19.9%
37	324.73	36	323.63	18	188.00	0.0059	0.015	4,532,000	800,000	800,000	2,240,000	2,292,000	49.4%
36	323.63	35	322.36	18	192.50	0.0066	0.015	4,793,000	869,000	869,000	2,433,200	2,359,800	50.8%
35	322.36	34	321	18	184.00	0.0074	0.015	5,075,000	875,000	875,000	2,450,000	2,625,000	48.3%
34	321	33	319.77	18	198.50	0.0062	0.015	4,645,000	880,000	880,000	2,464,000	2,181,000	53.0%
33	319.77	32	318.91	18	137.00	0.0063	0.015	4,683,000	885,000	885,000	2,478,000	2,205,000	52.9%
32	318.91	31	317.13	18	257.00	0.0069	0.015	4,901,000	895,000	895,000	2,506,000	2,395,000	51.1%
31	317.13	30	316.11	18	293.00	0.0035	0.015	3,490,000	905,000	905,000	2,534,000	956,000	72.6%
30	316.11	29	314.96	18	164.88	0.0070	0.015	4,936,000	915,000	915,000	2,562,000	2,374,000	51.9%
29	314.96	28	314.43	18	106.25	0.0050	0.015	4,172,000	920,000	920,000	2,576,000	1,596,000	61.7%
28	314.43	27	313.89	18	106.25	0.0051	0.015	4,213,000	930,000	930,000	2,604,000	1,609,000	61.8%
27	313.89	26	311.38	18	558.36	0.0045	0.015	3,958,000	935,000	935,000	2,618,000	1,340,000	66.1%
26	311.38	25	310.08	18	145.50	0.0089	0.015	5,566,000	945,000	945,000	2,646,000	2,920,000	47.5%
25	310.08	24	309.37	18	168.00	0.0042	0.015	3,823,000	954,000	954,000	2,671,200	1,151,800	69.9%
24	309.37	23	308.5	18	157.69	0.0055	0.015	4,375,000	1,000,000	1,000,000	2,800,000	1,575,000	64.0%
23	308.5	22	306.83	18	179.10	0.0093	0.015	5,690,000	1,328,000	1,328,000	3,718,400	1,971,600	65.3%
22	306.83	21	305.52	18	268.10	0.0049	0.015	4,130,000	1,328,000	1,328,000	3,718,400	411,600	90.0%
21	305.52	20	304.09	18	294.55	0.0049	0.015	4,130,000	1,328,000	1,328,000	3,718,400	411,600	90.0%
20	304.09	19	302.65	18	294.55	0.0049	0.015	4,130,000	1,328,000	1,328,000	3,718,400	411,600	90.0%
19	302.65	18	302.16	18	100.00	0.0049	0.015	4,130,000	1,328,000	1,328,000	3,718,400	411,600	90.0%
18	302.16	17	300.99	18	276.83	0.0042	0.015	3,823,000	1,328,000	1,328,000	3,718,400	104,600	97.3%
17	300.99	16	299.82	18	276.83	0.0042	0.015	3,823,000	1,328,000	1,328,000	3,718,400	104,600	97.3%
16	299.82	15	292.36	18	844.53	0.0088	0.015	5,534,000	1,834,000	1,834,000	5,135,200	398,800	92.8%
15	292.36	14	291.59	30	235.53	0.0033	0.015	13,234,000	2,747,000	2,747,000	7,691,600	5,542,400	58.1%
14	291.59	13	291.03	30	241.13	0.0023	0.015	11,048,000	2,747,000	2,747,000	7,691,600	3,356,400	69.6%
13	291.03	12	290.67	30	130.14	0.0028	0.015	12,190,000	2,747,000	2,747,000	7,691,600	4,498,400	63.1%
12	290.67	11	290.36	30	119.03	0.0026	0.015	11,747,000	2,747,000	2,747,000	7,691,600	4,055,400	65.5%
11	290.36	10	290.11	30	89.23	0.0028	0.015	12,190,000	2,747,000	2,747,000	7,691,600	4,498,400	63.1%

Upstream Manhole	Upstream Invert Elevation	Downstream Manhole	Downstream Invert Elevation	Pipe Diameter	Pipe Length	Pipe Slope	n	Pipe Capacity	Metered ADF (2002)	Metered ADF + Proj. ADF	Peak Calculated Flow	Available Capacity	% of capacity used
				in.	ft.	ft./ft.		gpd.	gpd	gpd	gpd.	gpd.	
10	290.11	9	289.82	30	200.85	0.0014	0.015	8,620,000	2,747,000	2,747,000	7,691,600	928,400	89.2%
9	289.82	8	289.44	30	144.60	0.0026	0.015	11,747,000	2,747,000	2,747,000	7,691,600	4,055,400	65.5%
8	289.44	7	288.51	30	298.70	0.0031	0.015	12,827,000	2,747,000	2,747,000	7,691,600	5,135,400	60.0%
7	288.51	6	288.03	30	193.26	0.0025	0.015	11,519,000	2,747,000	2,747,000	7,691,600	3,827,400	66.8%
6	288.03	5	287.57	30	270.36	0.0017	0.015	9,498,000	2,747,000	2,747,000	7,691,600	1,806,400	81.0%
5	287.57	4	287.26	30	96.94	0.0032	0.015	13,032,000	2,747,000	2,747,000	7,691,600	5,340,400	59.0%

**Notes:**

- 1 The calculated pipe slopes have been rounded off to four decimal places.
- 2 The pipe capacity is calculated by the Mannings equation.
- 3 The peak calculated flow equals the metered flow times 1.12 (seasonal peaking factor) times 2.5 (regulatory peaking factor) = 2.8
- 4 Flow figures for trunk line are from the May 2002 Flow Monitoring of the basins. The plant average monthly flow for May was 2,559 mgd versus a 2002 average annual flow of 2,596, therefore since data was close an adjustment to the May monitoring data was not necessary.

CONNECTION MANAGEMENT PLAN - REVISED: November 2005

TABLE B2

East End Trunk Line Allocation until Expansion is Complete from MH 16 to MH 18

Township	Development	Connections Allowed	Connections Made
City of Coatesville			
	Penn Crossing	10	
	Cox II	11	
Valley Township			
Cain Township			
	Southwoods (Weiss)		
	Hill Farm	0	
	Typ flow diverted from DARA		
	Typ other Request	0	
West Brandwine Township			
	Township Other Request	5	
East Fallowfield Township			
	Robins Cove	40	25
	Harkins Farm	0	
	North Woods (Thompson North)	0	
	Mendenhall Tract	0	
	Chen Tract	40	23
	Ridgecrest (Marlin)	0	
	Hunters Ridge (Thompson South)	40	27
West Cain Township			
Total Connections		146	75
Total Connections Available		147	

==> Cain will not be permitted any additional until EETL upgrade is completed