COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ALTERNATIVE RATE FILING OF HILLRIDGE FACILITIES, INC.	)))	CASE NO. 2010-00426

NOTICE OF FILING

Notice is given to all parties that the following materials have been filed into the record of this proceeding:

- The digital video recording of the evidentiary hearing conducted on April 28, 2011 in this proceeding;

- Certification of the accuracy and correctness of the digital video recording;

- All exhibits introduced at the evidentiary hearing conducted on April 28, 2011 in this proceeding;

- A written list of the exhibits introduced at the evidentiary hearing conducted on April 28, 2011 in this proceeding;

- A written log listing, *inter alia*, the date and time of where each witness' testimony begins and ends on the digital video recording of the evidentiary hearing conducted on April 28, 2011.

A copy of this Notice, the certification of the digital video record, exhibit list, and hearing log have been served by first class mail upon all persons listed at the end of this Notice. Parties desiring an electronic copy of the digital video recording of the hearing in Windows Media format may download a copy at http://psc.ky.gov/av_broadcast/2010-00426/2010-00426_28Apr11_Inter.asx. Parties wishing an annotated digital video

recording may submit a written request by electronic mail to pscfilings@ky.gov. A minimal fee will be assessed for a copy of this recording.

The exhibits introduced at the evidentiary hearing may be downloaded at http://psc.ky.gov/pscscf/2010%20cases/2010-00426/.

Done at Frankfort, Kentucky, this 3rd day of May 2011.

Linda Faulkner

Linda Faulkner
Director, Filings Division
Public Service Commission of Kentucky

Honorable Robert C Moore
Attorney At Law
Hazelrigg & Cox, LLP
415 West Main Street
P.O. Box 676
Frankfort, KENTUCKY 40602

Sonja Ridge
Hillridge Facilities, Inc.
17825 Bradbe Road
Fisherville, KY 40023

Honorable David Edward Spenard
Assistant Attorney General
Office of the Attorney General
Utility & Rate Intervention Division
1024 Capital Center Drive
Suite 200
Frankfort, KENTUCKY 40601-8204

Laurence J Zielke
Zielke Law Firm PLLC
1250 Meidinger Tower
462 South Fourth Avenue
Louisville, KENTUCKY 40202-3465

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ALTERNATIVE RATE FILING OF HILLRIDGE FACILITIES, INC.	)	
	)	CASE NO. 2010-00426
	)	

CERTIFICATE

I, Kathy Gillum, hereby certify that:

1. The attached DVD contains a digital recording of the hearing conducted in the above-styled proceeding on April 28, 2011;

2. I am responsible for the preparation of the digital recording;

3. The digital recording accurately and correctly depicts the hearing;

4. All Exhibits introduced at the hearing of April 28, 2011 are attached to this Certificate, as well as the "Exhibit List", which correctly lists all exhibits introduced at the hearing of April 28, 2011.

5. The "Hearing Log" attached to this Certificate accurately and correctly states the events that occurred at the hearing of April 28, 2011 and the time at which each occurred.

Given this 3rd day of May, 2011.

Kathy Gillum, Notary Public
State at Large

My commission expires: Sept. 3, 2013

Case History Log Report

Case Number: 2010-00426_28Apr11

Case Title: Alternative Rate Filing of Hillridge Facilities, Inc.
Case Type: Other
Department:
Plaintiff:
Prosecution:
Defendant:
Defense:

Date: 4/28/2011

Location: Default Location
Judge: David Armstrong, Jim Gardner, Charles Borders
Clerk: Kathy Gillum
Bailiff:

Event Time	Log Event	
8:00:09 AM	Case Started	
8:00:14 AM	Case Recessed	
10:05:24 AM	Case Started	
10:05:29 AM	Preliminary Remarks	
10:06:20 AM	Introductions	
	Note: Kathy Gillum	Counsel for Hillridge, Robert Moore; Office of Atty Gen. David Spenard and Dennis Howard; Counsel for MSD, Larry Zielke; PSC Staff Attorney, Gerald Wuetcher.
10:07:29 AM	Public Notice (Hillridge Exhibit 1 introduced)	
	Note: Kathy Gillum	Mr. Moore states that Public Notice was given and offered proof of notice as Hillridge Exhibit 1.
10:08:10 AM	No Public Comments	
10:08:32 AM	Housekeeping Issues Discussed	
	Note: Kathy Gillum	Outstanding Issues: Show Cause Order pertaining to the MSD remaining in proceeding issued 4-27-11. Mr. Zielke responded to Show Cause Order issued 4-27-11, stating the reasons that MSD needed to remain in this case. Mr. Zielke refers to potential exhibits to be introduced. Requests to submit exhibits 1 thru 15. Mr. Wuetcher stated that staff has not seen exhibits, but has no objection to the exhibits being tendered.
10:14:45 AM	Objection to Exhibits by Robert Moore	
	Note: Kathy Gillum	Mr. Moore objects to submission of exhibits on grounds that he had not had a chance to view exhibits and would like to respond.
10:15:13 AM	Exhibits Tendered by Larry Zielke (MSD)	
	Note: Kathy Gillum	Mr. Zielke moves to introduce Exhibits into evidence. Exhibits marked as MSD Exhibits 1 thru 15
10:15:42 AM	Chairman Armstrong	
	Note: Kathy Gillum	Chairman Armstrong states that the Commission notes Mr. Moore's objection and receives the tendered exhibits.

10:16:51 AM	Statement and Objection by Robert Moore (Hillridge)	
	Note: Kathy Gillum	Mr. Moore responds to statement made by Mr. Zielke that MSD is ready to accept Hillridge's flow. Mr. Moore refers to 2 studies performed by MSD regarding its Lea Ann Way Division. Mr. Moore objects to the introduction of the Exhibit's by MSD, due to the materials in the exhibits containing information regarding an on-going DOW proceeding that has not been finalized to date.
10:25:50 AM	Statement by David Spenard (OAG)	
	Note: Kathy Gillum	Mr. Spenard states that OAG does not object to most of the exhibits, but does object to Item 3 and Item 14 being admitted into the record unless its part of the record for which a decision is made.
10:29:26 AM	Statement by Gerald Wuetcher (PSC)	
	Note: Kathy Gillum	Statement explaining that PSC does not have the jurisdiction to decide which utility is allowed to serve the Hillridge customers. States that PSC can only decide portion of case regarding reasonableness of the rates. Mr. Wuetcher also made a statement as to the appropriateness of MSD remaining in the case.
10:34:52 AM	Chairman Armstrong	
	Note: Kathy Gillum	Chairman Armstrong states that the Commission will allow the Order to remain. Ruling that the questions of flow are not being considered. Requests that counsel state any objections that MSD counsel remain in the hearing room.
10:35:53 AM	Robert Moore (Hillridge)	
	Note: Kathy Gillum	Objects to MSD participating in proceeding.
10:36:30 AM	David Spenard (OAG)	
	Note: Kathy Gillum	Mr. Spenard states that OAG would be uncomfortable in asking questions for MSD
10:37:05 AM	Gerald Wuetcher (PSC)	
	Note: Kathy Gillum	Mr. Wuetcher states that Staff does not have an objection to MSD's presence, but does object to MSD's witness being allowed to testify. Mr. Wuetcher states that If MSD is no longer a party, they should not be able to participate in the proceeding.
10:38:37 AM	Larry Zielke (MSD)	
	Note: Kathy Gillum	Mr. Zielke states that he understands that they are no longer an intervenor.
10:39:06 AM	Chairman Armstrong	
	Note: Kathy Gillum	Chairman announces ruling that MSD is no longer a party to the action. MSD leaves the hearing room.
10:39:27 AM	Robert Moore (Hillridge)	
	Note: Kathy Gillum	Mr. Moore requests to have a 15 minute conference with parties in an attempt to reach a settlement
10:40:02 AM	David Spenard (OAG)	
	Note: Kathy Gillum	Mr. Spendard states that a discussion might be beneficial.
10:40:15 AM	Case Recessed	
10:40:11 AM	Break	
	Note: Kathy Gillum	Break for parties to discuss case.
1:30:16 PM	Case Started	

1:30:26 PM	Gerald Wuetcher (PSC) Note: Kathy Gillum	A Stipulation has been reached between the utility and staff. Terms are that the total revenue requirement should be $315,544. Includes rate case expense. Utility will be filing the $15,000.00 of rate case expense for items incurred after the filing of the application. The difference also reflects a recalculation of purchased power. Staff will file an exhibit showing how the calculation was made. Hillridge Facilities will amend it's request for rate adjustment. Hillridge will publish notice by mail that it has amended it's rate application. Hillridge has agreed to publish no later than May 9th. Upon submission of Stipulation today and the filing of exhibits, the record will be closed except for public comment, and the matter would be submitted for decision as of May 27th. Mr. Wuetcher reserves right to make statement at end of proceeding.
1:38:13 PM	Robert Moore (Hillridge) Note: Kathy Gillum	Hillridge agrees to the Stipulation and will be filing a Motion to Amend the Rate Application. Requests to file as an Exhibit 4-29-11. No objections.
1:40:43 PM	Exhibits 2 thru 6 introduced (Hillridge) Note: Kathy Gillum	Motion to Amend the Rate Application. (Exh 2) Exhibits 3 thru 6 also introduced. Exhibits 2 thru 6 marked as Hillridge Exhibits 2 thru 6. No objections from PSC or OAG.
1:43:32 PM	David Spenard (OAG) Note: Kathy Gillum	No objection to the amendment of the application. No objection to staff's revised recommendations. OAG has no additional evidence or arguments and waives briefing.
1:44:17 PM	Gerald Wuetcher (PSC) Note: Kathy Gillum	Mr. Wuetcher moves that Commission's Staff Report be incorporated into the record, and to clarify states that the deviation was inadvertant and not the Commission's past practice.
1:47:16 PM	Commissioner Borders Note: Kathy Gillum	Mr. Borders states that May 27th date discussed is a furlough day for state employees and the Commission would not be open on that date. Parties agree that the date will be the first day of business after Memorial Day.
1:47:30 PM	Gerald Wuetcher (PSC) Note: Kathy Gillum	Mr. Wuetcher makes the suggestion that the MSD Exhibits be viewed as tendered Exhibits in the event there is a need of documentation for an appellate court.
1:49:51 PM	Chairman Armstrong Note: Kathy Gillum	Chairman Armstrong instructs clerk to mark MSD Exhibits as Tendered and notice the file that MSD is not a party to this action. Chairman adjourned hearing.
1:50:17 PM	Case Recessed	
3:27:11 PM	Case Stopped	

Exhibit List Report

Case Number: 2010-00426_28Apr11

Case Title: Alternative Rate Filing of Hillridge Facilities, Inc.

Department:

Plaintiff:

Prosecution:

Defendant:

Defense:

Name	Description
Hillridge Exhibit 1	Notice of Filing of Public Notice
Hillridge Exhibit 2	Motion to Amend Application for Rate Adjustment
Hillridge Exhibit 3	Invoice # 21221 dated January 6, 2011 submitted to Sonja Ridge
Hillridge Exhibit 4	Invoice # 21582 dated April 12, 201 submitted to Sonja Ridge
Hillridge Exhibit 5	Invoice # 21670 dated April 28, 2011 submitted to Sonja Ridge
Hillridge Exhibit 6	Invoice dated December 13, 2010 from Kentucky Small Utility Consulting, LLC
MSD Exhibit 1 (tendered - MSD dismissed as party)	Letter dated 1-28-11 between DOW and EPA
MSD Exhibit 10 (tendered - MSD dismissed as party)	DOW Notice of Violation dated 4-30-08
MSD Exhibit 11 (tendered - MSD dismissed as party)	DOW Notice of Violation dated 2-15-08
MSD Exhibit 12 (tendered - MSD dismissed as party)	DOW Notice of Violation dated 2-10-04
MSD Exhibit 13 (tendered - MSD dismissed as party)	DOW Notice of Violation dated 11-13-03
MSD Exhibit 14 (tendered - MSD dismissed as party)	MSD Statistics and Information related to the Lea Ann Way West sewershed
MSD Exhibit 15 (tendered - MSD dismissed as party)	Various KAR provisions related to the wastewater treatment
MSD Exhibit 2 (tendered - MSD dismissed as party)	Letter dated 1-16-11 between MSD and DOW
MSD Exhibit 3 (tendered - MSD dismissed as party)	MSD's Costs Estimate for Rehabilitating the Hillridge system
MSD Exhibit 4 (tendered - MSD dismissed as party)	Hillridge's KPDES Permits which have expired
MSD Exhibit 5 (tendered - MSD dismissed as party)	DOW Administrative Complaint filed against Hillridge 11-17-10
MSD Exhibit 6 (tendered - MSD dismissed as party)	DOW Notice of Violation dated 1-20-11
MSD Exhibit 7 (tendered - MSD dismissed as party)	DOW Notice of Violation dated 3-8-10
MSD Exhibit 8 (tendered - MSD dismissed as party)	DOW Notice of Violation dated 10-28-08
MSD Exhibit 9 (tendered - MSD dismissed as party)	DOW Notice of Violation dated 6-27-08

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ALTERNATIVE RATE FILING OF	)	
HILLRIDGE FACILITIES, INC.	)	CASE NO. 2010-00426

NOTICE OF FILING OF NOTICE OF FORMAL HEARING

Comes Hillridge Facilities, Inc. ("Hillridge"), by counsel, and hereby files a copy of the Notice of Formal Hearing that was published in the Saturday, April 16, 2011 edition of the Courier Journal.

Respectfully Submitted,

Robert C. Moore
Hazelrigg & Cox, LLP
415 West Main Street, 1st Floor
P.O. Box 676
Frankfort, Kentucky 40602-0676

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served by first class mail, postage prepaid, on Jeff Derouen, Executive Director, Public Service Commission, 211 Sower Blvd., P.O. Box 615, Frankfort, Kentucky 40602, David Edward Spenard, Assistant Attorney General, 1024 Capital Center Drive, Suite 200, Frankfort, Kentucky 40601-8204 and Laurence J. Zielke and Janice M. Theriot, Zielke Law Firm PLLC, 1250 Meidinger Tower, 462 S. 4th Street, Louisville, Kentucky, on the 28th day of April, 2011.

Robert C. Moore

HILLRIDGE EXHIBIT 1

FFY 2011 Weatherization Assistance Program Formula Grant and American Recovery and Reinvestment Act 2009-2012 Weatherization Amendment

Public Hearing Notice

NOTICE OF FORMAL HEARING

Hillridge Facilities, Inc., hereby provides notice that a formal hearing concerning its application for an ajustment in rates and for surcharge in Alternative Rate Filing of Hillridge Facilities, Inc., Case No. 2010-00426, will be held by the Kentucky Public Service Commission on Thursday, April 28, 2011, at 10:00 a.m. Eastern Daylight Time, in Hearing Room 1 of the Commission's offices at 211 Sower Boulevard, Frankfort, Kentucky.

Public Notice
Notice is hereby given that LIT Industrial Limited Partnership, 2650 Cedar Springs Road, Suite 850, Dallas, TX 75201, has filed an application with the Energy and Environment Cabinet to place fill in the 100-year floodplain. The property is located at 7201 National Turnpike, Louisville, KY 40214. The site is located 1 mile north of the intersection of National Turnpike and Outer Loop, near Northern Ditch. Any comments or objections concerning this application shall be directed to: Kentucky Division of Water, Surface Water Permit Branch, Flood Plain Management Section,

A. Arnold World Class Relocation, under the authority of Kentucky revised Statute 355.7-210, is selling at auction the following storage lots for unpaid charges: Beverly Gay, Contents: Household furniture & other misc. items. Auction date: April

611 Skilled Labor
616 General
620 Job Information
622 Employment Wanted
624 Private Care
626 Domestic Care

568 DRIVERS

CDL Training Now Available Locally! Learn to drive for SCHNEIDER NATIONAL CARRIERS No Exp. needed Job Ready in 15 Days Paying $800/week plus benefits after training. Immediate Openings Call Today! 888-904-2745

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GARAGE SALE

200 Estates
210 Miscellaneous
230 North
240 South
250 East
260 West
270 Central
290 Prospect
300 Bullitt County
320 Indiana
340 Oldham County

210 GARAGE SALES

Downsizing/Moving out of State. Lake Forest. Sat 4/16. 14401 Maple Ridge Pl. 8-1. Furniture, trains, tools, electronics, ladder, household items, seasonal decorations, trundle bed, rugs. Rain or shine. Everything must go!

Garage Sale. Polo Fields, 17510 Curry Branch Road. Saturday, April 16th, 8:00 am to 2:00 pm.

240 SALES: SOUTH

BLOCK SALE

RECEIVED

APR 29 2011

PUBLIC SERVICE COMMISSION

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ALTERNATIVE RATE FILING OF HILLRIDGE FACILITIES, INC.	))	CASE NO. 2010-00426

HILLRIDGE FACILITES, INC.'S MOTION TO AMEND APPLICATION FOR RATE ADJUSTMENT

Comes Hillridge Facilities, Inc. ("Hillridge"), by counsel, and for its Motion to Amend Application for Rate Adjustment states as follows.

1. The Application for Rate Adjustment submitted by Hillridge reflected that its revenue requirement of $324,384.00 justified a monthly rate per customer of $37.55. The Application for Rate Adjustment also included a request for surcharge, which request has been withdrawn.

2. In order to facilitate a decision on its Application for Rate Adjustment and considering the request for surcharge, Hillridge requested a monthly rate per customer of $32.50 instead of $37.55.

3. In light of the withdrawal of the request for surcharge, Hillridge hereby requests leave to amend its Application for Rate Adjustment to state a requested monthly rate per customer of $36.52.

Respectfully Submitted,

Robert C. Moore
Hazelrigg & Cox, LLP
415 West Main Street, 1st Floor
P.O. Box 676
Frankfort, Kentucky 40602-0676

HILLRIDGE EXHIBIT 2

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served by first class mail, postage prepaid, on Jeff Derouen, Executive Director, Public Service Commission, 211 Sower Blvd., P.O. Box 615, Frankfort, Kentucky 40602, David Edward Spenard, Assistant Attorney General, 1024 Capital Center Drive, Suite 200, Frankfort, Kentucky 40601-8204 and Laurence J. Zielke and Janice M. Theriot, Zielke Law Firm PLLC, 1250 Meidinger Tower, 462 S. 4th Street, Louisville, Kentucky, on the 29th day of April, 2011.

Robert C. Moore

Hazelrigg & Cox, LLP
415 W. Main Street
P. O. Box 676
Frankfort, KY 40602

Invoice submitted to:
Sonja Ridge
17825 Bradbe Road
Fisherville, KY 40023
RCM

January 06, 2011

In Reference To: Hillridge WWTP

Invoice # 21221

Professional Services

		Hours	Amount
12/3/2010	Telephone conferences with S. Ridge	0.55	101.75
12/6/2010	Telephone conference with S. Ridge Draft Notice of Appearance	0.30	55.50
12/8/2010	Review file Review case law Draft Objection to Motion for Full Intervention filed by MSD	1.10	203.50
12/9/2010	Review case law re Objection to Intervention	0.80	148.00
12/10/2010	Review file Draft Objection to Motion for Full Intervention Correspondence to S. Ridge	1.75	323.75
12/21/2010	Telephone conference with Hearing Officer S. Blanton	0.20	37.00
12/22/2010	Correspondence to S. Ridge	0.05	9.25
	For professional services rendered	4.75	$878.75
	Previous balance		$389.75
	Balance due		$1,268.50

HILLRIDGE EXHIBIT 3

Timekeeper Summary

Name	Hours	Rate	Amount
Robert C. Moore	4.75	185.00	$878.75

WE ACCEPT VISA AND MASTERCARD

Hazelrigg & Cox, LLP
415 W. Main Street
P. O. Box 676
Frankfort, KY 40602

Invoice submitted to:
Sonja Ridge
17825 Bradbe Road
Fisherville, KY 40023
RCM

February 16, 2011

In Reference To: Hillridge WWTP

Invoice # 21406

Professional Services

		Hours	Amount
1/10/2011	Telephone conference with S. Ridge	0.45	83.25
1/12/2011	Review waiver form Correspondence to S. Blanton	0.10	18.50
1/13/2011	Review Data Requests Telephone conference with S. Ridge Review file to prepare for meeting with J. Nacey and G. Wilson with DOW	1.30	240.50
1/14/2011	Conference with J. Nacey, G. Wilson and J. Schuman Correspondence to J. Kaninberg re information request Draft request for extension of time	1.70	314.50
1/26/2011	Telephone conference with S. Ridge Review Orders entered by the PSC Telephone conference with [redacted]re status of Lea Ann Way Pump Station Correspondence to T. Osterloh re Orders and informal conference and filing of documents Telephone conference with L. Smither re inspection of WWTP	0.90	166.50
1/27/2011	Telephone conference with J. West Telephone conference with T. Osterloh and J. Wuetcher Telephone conference with S. Ridge Review file Draft Motion to File Reduced Number of Copies Review correspondence from G. Wuetcher and respond to same	1.30	240.50
1/28/2011	Review correspondence from J. Wuetcher and respond to same Telephone conference with J. Kaninberg Telephone conference with S. Ridge	0.50	92.50

		Hours	Amount
1/31/2011	Telephone conference with J. Kaninberg Telephone conference with J. Wuetcher Correspondence to Division of Water re MSD records Review statute and regulations motion to reconsider and suspension of KPDES permit	1.40	259.00
	For professional services rendered	7.65	$1,415.25
	Previous balance		$1,268.50
1/17/2011	Payment - thank you. Check No. 3696		($1,800.00)
	Total payments and adjustments		($1,800.00)
	Balance due		$883.75

Timekeeper Summary

Name	Hours	Rate	Amount
Robert C. Moore	7.65	185.00	$1,415.25

WE ACCEPT VISA AND MASTERCARD

Hazelrigg & Cox, LLP
415 W. Main Street
P. O. Box 676
Frankfort, KY 40602

Invoice submitted to:
Sonja Ridge
17825 Bradbe Road
Fisherville, KY 40023
RCM

February 16, 2011

In Reference To: Hillridge WWTP

		Amount
	Previous balance	$883.75
2/8/2011	Payment - thank you. Check No. 1032	($1,500.00)
2/16/2011	On 9/15/10 rec'd $2,000 check from client. Applied $947.00 (balance due on 9/7/10 invoice) of $2,000. Erroneously showed a $2,000 retainer on 10/11/10 invoice. Should have showed $1,053 retainer balance, which is $2,000 less the $947. PLEASE CALL IF YOU HAVE QUESTIONS. Thank you. Nancy Bailey	$947.00
	Total payments and adjustments	($553.00)
	Balance due	$330.75

WE ACCEPT VISA AND MASTERCARD

Hazelrigg & Cox, LLP
415 W. Main Street
P. O. Box 676
Frankfort, KY 40602

Invoice submitted to:
Sonja Ridge
17825 Bradbe Road
Fisherville, KY 40023
RCM

March 09, 2011

In Reference To: Hillridge WWTP

Invoice # 21507

Professional Services

		Hours	Amount
2/1/2011	Review Answers to Commission Staffs First Information Requests Finalize Answers and prepare redacted and unredacted copies of same Draft Petition for Confidential Treatment Correspondence to J. Derouen Telephone conference with [redacted]	2.25	416.25
2/2/2011	Correspondence to S. Ridge Conference with [redacted] re DOW issues Telephone conference with S. Ridge Telephone conference with D. Spenard (AGs counsel) Telephone conference J. Nacey	0.95	175.75
2/3/2011	Review correspondence from J. Nacey Telephone conference with J. Nacey Correspondence to S. Ridge	0.40	74.00
	Telephone conference with M. Elliston re ORR Correspondence to M. Elliston re ORR	0.20	37.00
2/4/2011	Review Lee Ann Way project documents Correspondence to [redacted] Review MSD website Telephone conference with [redacted] re MSD records Correspondence to M. Elliston re SSDP and other MSD records Telephone conference with [redacted] and [redacted] re records	2.50	462.50
2/8/2011	Prepare for Informal Conference Correspondence to S. Ridge re Orders Conference with J. Kaninberg and S. Ridge Attend Informal Conference	3.50	647.50

		Hours	Amount
2/9/2011	Conference with [redacted] re legal issues	0.60	111.00
2/11/2011	Open Records Review at Division of Water	2.00	370.00
2/15/2011	Review Order and Data Requests Correspondence to S. Ridge Review correspondence from J. Wuetcher and respond to same Telephone conference with J. Wuetcher Calendar dates Telephone conference with B. Bush with USEPA	1.00	185.00
2/16/2011	Telephone conference with S. Ridge	0.40	74.00
2/17/2011	Attend Prehearing conference Review records Telephone conference with L. Smither Conference with S. Ridge	4.45	823.25
2/18/2011	Review file Draft Answers to PSC Information Requests Correspondence to M. Elliston re ORR Review Informal Conference Minutes Draft Comments to Informal Conference	1.85	342.25
2/21/2011	Correspondence to S. Ridge Finalize correspondence to T. Osterloh re IC memo Review correspondence from M. Elliston and respond to same Telephone conference with M. Elliston re records review Review file Telephone conference with S. Ridge Correspondence to [redacted] Telephone conference with [redacted] Correspondence to J. Conway re ORR	1.60	296.00
2/22/2011	Review correspondence to J. Kaninberg Correspondence to J. Kaninberg Draft Answers to Information Request Review records re MSD sanitary sewer overflows Telephone conference with J. Nacey Telephone conference with S. Ridge	2.55	471.75
2/23/2011	Correspondence to S. Ridge Review correspondence from J. Kaninberg Review files Correspondence to S. Gruzesky Telephone conference with S. Ridge	2.40	444.00
2/24/2011	Revise Answers to Second Information Requests Telephone conference with S. Ridge Correspondence to S. Ridge re various issues Finalize correspondence to S. Gruzesky Finalize Answers to Commissions Second Data Requests	1.10	203.50

		Hours	Amount
	For professional services rendered	27.75	$5,133.75
	Additional Charges :		
2/4/2011	Copying cost - MSD		25.00
2/11/2011	Copying cost - Open Records Request		35.00
2/25/2011	Copying cost		48.90
	Postage		3.12
	Total costs		$112.02
	Total amount of this bill		$5,245.77
	Previous balance		$330.75
2/17/2011	Payment - thank you. Check No. 1042		($800.00)
	Total payments and adjustments		($800.00)
	Balance due		$4,776.52

Timekeeper Summary

Name	Hours	Rate	Amount
Robert C. Moore	27.75	185.00	$5,133.75

WE ACCEPT VISA AND MASTERCARD

Hazelrigg & Cox, LLP
415 W. Main Street
P. O. Box 676
Frankfort, KY 40602

Invoice submitted to:
Sonja Ridge
17825 Bradbe Road
Fisherville, KY 40023
RCM

April 12, 2011

In Reference To: Hillridge WWTP

Invoice # 21582

Professional Services

		Hours	Amount
3/2/2011	Review Hillridge records at DOW	2.10	388.50
3/3/2011	Telephone conference with B. Bush with USEPA	0.20	37.00
3/4/2011	Review documents Telephone conference with D. Spenard Telephone conference with J. Theriot Draft Supplement to Hillridges Answers to Second Requests for Information Draft Motion to deviate from filing requirement Correspondence to J. Derouen Correspondence to counsel	1.60	296.00
3/7/2011	Correspondence to G. Wuetcher, J. Theriot and D. Spenard re Supplement to Answers Telephone conference with G. Wuetcher Review file Draft Motion for Reconsideration of denial of confidential treatment	1.70	314.50
3/8/2011	Review Staff Report Review March 7, 2011 Order from PSC Review MSD records Correspondence to S. Ridge Review correspondence from J. Dwyer Correspondence to J. Dwyer	2.90	536.50
3/9/2011	Review correspondence from J. Theriot Telephone conferences with J. Kaninberg Telephone conference with S. Ridge and J. Kaninberg	1.15	212.75

HILLRIDGE EXHIBIT 4

		Hours	Amount
3/14/2011	Telephone conference with C. Seitz Review MSD Sanitary Sewer Overflows	1.00	185.00
3/15/2011	Conference with RCM	0.10	18.50
	Conference with S. Ridge and J. Kaninberg Conference with JBB	2.85	527.25
3/16/2011	Telephone conference with D. Spenard Conference with G. Wuetcher and T. Osterloh	0.45	83.25
3/17/2011	Review correspondence from J. Wuetcher re hearing and respond to same Review correspondence from J. Theriot re hearing Review correspondence from D. Spenard re hearing Review correspondence from J. Kaninberg re quote Review correspondence from D. Spenard and respond to same Review correspondence from J. Kaninberg Correspondence to L. Wood	0.35	64.75
3/18/2011	Telephone conference with D. Spenard	0.15	27.75
3/21/2011	Review file and prepare for hearing Attend hearing Draft Comments to Staff Report Correspondence to S. Ridge Review filings by MSD Telephone conference with J. Nacey at DOW	6.25	1,156.25
3/23/2011	Review Attorney Generals Response to Comments Review photographs provided by S. Ridge Correspondence to S. Gruzesky	0.90	166.50
3/25/2011	Telephone conference with S. Gruzesky Review records Correspondence to S. Gruzesky	1.15	212.75
3/28/2011	Telephone conference with S. Gruzesky Review file Draft Requests for Information to the PSC and to MSD	1.90	351.50
3/29/2011	Review file Telephone conference with Scott Porter with MSD Finalize correspondence to S. Gruzesky Correspondence to S. Ridge Review file and documents from MSD Telephone conference with S. Ridge	3.35	619.75
	For professional services rendered	28.10	$5,198.50

Additional Charges :

		Amount
3/4/2011	Copying cost	37.05
	Copying cost	60.45
3/21/2011	Mileage	38.25
	Total costs	$135.75
	Total amount of this bill	$5,334.25
	Previous balance	$4,776.52
3/15/2011	Payment - thank you. Check No. 3721	($5,000.00)
4/11/2011	Payment - thank you. Check No. 3732	($1,500.00)
	Total payments and adjustments	($6,500.00)
	Balance due	$3,610.77

Timekeeper Summary

Name	Hours	Rate	Amount
John B. Baughman	0.10	185.00	$18.50
Robert C. Moore	28.00	185.00	$5,180.00

WE ACCEPT VISA AND MASTERCARD

Hazelrigg & Cox, LLP
415 W. Main Street
P. O. Box 676
Frankfort, KY 40602

Invoice submitted to:
Sonja Ridge
17825 Bradbe Road
Fisherville, KY 40023
RCM

April 28, 2011

In Reference To: Hillridge WWTP

Invoice # 21670

Professional Services

		Hours	Amount
4/1/2011	Conference with S. Ridge Conference with S. Gruzesky, et al at DOW	2.00	370.00
4/7/2011	Telephone conference with Hearing Officer S. Blanton Review correspondence from S. Ridge Telephone conference with S. Ridge Correspondence to J. Schuhmann with DOW Telephone conference with D. Hobbs Correspondence to D. Hobbs	2.00	370.00
4/8/2011	Review RJN Report Correspondence to J. Schuhmann Telephone conference with J. Schuhmann Telephone conference with S. Poter	2.80	518.00
4/13/2011	Draft Discovery Answers Telephone conference with L. Smither Correspondence to J. Derouen Telephone conference with S. Ridge	5.20	962.00
4/14/2011	Review statute re notice and draft same Telephone conference with J. Kaninberg re legal invoices Correspondence to S. Ridge re filing and notice Telephone conference with S. Ridge Telephone conference with J. Schuhmann and J. Nacey Review invoices	0.90	166.50

HILLRIDGE EXHIBIT 5

		Hours	Amount
4/15/2011	Review file Telephone conference with J. Kaninberg Telephone conference with G. Wuetcher re filing Telephone conference with L. Smither	0.65	120.25
4/18/2011	Review file Telephone conference with J. Theriot Review correspondence from G. Wuetcher re Informal Conference and respond to same Draft Witness List and Summary of Testimony Telephone conference with G. Wuetcher	1.10	203.50
4/19/2011	Review MSD and PSC filings Correspondence to S. Ridge Telephone conference with D. Spenard Review correspondence from G. Wuetcher re informal conference and respond to same Telephone conference with J. Kaninberg	0.85	157.25
4/21/2011	Telephone conferences with S. Ridge Prepare for and participate in Prehearing conference Draft Notices of Filing	2.50	462.50
4/22/2011	Review NOV Telephone conference with S. Ridge Finalize Notices of Filing Draft Motion to Withdraw Surcharge Request Draft Motion to Compel Review Notice of Violation Correspondence to B. Trivette Telephone conference with L .Smither	5.55	1,026.75
4/25/2011	Telephone conference with D. Spenard	0.20	37.00
4/26/2011	Telephone conferences with S. Ridge Telephone conference with J. Kaninberg Review documents and prepare for hearing Telephone conference with L. Smither Review correspondence from M. Johnson re offer to purchase Review invoices from R. Greenberg Review correspondence from L. Smither and revise correspondence to B. Trivette	2.55	471.75
4/27/2011	Review documents Conference with J. Kaninberg, S. Ridge and J. Murphy Telephone conference with D. Spenard Telephone conference with G. Wutcher Draft Notice of Filing Review records Draft Supplement to Answers to Commissions Second Information Requests	5.30	980.50

		Hours	Amount
4/28/2011	Preparation and review of exhibits Preparation of Notice of Filing and Supplement to Answer Conference with client and attendance at hearing	4.00	740.00
	For professional services rendered	35.60	$6,586.00
	Additional Charges :		
4/13/2011	Photocopies		28.80
	Photocopies		30.00
4/19/2011	Copying cost		6.30
4/22/2011	Copying cost		13.56
	Photocopies		9.60
	Postaqge		3.84
	Total costs		$92.10
	Total amount of this bill		$6,678.10
	Previous balance		$3,610.77
4/27/2011	Payment - thank you. Check No. 1002		($4,000.00)
	Total payments and adjustments		($4,000.00)
	Balance due		$6,288.87

Timekeeper Summary

Name	Hours	Rate	Amount
Robert C. Moore	35.60	185.00	$6,586.00

WE ACCEPT VISA AND MASTERCARD

KENTUCKY SMALL UTILITY CONSULTING, LLC
Jack Kaninberg, Owner
8105 Parkshire Court
Louisville, KY 40220
(502) 742-9325

December 13, 2010

INVOICE FOR CONSULTING SERVICES – Hourly Charges

Ms. Sonja Ridge
Hillridge Facilities, Inc
17825 Bradbe Road
Fisherville, KY 40023

Description of Service for December 2010	Amount
-Hourly charges (at $25 per hour x 8.5 hours; see below)	$212.50
-Copying Charge (Receipt attached)	$24.90
Total	**$237.40**

Date	Hours	Explanation – Hillridge hourly charges
12/3	1.50	(12:30 pm – 2 pm) – Organize invoices for copying and copy at Kinkos
12/6	3.75	(9:15 am - 1 pm) – Organize files by account to determine if all invoices were available for all accounts.
12/7	0.75	(8:15 am – 9 am) – Additional preparation for field review.
12/9	2.50	(9am – 11:30 am) – Field review with Daryl Parks
	8.50	Totals for December 3-9

Please make all checks payable to Jack Kaninberg
Thank You For Your Business!

HILLRIDGE EXHIBIT 6

KENTUCKY SMALL UTILITY CONSULTING, LLC
Jack Kaninberg, Owner
8105 Parkshire Court
Louisville, KY 40220
(502) 742-9325

March 31, 2011

INVOICE FOR CONSULTING SERVICES – HOURLY CHARGES

Ms. Sonja Ridge
Hillridge Facilities, Inc.
17825 Bradbe Road
Fisherville, KY 40023

Description of Monthly Service for March 2011	Amount
-Hourly Charges ($25/hr. x 9.50 hours)	$237.50

Date	Hours	Explanation
3/15	5.00	(12:30 pm – 5:30 pm) – Travel to and from Frankfort to meet with Rob Moore.
3/16	1.00	(7:45 am – 8:45 am) – Follow-up work from 3/15 meeting
3/21	3.25	(5:15 pm – 8:30 pm) – Attend public meeting at Floyds Fork Park
3/29	0.25	(9 am – 9:15 am) – Found, printed and briefly skimmed PSC data requests to Hillridge and MSD.
	9.50	**Totals for March**

Please make all checks payable to Jack Kaninberg

Thank You For Your Business!

KENTUCKY SMALL UTILITY CONSULTING, LLC
Jack Kaninberg, Owner
8105 Parkshire Court
Louisville, KY 40220
(502) 742-9325

February 25, 2011

INVOICE FOR CONSULTING SERVICES – HOURLY CHARGES

Ms. Sonja Ridge
Hillridge Facilities, Inc.
17825 Bradbe Road
Fisherville, KY 40023

Description of Monthly Service for December 2010	Amount
-Hourly Charges ($25/hr. x 7.75 hours)	$193.75

Date	Hours	Explanation
2/8	5.00	(8am – 2 pm; less 1 hr. lunch) – Travel to and from Frankfort for Informal Conference, which lasted from 9 am to 12 noon.
2/15	1.75	(9:45 am – 11:30 am) – Work on answers to PSC's second data request.
2/22	1.00	(8 am – 9 am) – Sonja called about KPDES permit info; I researched it online; also reviewed draft responses to data request questions.
	7.75	Totals for February 2011

Please make all checks payable to Jack Kaninberg

Thank You For Your Business!

KENTUCKY SMALL UTILITY CONSULTING, LLC
Jack Kaninberg, Owner
8105 Parkshire Court
Louisville, KY 40220
(502) 742-9325

February 2, 2011

INVOICE FOR CONSULTING SERVICES – HOURLY CHARGES

Ms. Sonja Ridge
Hillridge Facilities, Inc.
17825 Bradbe Road
Fisherville, KY 40023

Description of Monthly Service for December 2010	Amount
-Hourly Charges ($25/hr. x 15 hours)	$375.00
-3 Kinkos Copying Charges (Jan. 28, Jan. 28, and Jan. 30)	$44.17
	Total - $419.17

Date	Hours	Explanation
1/27	3.25	(Thursday) – Organized DR info, met with Sonja and got info, input into computer.
1/28	4.25	(Friday) – Removed staples and organized papers, copies at Kinkos, work on 2010 general ledger for DR response.
1/29	4.00	(Saturday) – Met Sonja (and relatives) at Kinkos for copying, then worked in my office organizing and modifying the DR responses and invoices, prepared oath page.
1/30	0.50	(Sunday) – Made copy of partial DR response at Kinkos; waited for and met Sonja to deliver it and the oath page to her
1/31	1.75	-(Monday) – E-mailed Rob Moore; met Sonja at Kinkos to retrieve verified oath page; got additional invoices, and made copies at Kinkos; came back to office to modify DR response.
	1.25	-(Monday) – Rob Moore arranged for runner to meet me in Shelbyville to deliver DR response, drove there and returned.
	15.00	Totals for January PSC data request

Please make all checks payable to Jack Kaninberg

Thank You For Your Business!

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ALTERNATIVE RATE FILING OF HILLRIDGE FACILITIES, INC.	) CASE NO. 2010-00426)

LOUISVILLE-JEFFERSON COUNTY HEARING EXHIBITS

1. Letter between DOW and EPA dated January 28, 2011, stating that DOW believes MSD should take over the Hillridge WWTP flow.

2. Letter between MSD and DOW dated March 16, 2011, stating that MSD certifies that it can treat the flow from the Hillridge WWTP.

3. MSD's Costs Estimate for Rehabilitating the Hillridge system.

4. Hillridge's KPDES Permits which have expired.

5. The DOW Administrative Complaint filed against Hillridge on November 17, 2010, in which Hillridge is subject to a fine of $25,000 per day that it continues to operate improperly.

6. DOW Notice of Violation to Hillridge dated January 20, 2011.

7. DOW Notice of Violation to Hillridge dated March 8, 2010.

8. DOW Notice of Violation to Hillridge dated October 28, 2008.

9. DOW Notice of Violation to Hillridge dated June 27, 2008.

10. DOW Notice of Violation to Hillridge dated April 30, 2008.

11. DOW Notice of Violation to Hillridge dated February 15, 2008.

12. DOW Notice of Violation to Hillridge dated February 10, 2004.

13. DOW Notice of Violation to Hillridge dated November 13, 2003.

14. MSD Statistics and information related to the Lea Ann Way West sewershed.

15. Various KAR provisions related to the wastewater treatment.

Steven L. Beshear
Governor

ENERGY AND ENVIRONMENT CABINET

Department for Environmental Protection
Division of Water
200 Fair Oaks Lane, 4th Floor
Frankfort, Kentucky 40601
Phone: (502) 564-3410
Fax: (502) 564-2741
www.water.ky.gov

Leonard K. Peters
Secretary

R. Bruce Scott
Commissioner

January 28, 2011

William Bush
Associate Regional Counsel
U.S. EPA Region 4
Atlanta Federal Center
61 Forsyth Street SW
Atlanta, GA 30303

Re: Louisville MSD takeover of Hillridge WWTP flow

Dear Sir:

The Commonwealth of Kentucky Division of Water (KDOW) wishes to inform the United State Environmental Protection Agency that Louisville/Jefferson County Metropolitan Sewer District (MSD) may begin serving the homeowners currently receiving their wastewater treatment services from the Hillridge Wastewater Treatment Plant (WWTP).

The Hillridge WWTP and collection system were built in 1965. The WWTP discharges into Fern Creek in Jefferson County and is obsolete and in disrepair. The collection system has severe inflow and infiltration problems. MSD estimates that complete repair of the collection system will cost in excess of $1,000,000. The permit holder is out of compliance with its discharge permit limitations and has been for years. The discharge permit expired and, due to the WWTP's chronic noncompliance and potential availability of the regional system, KDOW did not renew the permit. On February 19, 2010, KDOW sent a letter to Hillridge, a copy of which is enclosed, placing a sewer sanction on the plant and collection system due to the excessive overflows and severe stormwater inflow and infiltration problems. On November 17, 2010, the KDOW filed an Administrative Complaint against the facility, a copy of which is attached. The complaint describes the Hillridge WWTP's illicit discharges.

Under the terms of Hillridge's Kentucky Pollutant Discharge Elimination System (KPDES) permit issued by KDOW, the plant should eliminate its discharge at such time as a regional sewer system becomes available to serve the homeowners currently served by the Hillridge WWTP. Exercising this provision in the Hillridge KPDES permit would result in the removal of a point source of pollution from Fern Creek and treatment of that wastewater to a higher level than is possible at the Hillridge WWTP. The Hillridge KPDES permit states:

"This treatment unit is temporary and in no way supersedes the need of a regional sewer system. The permittee will eliminate the discharge and treatment unit by connection to a regional sewer system when it becomes available as defined in 401 KAR 5:002."

MSD has recently completed work on the Leanne Way Pump Station. The availability of capacity at that pump station means that a regional sewer system is "available" to homeowners served by Hillridge, as defined by 401 KAR 5:002.

MSD's approved System Capacity Assurance Plan ("SCAP") requires new developments in the area currently served by the Hillridge collection system to meet a 3:1 ratio so that each additional gallon of sewage added by any new development to the system will require the removal of three gallons of inflow and infiltration. However, the SCAP (at section 4.2.1) includes several scenarios where maintaining a 1:1 ratio is sufficient. KDOW believes that a project such as elimination of illicit discharges by taking off line and treating the sewage from a third-party's non-compliant WWTP via a compliant regional sewer system is an appropriate scenario for meeting the 1:1 ratio allowed in the SCAP.

KDOW is requesting that EPA acknowledge that by adding the customers now served by the Hillridge WWTP, MSD will be removing an illicit discharge and will not be adding new developments; thus MSD should not be required to remove three gallons of inflow and infiltration for each one gallon of sewage added. However, MSD will remove as much inflow and infiltration as can quickly be removed and can commit to a 1:1 removal ration within the first year of adding the Hillridge customers. This work will cost approximately $400,000. MSD acknowledges that the area currently served by the Hillridge WWTP contains some vacant lots; and, before any new development can occur on these lots, the 3:1 ratio must be met. The current Hillridge customers however, may immediately be served by MSD's regional system.

I appreciate your time and consideration of this matter. If you have any questions or concerns, please feel free to contact Josh Nacey at (502) 564-3410, ext. 4965.

Sincerely,

Sandra L. Gruzesky, Director
Kentucky Division of Water

SG/jn

Enclosure

c: Scott Gordon, EPA Region IV
Doug Mundrick, EPA Region IV
Cesar Zapata, EPA Region IV
Bud Schardein, MSD
Mark Johnson, MSD
Brian Bingham, MSD
Larry Zielke, Counsel for MSD
Stuart Benson, Louisville Metro Council
Jory Becker, KDOW

MSD
Metropolitan Sewer District

Louisville and Jefferson County Metropolitan Sewer District
700 West Liberty Street
Louisville Kentucky 40203-1911
502-540-6000
www.msdlouky.org

March 16, 2011

Mr. Shafiq Amawi
Division of Water
Kentucky Natural Resources and Environmental Protection
4th Floor
200 Fair Oaks Drive
Frankfort, KY 40601

Subject: Hillridge Waste Water Collection System

Dear Mr. Amawi:

Requirements for sewer line extension within the revised 401KAR5:005 state that "the applicant shall demonstrate that the portion of the sewer system used by the connection has adequate capacity to transport the current and anticipated peak flow to the Water Quality Treatment Center, KPDES Number 0022411 and that the portion of the sewer system used by the connection is not subject to excessive infiltration or excessive inflow."

The above-proposed development is in the Derek R. Guthrie Water Quality Treatment Center service area. The proposed project is in compliance with the current West County Action Plan. The water quality treatment center and sanitary sewers, to which this development will connect, are owned and operated by MSD and have sufficient capacity to service this development at this time. MSD will own, operate and maintain this public sanitary sewer system once the project has been completed and accepted by MSD.

MSD has made substantial improvements to the Lea Ann Way Pump Station and the upstream collection system. MSD certifies that the accessible portions of the Hillridge Wastewater Collection System have been reviewed and that MSD understands the general condition and characteristics of the system. MSD commits to perform additional system improvements in accordance with the MSD System Capacity Assurance Program (SCAP) within one year of accepting the additional flow in an amount of the estimated flows within the existing Hillridge Collection System. Future flows will be handled as outlined in the SCAP document.

The project chiefly consists of: Hillridge Wastewater System, excluding the Treatment Facilities.

Sincerely,

Mark J Johnson /bab

Mark J. Johnson, P.E.
Director of Engineering and Chief Engineer

cc: Peter Goodmann Larry Zielke

MSD EXHIBIT 2

Beneficial U...
www.louisvillegreen.com

Hillridge Sanitary System Rehabilitation Project

Existing Stats

47,505 LF of Sewer (4" to 15" dia.)

277 Manholes

STANDARD ITEM DESCRIPTION	UNIT REQ	UNITS	UNIT COST	TOTAL COST	NOTES:
SANITARY SEWERS					
8-Inch Sanitary Sewer Pipe	2,552	L.F.	$130.00	$331,760.00	Full replacement for Structural Codes 4 and 5
Saddle and Connection for PSC	48	EA.	$600.00	$28,800.00	Based on house count near lines to be replaced.
MANHOLES					
4-FOOT DIA TYPE I MANHOLES W/CASTING	16	EA.	$3,500.00	$56,000.00	Based on new 8-inch segments
MANHOLE REHABILITATION-EPOXY LINER	152	EA.	$3,000.00	$456,000.00	Approximately 55% of sewers need rehab, used same percentage for manholes. Could be much less. Manhole were not inspected.
CURED IN PLACE PIPE 8-INCH	11537	L.F.	$28.00	$323,036.00	Line all 2 and 3 structural defects, all I/I defects.
PSC Top Hats, 4-INCH	198	EA.	$1,500.00	$297,000.00	Based on house count near lining.
ROOT REMOVAL					
Medium Cleaning, w/ Root Control	14650	L.F.	$2.00	$29,300.00	All remaining root defect segments not getting replaced or lined
EROSION CONTROL	1	LS	$8,000.00	$8,000.00	Guess, based on project size
PAVEMENT					
Pavement Restoration Utility Cut in Road 8-inch Pipe	2,102	L.F.	$22.00	$46,244.00	All sewer line to be replace in asphalt minus 450 LF
Milling of Roads to be Resurfaced	500	L.F.	$3.00	$1,500.00	
Resurfacing	1,200	S.Y.	$4.50	$5,400.00	
VIDEO RECORDING	1	L.S.	$500.00	$500.00	
VACUUM EXCAVATIONS	8	EA.	$150.00	$1,200.00	
SUBTOTAL				$1,584,740.00	
BONDS (1.5% OF THE SUBTOTAL)	1	L.S.		$23,771.10	
MOBIL./DEMOB. (1% OF THE SUBTOTAL)	1	L.S.		$23,771.10	

TOTAL $1,632,282.20

MSD EXHIBIT 3

HENRY C. LIST
SECRETARY

PAUL E. PATTON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
14 REILLY RD
FRANKFORT KY 40601

DEC 3 2003

Donald Ridge, President
Hillridge Facilities, Incorporated
17825 Bradbe Road
Fisnerville, Kentucky 40023

Re: Hillridge Facility
KPDES No.: KY0036226
Jefferson County, Kentucky

Dear Mr. Ridge:

Enclosed is the Kentucky Pollutant Discharge Elimination System (KPDES) permit for the above-referenced facility. This action constitutes a final permit issuance under 401 KAR 5:075, pursuant to KRS 224.16-050.

Your facility is being issued a permit that is shorter than the normal five-year term in order to synchronize permit issuance by watershed. The permit fee that is assessed for this short-term permit is prorated based on the permit duration. Implementation of watershed permitting began in the year 2001 and your targeted permit issuance is based upon your location in the watershed basin.

This permit will become effective on the date indicated in the attached permit provided that no request for adjudication is granted. All provisions of the permit will be effective and enforceable in accordance with 401 KAR 5:075, unless stayed by the Hearing Officer under Sections 11 and 13.

Any demand for a hearing on the permit shall be filed in accordance with the procedures specified in KRS 224.10-420, 224.10-440, 224.10-470 and any regulations promulgated thereto. Any person aggrieved by the issuance of a permit final decision may demand a hearing, pursuant to KRS 224.10-420(2) within thirty (30) days from the date of the issuance of this letter. Two (2) copies of request for hearing should be submitted in writing to the Natural Resources and Environmental Protection Cabinet, Office of Administrative Hearings, 35-36 Fountain Place, Frankfort, Kentucky 40601 and the Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet, Division of Water, 14 Reilly Road, Frankfort, Kentucky 40601. For your record keeping purposes, it is recommended that these requests be sent by certified mail. The written request must conform to the appropriate statutes referenced above.

MSD EXHIBIT 4

If you have any questions regarding the KPDES decision, please contact Courtney Seitz, Inventory and Data Management Section, KPDES Branch, at (502) 564-2225, extension 465.

Further information on procedures and legal matters pertaining to the hearing request may be obtained by contacting the Office of Administrative Hearings at (502) 564-7312.

Sincerely,

Jeffrey W. Pratt, Director
Division of Water

JWP:NG:ng
Enclosure

c: Louisville Regional Office
Division of Water Files

HENRY C. LIST
SECRETARY

PAUL E. PATTON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
14 REILLY RD
FRANKFORT KY 40601

STATEMENT OF BASIS

KPDES No.: KY0036226 **Permit Writer:** Robert S. Clay, Jr. **Date:** August 19, 2003

Facility Name: Hillridge Facilities, Inc.

Facility Location: Kirby Lane at Watterson Trail
Jeffersontown, Jefferson County, Kentucky

Permitting Action: This is a re-issuance of a permit for a residential development.

Permit Duration: Expires December 31, 2007. This expiration date will place the facility in the correct 5-year cycle as per the Kentucky Watershed Management Framework. In this instance, the permit is scheduled for re-issuance in January 2008 for the Salt/Licking Basin Management Unit.

Receiving Stream: Fern Creek at Mile point 29.17

Stream Segment Use Classification: Warmwater Aquatic Habitat and Primary/Secondary Contact Recreation. Fern Creek is listed on the Kentucky 303(d) List of First Priority Impaired Streams for pathogens, organic enrichment/low DO, and nutrients.

Stream Low Flow Condition: 0.25 cfs

Justification of Permit Conditions:

The following regulations are pursuant to KRS 224.70-100 and KRS 224.70-110.

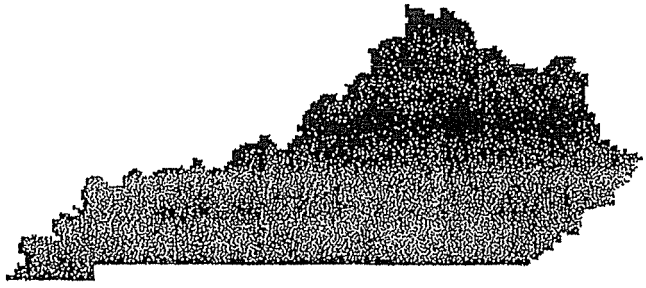
Biochemical Oxygen Demand (5-day), Total Suspended Solids, Fecal Coliform, and pH
The effluent limitations for the above permit parameters are consistent with 401 KAR 5:045.

Ammonia Nitrogen, Dissolved Oxygen, and Phosphorus
The effluent limitations for the above permit parameters are consistent with 401 KAR 5:031.

Antidegradation:

The conditions of 401 KAR 5:029, Section 1(1) have been satisfied by this permit action. A review under Section 1(2), (3), and (4) is not applicable.

KPDES



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT

PERMIT NO.: KY0036226

AUTHORIZATION TO DISCHARGE UNDER THE KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

Pursuant to Authority in KRS 224,

Hillridge Facilities, Incorporated
17825 Bradbe Road
Fisherville, Kentucky 40023

is authorized to discharge from a facility located at

Hillridge Facility
Kirby Lane at Watterson Trail
Jeffersontown, Jefferson County, Kentucky

to receiving waters named

Fern Creek at mile point 29.17

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof. The permit consists of this cover sheet, and Part I 2 pages, Part II 1 page, and Part III 1 page.

This permit shall become effective on FEB 1 2004

This permit and the authorization to discharge shall expire at midnight, December 31, 2007.

DEC 3 2003
Date Signed

Jeffrey W. Pratt, Director
Division of Water

Robert W. Logan
Commissioner

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from Outfall serial number: 001, Sanitary Wastewater.

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS lbs/day		DISCHARGE LIMITATIONS Other Units (Specify)		MONITORING REQUIREMENTS		
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.	Measurement Frequency	Sample Type	Sampling Location
Flow, Design (0.3268 mgd)	N/A	N/A	Report	Report	Continuous	Instantaneous	Influent or Effluent
Biochemical Oxygen Demand (5-day), Carbonaceous	40.9	81.8	15 mg/l	30 mg/l	1/Week	Composite	Effluent
Total Suspended Solids	81.8	164	30 mg/l	60 mg/l	1/Week	Composite	Effluent
Fecal Coliform Bacteria, N/100	N/A	N/A	200	400	1/Week	Grab	Effluent
Ammonia (as N)	5.45 24.5	10.9 49.0	2 mg/l* 9 mg/l**	4 mg/l* 18 mg/l**	1/Week	Composite	Effluent
Phosphorus	N/A	N/A	Report	Report	1/Month	Grab	Effluent
Dissolved Oxygen shall not be less than 7 mg/l					1/Week	Grab	Effluent

The pH of the effluent shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per Week by grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

The effluent shall not cause a visible sheen on the receiving water.

* Effective May 1 - October 31
** Effective November 1 - April 30

B. Schedule of Compliance

1. The permittee shall achieve compliance with all requirements on the effective date of this permit.

2. This treatment unit is temporary and in no way supersedes the need of a regional sewer system. The permittee will eliminate the discharge and treatment unit by connection to a regional sewer system when it becomes available as defined in 401 KAR 5:002.

STANDARD CONDITIONS FOR KPDES PERMIT

The permittee is also advised that all KPDES permit conditions in KPDES Regulation 401 KAR 5:065, Section 1, will apply to all discharges authorized by this permit.

This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal and local agencies.

It is the responsibility of the permittee to demonstrate compliance with permit parameter limitations by utilization of sufficiently sensitive analytical methods.

PART III

OTHER REQUIREMENTS

A. Reporting of Monitoring Results

Monitoring results must be obtained for each month and reported on a preprinted Discharge Monitoring Report (DMR) Form that will be mailed to you each quarter for the upcoming quarter. The completed DMRs for each month must be sent to the Division of Water at the address listed below (with a copy to the appropriate Regional Office) postmarked no later than the 28th day of the month following the completed quarter.

Division of Water
Louisville Regional Office
9116 Leesgate Road
Louisville, Kentucky 40222
ATTN: Supervisor

Kentucky Natural Resources and
Environmental Protection Cabinet
Dept. for Environmental Protection
Division of Water/KPDES Branch
14 Reilly Road, Frankfort Office Park
Frankfort, Kentucky 40601

B. Reopener Clause

This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under 401 KAR 5:050 through 5:080 and KRS 224, if the effluent standard or limitation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

2. Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of KRS Chapter 224 when applicable.

COMMONWEALTH OF KENTUCKY
ENERGY AND ENVIRONMENT CABINET
FILE NO. DOW-33312-_____

ENERGY AND ENVIRONMENT CABINET PLAINTIFF

VS. **ADMINISTRATIVE COMPLAINT**

HILLRIDGE FACILITIES, INC. DEFENDANT

SERVE VIA CERTIFIED MAIL :
Donald Ridge
17825 Bradbe Road
Fisherville, KY 40023
Individually and as
Registered Agent for Hillridge Facilities, Inc.

* * * * * * * * * * *

COMES THE PLAINTIFF, the Energy and Environment Cabinet (hereinafter, "the Cabinet"), through counsel, and for its complaint against the Defendant, Hillridge Facilities, Inc., (hereinafter, "Hillridge"), states the following:

1. The Cabinet is charged with the statutory duty of protecting public health and the environment pursuant to KRS Chapter 224 and the regulations promulgated pursuant thereto.

2. Hillridge is a Kentucky Corporation currently in good standing with the Secretary of State's Office. The registered agent for service of process for Hillridge is Mr. Don Ridge. Hillridge's principal office is located at 17825 Bradbe Road, Fisherville, Kentucky 40023.

3. The Cabinet issued Kentucky Pollutant Discharge Elimination System (KPDES) Permit No. KY0036226 to Hillridge which became effective on February 1, 2004. That permit expired December 31, 2007 and has not been renewed.

4. At all times relevant to this complaint, Hillridge operated a Waste Water Treatment Plant ("WWTP") located in Jefferson County near Kirby Lane at Watterson Trail. This WWTP was permitted to discharge into Fern Creek at mile point 29.17. Fern Creek is on Kentucky's 303(d) List of impaired waters. The impairment is due to pathogens and organic enrichment caused by sewage.

5. On or about February 5, 2008, an authorized representative from the DOW conducted an inspection of the above referenced facility. The inspector observed, among other things, an overflow of the sewer plant's manhole. This untreated overflow entered directly into the stream. The inspector also observed that the plant's discharge was cloudy.

6. On or about February 11, 2008, the inspector returned to the site. The inspector observed gray water and white sludge solids in the stream below the plant's effluent discharge point.

7. A records review for the facility revealed that Hillridge did not submit Discharge Monitoring Reports ("DMR's") for the months of February, March, August, and October of 2007 and the review also revealed the following violations of permit conditions: in April 2007, the plant exceeded its total suspended solids limit; in May and June 2007, the WWTP exceeded its permit limits for fecal coliform; in July 2007, the WWTP exceeded its limits for ammonia (NH3); and, in August 2007 and February 2008, there were additional fecal coliform exceedences at the plant. The plant's records also showed that the plant's maximum daily flow was exceeded in January, February, March, April, May, October, November, and December 2007.

8. On or about February 15, 2008, DOW issued a NOV to Hillridge for the conditions observed during the February 2008 inspections. A copy of the NOV is attached

hereto and incorporated herein as Plaintiff's exhibit 1. The NOV cited the following violations:

a. 401 KAR 5:015 Section 2: Failure to report a spill or discharge;

b. 401 KAR 5:065 Section 1(12)(d): Failure to submit DMR's for four (4) separate months;

c. 401 KAR 5:065 Section 1(12)(f): Failure to report a bypass;

d. 401 KAR 5:065 Section 1(5): Improper operation and maintenance;

e. 401 KAR 5:005 Section 11(1): Failure to properly operate the disinfection system to meet permit limits;

f. 401 KAR 5:005 Section 12: Improper operation of a flow measuring device;

g. 401 KAR 5:065 Section 1(1)(a): Failure to operate facility within permit limits;

h. 401 KAR 5:031 Section 2(now recodified 401 KAR 10:030): Degradation of the waters or the Commonwealth;

i. 401 KAR 5:055 Section 1: Failure to prevent non-permitted discharges of untreated waste water;

9. Between March 2005 and March 2008, DOW documented approximately 30 bypasses or overflows at the plant or the manhole. Each of these bypasses constitutes a violation of 401 KAR 5:065 Section 1(13)(c).

10. As a result of the excessive number of overflows and the facility's history of violations, some of which are outside the statute of limitations, the Cabinet placed Hillridge on the state's Sewer Sanction list. As a result of this action, Hillridge is prohibited from allowing any sewer line extensions or "taps on" to their existing sewer lines unless an exemption is

granted.

WHEREFORE, the Cabinet demands the following relief:

1. That the Defendant be ordered to pay a civil penalty of twenty-five thousand dollars ($25,000) per day per violation for the violations indentified in paragraph 8 above pursuant to KRS 224.99-010(1);

2. That the Defendant be ordered to comply with the following remedial measures:

a. Commencing immediately, Hillridge shall report to the Cabinet all spills, bypass discharges, upset condition discharges or other releases of substances from its facilities identified above which would result in or contribute to the pollution of the waters of the Commonwealth, including emergency and accidental releases, in accordance with KRS 224.01-400, 401 KAR 5:015, and 401 KAR 5:065;

b. Hillridge shall, at all times, provide proper operation and maintenance to its WWTP and the sewage collection system in accordance with 401 KAR 5:065 and KPDES Permit No. KY0036226;

c. Hillridge shall, at all times, maintain the services of a certified WWTP operator who is qualified to operate a WWTP of a classification equal to or higher than the Hillridge WWTP;

d. Hillridge shall conduct proper sampling, monitoring, and reporting pursuant to KPDES Permit No. KY0036226 and submit the DMR's to DOW's central office and DOW's Louisville Regional Office by the 28th day of the month following the compliance period;

e. Hillridge shall, at all times, apply proper disinfection and dechlorination of the effluent being discharged from its facility in accordance with 401 KAR 5:065 and KPDES Permit No. KY0036226;

f. Commencing immediately, Hillridge shall install a flow measuring device that can accurately measure all flow entering the WWTP;

g. Hillridge shall review, update, and implement a Best Management Practices (BMP) plan in accordance with KPDES Permit No. KY0036226. The revised BMP plan shall be submitted to the Division of Enforcement and DOW's Louisville Regional Office;

h. Hillridge shall develop and submit a Groundwater Protection Plan (GPP) to DOW for review and approval in accordance with 401 KAR 5:037;

i. Hillridge shall develop, submit, and implement a Sanitary Sewer Overflow Plan (SSOP). The SSOP shall be submitted to Director, Division of Enforcement, 300 Fair Oaks Lane, Frankfort, KY, 40601, and shall include, but not be limited to:

1. A map of the entire collection system, including the location of any known sanitary sewer overflows (SSO);
2. Frequency of overflows;
3. Estimate of the annual volume of overflows;
4. Type of overflow (manhole, pump station, overflow pipe, etc.);
5. Receiving stream for the overflow;
6. Immediate area of overflow and downstream land use, including potential for public health concerns;

7. A description of any previous (within the last 5 years), current, or proposed rehabilitation or construction work to remediate or eliminate overflows;
8. A schedule for the elimination of overflows;
9. A plan that addresses Hillridge's approach to eliminating any sources of private inflow and infiltration (I&I), such as down spouts, sump pumps, roof drains, and other illegal connections to the system. The plan should include a method of enforcement for violations, a schedule to address existing illegal connections, and a plan to prevent future illegal connections.

j. Hillridge shall submit a Sewer Overflow Response Plan (SORP) to the Cabinet. The SORP shall be submitted to the Director, Division of Enforcement, 300 Fair Oaks Lane, Frankfort, KY, 40601, and shall include, but not be limited to:

1. An overflow response procedure (designated responders, response times, cleanup methods, etc.);
2. A regulatory agency notification procedure;
3. A manhole and pump station inspection schedule.

k. Hillridge shall submit to the Cabinet a Sewer System Evaluation Survey (SSES) certified by a professional engineer. The SSES shall be submitted to the Director, Division of Enforcement, 300 Fair Oaks Lane, Frankfort, KY, 40601, and shall include, but not be limited to:

1. An inflow and infiltration (I&I) study to determine the sources

of I&I into the facility's collection system;

2. A written report of the I&I study to the Cabinet's Division of Enforcement for review and acceptance. The I&I report shall include a schedule of recommended corrective actions to be undertaken to reduce or eliminate the identified I&I problems within the sewage collection system serving the facility;
3. Detailed maps, sketches, and schematic diagrams of the current sewage collection system;
4. A determination of whether it is more cost effective to remove the I&I as compared to transporting and treating it.

1. Hillridge shall comply with all requirements of KRS Chapter 224 and 401 KAR Chapter 5, and KPDES Permit No. KY0036226.

Respectfully submitted,

ENERGY AND
ENVIRONMENT CABINET

JOSH W. NACEY
Office of General Counsel
200 Fair Oaks Lane, 1st Floor
Frankfort, Kentucky 40601
Telephone No. (502) 564-3410
Facsimile No. (502) 564-9003

COUNSEL FOR PLAINTIFF

STEVEN L. BESHEAR
GOVERNOR

ROBERT D. VANCE
SECRETARY

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water
9116 Leesgate Rd
Louisville, KY 40222-5084
www.kentucky.gov

February 15, 2008

Certified No. 7005 0390 0003 0864 0186
Return Receipt Requested

Donald Ridge
17825 Bradbe Rd
Fisherville, KY 40023

Re: Notice of Violation
AI ID: 2067
AI Name: Hillridge Facilities Inc
Activity ID: ENV20080001
Permit No. KY0036226
Jefferson County, KY

Dear Donald Ridge:

The Kentucky Department for Environmental Protection (DEP) has issued the enclosed Notice of Violation for violations discovered at your facility. Please review this Notice of Violation carefully to ensure that all remedial measures are completed by the specified deadlines. You will be required to attend an administrative enforcement meeting to be scheduled by the Division of Enforcement. Additional remedial measures and deadlines will be determined at that time.

Your cooperation and attention to this matter is appreciated. If you have any questions; please contact me at 502-429-7122.

Sincerely,

Brad Trivette

Mr. Brad Trivette,
Environmental Inspector III
Division of Water

Enclosure

EXHIBIT
Plaintiff's 4

COMMONWEALTH OF KENTUCKY
ENVIRONMENTAL AND PUBLIC PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water

NOTICE OF VIOLATION

To: Donald Ridge
17825 Bradbe Rd
Fisherville, KY 40023

AI Name: Hillridge Facilities Inc **AI ID:** 2067 **Activity ID:** ENV20080001
County: Jefferson
Enforcement Case ID:
Date(s) Violation(s) Observed: 2/5/2008 & 02/11/2008

This is to advise that you are in violation of the provisions cited below:

1 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
Whenever, by reason of emergency or accident, a spill or discharge occurs which results in pollution of the waters of the Commonwealth, the Division of Water shall be notified by the most rapid means available. [401 KAR 5:015 Section 2]

Description of Non Compliance:
The manhole at the sewer plant was overflowing at the time of inspection. The surge basin was being pumped directly into the chlorine contact tank bypassing secondary treatment. The operator told me it was set up on a float switch and comes on automatically. It as never been reported as a bypass.

The remedial measure(s), and date(s) to be completed by are as follows:
Immediately report all overflows and bypasses from the sewer collection system or the waste water treatment plant. [401 KAR 5:015 Section 2, 401 KAR 5:065 Section 1(12)(f)]

2 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
Reporting Requirements - Monitoring Reports: Monitoring results shall be reported at the intervals specified in the permit. [401 KAR 5:065 Section 1(12)(d)]

Description of Non Compliance:
DMR's have not been received for the months of Feb., Mar, Aug., Oct. of 2007.

The remedial measure(s), and date(s) to be completed by are as follows:
Submit monitoring reports to the Division of Water by the 28th day of following month of the compliance period. [401 KAR 5:065 Section 1(12)(d)]

3 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
Reporting Requirements - Monitoring Reports: Monitoring results shall be reported on a Discharge Monitoring Report (DMR). [401 KAR 5:065 Section 1(12)(d)1]

Description of Non Compliance:
DMR's have not been received for the months of Feb., Mar, Aug., Oct. of 2007.

The remedial measure(s), and date(s) to be completed by are as follows:
Submit monitoring reports to the Division of Water by the 28th day of following month of the compliance period. [401 KAR 5:065 Section 1(12)(d)]

4 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
Twenty-four (24) hour reporting. The permittee shall follow the provisions of 401 KAR 5:015 and shall orally report any noncompliance which may endanger health or the environment, within 24 hours from the

time the permittee becomes aware of the circumstances. This report shall be in addition to and not in lieu of any other reporting requirement applicable to the noncompliance. [401 KAR 5:065 Section 1(12)(f)]

Description of Non Compliance:
The manhole at the sewer plant was overflowing at the time of inspection. The surge basin was being pumped directly into the chlorine contact tank bypassing secondary treatment. The operator told me it was set up on a float switch and comes on automatically. It as never been reported as a bypass.

The remedial measure(s), and date(s) to be completed by are as follows:
Immediately report all overflows and bypasses from the sewer collection system or the waste water treatment plant. [401 KAR 5:015 Section 2, 401 KAR 5:065 Section 1(12)(f)]

5 Violation Description for Subject Item GINS0000000001(KPDES Individual):
Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls, and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. [401 KAR 5:065 Section 1(5)]

Description of Non Compliance:
Some of the bypasses are not being reported. On the day of the inspection the flow was very high and the smaller plants clarifier was losing some solids. The surge tank was bypassing directly to the chlorine tank to reduce flow to the plant. The chlorine was not sufficient for the flow. The fecal sample taken of the effluent resulted in > 1,200 colonies/ 100 ml. The collection system appears to have I & I problems during wet weather. The flow on the 5th and 6th was over the top of the v notch weir. The manhole at the plant overflowed both days. There have been repeated reports of overflows at the manhole located at the sewer plant. The dry weather flow is usually <200,000 gallons. The plant usually exceeds the design flow of 362,000 during wet weather. The max. daily flow was exceeded for the following months in 2007. Jan, Feb, Mar, Apr, May, Oct, Nov, Dec.

The remedial measure(s), and date(s) to be completed by are as follows:
Use proper operations and maintenance practices that will ensure compliance with all applicable regulations and KPDES permit requirements. [401 KAR 5:065 Section 1(5)]

6 Violation Description for Subject Item GINS0000000001(KPDES Individual):
All wastewater treatment plants shall have a disinfection process which meets the following requirements: An ultraviolet disinfection system designed to treat the anticipated peak hourly flow; a chlorination system with a flow or demand proportional feed system. The chlorine contact tank shall have a minimum detention time of thirty (30) minutes based on the average flow, or fifteen (15) minutes based on the peak hourly flow, whichever requires the larger tank size. Wastewater treatment plants shall also have a dechlorination system with a flow or demand proportional feed system if necessary to meet the effluent limits; or a chlorination system with a manually controlled feed system and a flow equalization basin designed to eliminate the diurnal flow variations. [401 KAR 5:005 Section 11(1)]

Description of Non Compliance:
There was a fecal violation in May 2007. The fecal sample taken of the effluent on 2/5/08 resulted in > 1,200 colonies/ 100 ml.

The remedial measure(s), and date(s) to be completed by are as follows:
Properly operate the disinfection system to meet permit limits. [401 KAR 5:005 Section 11(1)]

7 Violation Description for Subject Item GINS0000000001(KPDES Individual):
The flow measuring device shall measure all flow received at the wastewater treatment plant. An indicating, recording, and totalizing flow measuring device shall be installed at each large wastewater treatment plant. [401 KAR 5:005 Section 12]

Description of Non Compliance:
During very wet weather the flow is over the top of the V-notch weir and can not be measured properly. The flow was over the top of the weir 2-5-08 and on 2-6-08.

The remedial measure(s), and date(s) to be completed by are as follows:
Install a flow measuring device that can measure all of the flow entering the waste water facility. [401 KAR 5:005 Section 12]

8 Violation Description for Subject Item GINS0000000001(KPDES Individual):
Standard Permit Conditions: The permittee is also advised that all KPDES permit conditions in KPDES Regulation 401 KAR 5:065, Section 1 will apply to all discharges authorized by this permit. This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal, and local agencies. It is the responsibility of the permittee to demonstrate compliance with permit parameter limitations by utilization of sufficiently sensitive analytical methods. [401 KAR 5:065 Section 1(1)(a)]

Description of Non Compliance:
DMR, violations for 2007. June-fecal, July-NH3, Apr-TSS and Aug-fecal. The fecal sample taken on 2-5-08 resulted in >1,200 colonies/ 100ml.

The remedial measure(s), and date(s) to be completed by are as follows:
Use proper operations and maintenance practices that will ensure compliance with all applicable regulations and KPDES permit limits. [401 KAR 5:065 Section 1(1)(a)]

9 Violation Description for Subject Item GINS0000000001(KPDES Individual):
There shall be no discharge that causes the surface waters of the Commonwealth to be aesthetically or otherwise degraded by substances that: (a) settle to form objectionable deposits; (b) float as debris, scum, oil, or other matter to form a nuisance; (c) produce objectionable color, odor, taste, turbidity; (d) injure, are chronically or acutely toxic to or produce adverse physiological or behavioral responses in humans, animals, fish and other aquatic life. [401 KAR 5:031 Section 2]

Description of Non Compliance:
The high flow at the sewer plant during the period of 2-5-08 to 2-11-08 resulted in grey water and some lite sludge solids being discharged to the stream. A citizen complaint concerning grey water discoloring the stream was sent the Louisville regional office on 2-10-08 and on 2-11-08. The investigation on 2-11-08 confirmed grey water and a dusting of light sludge solids in the stream below the plants effluent discharge point. The plants discharge was cloudy on the 2-5-08 and was clear at 2:00 pm on 2-11-08. Joe Sanders, the plant operator, confirmed via phone conversation on 2-12-08 that the air at the plant had been reduced for several days due to the high flow. The reduction in air for the aeration basins had resulted in some grey water discharge. The stream below the plant was still discolored grey at the time of my 2-11-08 complaint investigation. The time was 2:00 pm to 4:00 pm.The water upstream of the plant was very clear and free of any sludge deposits.

The remedial measure(s), and date(s) to be completed by are as follows:
Immediately stop causing degradation to the waters of the Commonwealth of Kentucky. [401 KAR 5:031 Section 2(a,c)]

10 Violation Description for Subject Item GINS0000000001(KPDES Individual):

Applicability of the KPDES Requirements. The KPDES program shall require a permit to discharge pollutants from a point source into waters of the Commonwealth. Compliance with the KPDES program requirements shall constitute compliance with the operational permit requirements of 401 KAR 5:005 and requirements related to the operational permit. Failure to obtain a KPDES permit shall not relieve a discharger subject to the KPDES program from complying with the applicable performance standards of that program, 401 KAR 5:050 to 5:080, inclusive. [401 KAR 5:055 Section 1]

Description of Non Compliance:
The system has repeated overflows of untreated wastewater from the manhole at the plant. This overflow goes directly to the stream.

The remedial measure(s), and date(s) to be completed by are as follows:
Immediately stop all non-permitted discharges of untreated wastewater from entering the waters of the Commonwealth of Kentucky. [401 KAR 5:055 Section 1]

1 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
1

The KPDES program requires permits for the discharge of pollutants from a point source into the waters of the Commonwealth. [401 KAR 5:055 Section 1]

Description of Non Compliance:
The facility does not hold an active KPDES permit. The permit expired Dec. 31, 2007. The new permit has not been issued because a regional sewer system is now available.

The remedial measure(s), and date(s) to be completed by are as follows:
Stop all non-permitted discharges of wastewater from entering the waters of the Commonwealth of Kentucky. Comply with all of the terms of the KPDES permit and connect to the regional municipal sewer. [401 KAR 5:055 Section 1]

1 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
2

The permittee shall comply with all conditions of the permit. Any permit non-compliance shall constitute a violation of KRS 224, among which shall be the following remedies: Enforcement action, permit revocation, revocation and reissuance, or modification; or denial of permit renewal application. [401 KAR 5:065 Section 1(1)(a)]

Description of Non Compliance:
The facility has failed to comply with the terms of the permit. A regional sewer system is now available. The owner of the sewer system has failed to connect to the regional sewer system.

The remedial measure(s), and date(s) to be completed by are as follows:
Stop all non-permitted discharges of wastewater from entering the waters of the Commonwealth of Kentucky. Comply with all of the terms of the KPDES permit and connect to the regional municipal sewer. You will be required to attend an administrative enforcement meeting to be scheduled by the Division of Enforcement. Additional remedial measures will be determined at that time.
[401 KAR 5:055 Section 1]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to $25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

If you have questions or need further information, write or call the undersigned:

Division of Water
Louisville Regional Office
9116 Leesgate Rd
Louisville, KY 40222-5084
502-429-7122(8:00 AM – 4:30 PM)
Mr. Brad Trivette, Environmental Inspector III

Brad Trivette

Issued By: _____
Mr. Brad Trivette, Environmental Inspector III

Date: February 15, 2008

Charles A. Roth

Issued By: _____
Mr. Charles Roth, Environmental Control Supervisor
Date: February 15, 2008

How Delivered: Certified Certified/Registered # 7005 0390 0003 0864 0186

STEVEN L. BESHEAR
GOVERNOR

LEONARD K. PETERS
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF ENFORCEMENT
300 FAIR OAKS LANE
FRANKFORT KENTUCKY 40601
www.kentucky.gov

February 19, 2010

Certified No. 7007 0710 0004 2989 9591
Return Receipt Requested

Mr. Donald Ridge
17825 Bradbe Road
Fisherville, KY 40023

RE: Sewer Sanction in place on
Hillridge Facilities, Inc. WWTP
DOW 080111
AI ID: 2067
KPDES NO. KY0036226
Jefferson County, Kentucky

Dear Mr. Ridge:

This letter is to notify you that the Division of Enforcement has placed a sewer sanction on the Hillridge Facilities wastewater treatment plant and sewage collection system for the following reasons:

1. Our records indicate that the wwtp and the sewer collection system has had an excessive number of overflows and the facility has failed to develop and implement a Sanitary Sewer Overflow Plan (SSOP) to address the Inflow, Infiltration (I&I) within the collection system; and

2) The facility's Kentucky Pollutant Discharge Elimination System (KPDES) Permit Number KY0036226 was suspended by the Cabinet on April 30, 2008.

State regulations allow the Cabinet to place the Hillridge Facilities wastewater system on sewer sanction to ensure appropriate measures are taken to protect the waters of the Commonwealth. The sewer sanction once in place will not allow any sewer line extensions or taps on to existing sewer lines, including single family dwellings, to occur without an exemption approved by this office. These requests for exemption to the sanction should be submitted to Greg Wilson at the Division of Enforcement using the attached Sewer Sanction Exemption Request Form. All exemption requests submitted must be signed by a representative of the municipality, facility, or agency receiving the

wastewater. These requests are reviewed on a case-by-case basis and approved or denied based on the nature of the request, the condition of the system, and the progress the facility has made in complying with all pertinent regulations, permits, and orders.

To have the sewer sanction lifted, the Hillridge facility must meet with the Division of Water and the Division of Enforcement to outline remedial measures necessary to address capacity, Inflow Infiltration (I/I) problems and the excessive number of overflows that occur within the sewer collection system.

If you would like to arrange a meeting with this office or if you have any questions please do not hesitate to contact Greg Wilson at 502-564-2150, extension 168 or e-mail at greg.wilson @ky.gov.

Sincerely,

Jeffrey Cummins, Assistant Director
Division Enforcement

JAC/jgw

Enclosure

Cc: DOW Louisville Regional Office- Charlie Roth
Division of Plumbing
Main File
DOW - Hamid Beykzadeh
KPDES File

STEVEN L. BESHEAR
GOVERNOR

LEONARD K. PETERS
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

Division of Water
9116 Leesgate Rd
Louisville, KY 40222-5084
www kentucky.gov

January 20, 2011

Certified No. 7008 1140 0003 3813 2966
Return Receipt Requested

Donald Ridge
17825 Bradbe Rd
Fisherville, KY 40023

Re: Notice of Violation
AI ID: 2067
AI Name: Hillridge Facilities Inc
Activity ID: ENV20110001
Permit No. KY0036226
Jefferson County, KY

Dear Mr. Ridge:

The Kentucky Department for Environmental Protection (DEP) has issued the enclosed Notice of Violation for violations discovered at your facility on 1/5/2011. Please review this Notice of Violation carefully to ensure that all remedial measures are completed by the specified deadlines.

Your cooperation and attention to this matter is appreciated. If you have any questions, please contact me at 502-429-7122.

Sincerely,

Brad Trivette

Mr. Brad Trivette,
Environmental Inspector III
Division of Water

Enclosure

MSD EXHIBIT 6

COMMONWEALTH OF KENTUCKY
ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water

NOTICE OF VIOLATION

To: Donald Ridge
17825 Bradbe Rd
Fisherville, KY 40023

AI Name: Hillridge Facilities Inc **AI ID:** 2067 **Activity ID:** ENV20110001
Discovery ID: CIN20110001 **County:** Jefferson
Enforcement Case ID:
Date(s) Violation(s) Observed: 01/05/2011

This is to advise that you are in violation of the provisions cited below:

1 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
The KPDES program requires permits for the discharge of pollutants from a point source into the waters of the Commonwealth. [401 KAR 5:055 Section 2].

Description of Non Compliance:
The facility does not hold an active KPDES permit. The permit expired in Dec. 2007. The Division of Water will not reissue the permit because a regional municipal system is now available.

The remedial measure(s), and date(s) to be completed by are as follows:
Cease all unpermitted discharges and connect the privately owned system to the Regional municipal collection system as determined by the Division of Enforcement. [401 KAR 5:055 Section 2]

2 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls, and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. [40 CFR 122.41(e)]. [401 KAR 5:065 Section 2(1)]

Description of Non Compliance:
The facility is not being properly operated and maintained as required. There are maintenance issues at the plant. The sludge collector on the concrete plant is down for repairs. The air has been turned off to keep solids from leaving. The aeration basin and clarifier are cloudy and dark. The parts have been ordered but may take several weeks to arrive.
The air was recently off at the metal plant. The aeration basin was also darker than desired. There were also large sludge clumps coming up behind the weirs. The air is on now. The final effluent is cloudy.

The remedial measure(s), and date(s) to be completed by are as follows:
The permittee must, at all times, properly operate & maintain the facility. With proper approval(s) from the Division of Water, upgrade/update the facility in order to meet the regulatory requirements and facility permit conditions. Within thirty (30) days of the receipt of this notice, the permittee shall submit a written notification to the undersigned that the permittee complies with all requirements of its permit. Failure to comply with the remedial measures or repeated violations of this requirement may subject you and/or your company to an immediate referral to the Division of Enforcement. [401 KAR 5:065 Section 2(1)]

3 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
All wastewater treatment plants shall have a disinfection process which meets the following requirements: An ultraviolet disinfection system designed to treat the anticipated peak hourly flow; a chlorination system with a flow or demand proportional feed system. The chlorine contact tank shall have a minimum detention time of thirty (30) minutes based on the average flow, or fifteen (15) minutes based on the peak hourly flow, whichever requires the larger tank size. Wastewater treatment plants shall also have a dechlorination system with a flow or demand proportional feed system if necessary to meet the effluent limits; or a chlorination system with a manually controlled feed system and a flow equalization basin designed to eliminate the diurnal flow variations. Tablet type chlorination equipment shall not be used in an intermediate or large WWTP. [401 KAR 5:005 Section 11].

Description of Non Compliance:
The facility has failed to properly maintain and / or operate the disinfection unit.
There have been three TRC violations in 2010.
There were two fecal violations for 2010.

The remedial measure(s), and date(s) to be completed by are as follows:
The permittee must immediately maintain and operate the disinfection unit to allow for compliance with permit conditions. Within thirty (30) days of the receipt of this notice, the permittee shall submit a written notification to the undersigned that the permittee complies with all requirements of its permit. Failure to comply with the remedial measures or repeated violations of this requirement may subject you and/or your company to an immediate referral to the Division of Enforcement. [401 KAR 5:005 Section 11]

4 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and KRS 224 and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. [40 C.F.R. 122.41(a)]. [401 KAR 5:065 Section 2(1)]

Description of Non Compliance:

The facility has failed to comply with the effluent limitations contained in the permit.
DMR violations for 2010:
Jan- Fecal and TRC
May-D.O., NH3 and TRC
June-D.O., NH3,TRC,Fecal, and B.O.D.
July- D.O. and NH3
Aug- D.O.

The remedial measure(s), and date(s) to be completed by are as follows:
The permittee must comply with effluent limitations and all conditions of the KPDES permit. Within thirty (30) days of the receipt of this notice, the permittee shall submit a written notification to the undersigned that the permittee complies with all requirements of its permit. Failure to comply with the remedial measures or repeated violations of this requirement may subject you and/or your company to an immediate referral to the Division of Enforcement. [401 KAR 5:065 Section 2(1)]

5 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
No person shall directly, or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run otherwise discarged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110].

Description of Non Compliance:
Pollutants have entered and contributed to the pollution of the waters of the Commonwealth
The stream is cloudy below the effluent outfall. It is very clear upstream of the plants outfall.

The remedial measure(s), and date(s) to be completed by are as follows:
Immediately cease all activity, which is contributing or has contributed to the pollution of the waters of the Commonwealth. Within thirty (30) days of the receipt of this notice, the permittee/responsible party shall submit a plan of action and a schedule of implementation to the undersigned describing the necessary measures taken to address the non-compliance. Failure to comply with the remedial measures or repeated violations of this requirement may subject you and or your company to an immediate referral to the Division of Enforcement. [KRS 224.70-110]

6 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
Surface waters shall not be aesthetically or otherwise degraded. [401 KAR 10:031 Section 2]. [401 KAR 10:031 Section 2]

Description of Non Compliance:
The waters of the Commonwealth have been degraded.
The stream is cloudy below the effluent outfall. It is very clear upstream of the plants outfall.

The remedial measure(s), and date(s) to be completed by are as follows:
Immediately cease all discharges that are aesthetically or otherwise degrading the waters of the Commonwealth. The effluent must be brought into compliance so as to eliminate stream degradation. Within thirty (30) days of the receipt of this notice, the permittee/responsible party shall submit a plan of action and a schedule of implementation to the undersigned describing the necessary measures taken to address the non-compliance. Failure to comply with the remedial measures or repeated violations of this requirement may subject you and or your company to an immediate referral to the Division of Enforcement. [401 KAR 10:031 Section 2]

7 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and KRS 224 and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. [40 C.F.R. 122.41(a)]. [401 KAR 5:065 Section 2]

Description of Non Compliance:
The facility has failed to comply with the terms of the permit. The permitte has not connected the sewer system to the municipal regional system which is now available.

The remedial measure(s), and date(s) to be completed by are as follows:
Comply with all conditions of the KPDES permit. Cease all unpermitted discharges and connect the privately owned system to the Regional municipal collection system as determined by the Division of Enforcement. [401 KAR 5:065 Section 2]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to $25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

If you have questions or need further information, write or call the undersigned

Louisville Regional Office
9116 Leesgate Rd
Louisville, KY 40222-5084
502-429-7122 (8:00 AM – 4:30 PM)
Mr. Brad Trivette, Environmental Inspector III

Brad Trivette

Issued By: _____
Mr. Brad Trivette, Environmental Inspector III

Date: January 20, 2011

Charles A. Roth

Issued By: _____
Mr. Charles Roth, Environmental Control Supervisor
Date: January 20, 2011

How Delivered: Certified Certified/Registered # 7008 1140 0003 3813 2966

STEVEN L. BESHEAR
GOVERNOR

LEONARD K. PETERS
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF ENFORCEMENT
300 FAIR OAKS LANE
FRANKFORT KENTUCKY 40601
www.kentucky.gov

March 8, 2010

CERTIFIED MAIL No. 7008 1830 0003 6510 1603
Return Receipt Requested

Hillridge Facilities Inc.
Donald Ridge
17825 Bradbe Rd
Fisherville, KY 40023

Re: Notice of Violation
AI ID: 2067
AI Name: Hillridge Facilities Inc
Activity ID: ENV20100001
Facility No. KY0036226
Jefferson County, KY

Dear Mr. Ridge:

The Kentucky Department for Environmental Protection (DEP) has issued the enclosed Notice of Violation for violations discovered at your facility. Please review this Notice of Violation carefully to ensure that all remedial measures are completed by the specified deadlines.

Your cooperation and attention to this matter is appreciated. If you have any questions, please contact me at (502) 564-2150 extension 266.

Sincerely,

Lori E. Conway

Lori E. Conway
Environmental Enforcement Specialist
Compliance and Operations Branch

Enclosure

MSD EXHIBIT 7

ALI

COMMONWEALTH OF KENTUCKY
ENERGY and ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Enforcement

NOTICE OF VIOLATION

To: Hillridge Facilities Inc.
Donald Ridge
17825 Bradbe Rd
Fisherville, KY 40023

AI Name: Hillridge Facilities Inc **AI ID:** 2067 **Activity ID:** ENV20100001
County: Jefferson
Facility Number: KY0036226
Date(s) Violation(s) Observed: 03/03/2010

This is to advise that you are in violation of the provisions cited below:

1 Violation Description for Subject Item AIOO00000002067():
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

Description of Non Compliance:
Failing to comply with 40 CFR 122.41(a) as adopted by 401 KAR 5:065 Sec. 2(1)(a) by failing to comply with the Kentucky Pollutant Discharge Elimination System (KPDES) permit limits for KY0036226, Outfall 001-1, for **Total Ammonia Nitrogen (TAN)** during the months of August of 2008, and for the months of May, July and September of 2009.

The permitted limits for **TAN Loading** during the months of May through October are a 30-day average of 5.45 lbs/dy and a daily maximum of 10.9 lbs/dy. The reported results were a 30-day average of 8.387 lbs/dy and a daily maximum of 12.63 lbs/dy for May of 2009; a 30-day average of 10.51 lbs/dy and a daily maximum of 13.04 lbs/dy for July of 2009; and a daily maximum of 12.90 lbs/dy for September of 2009.

The permitted limits for **TAN Concentration** during the months of May through October are a 30-day average of 2 mg/l and a daily maximum of 4 mg/l. The reported results were daily maximum of 5.20 mg/l for August of 2008; a 30-day average of 3.80 mg/l and a daily maximum of 6.50 mg/l for May of 2009; a 30-day average of 7.68 mg/l and a daily maximum of 8.90 mg/l for July of 2009; and a 30-day average of 3.08 mg/l and a daily maximum of 7.00 mg/l for September of 2009.

The remedial measure(s), and date(s) to be completed by are as follows:
Hillridge Facilities Inc. shall comply with the terms and conditions of KPDES Permit #KY0036226. [KRS 224.70-110]

2 Violation Description for Subject Item AIOO00000002067():
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

Description of Non Compliance:
Failing to comply with 40 CFR 122.41(a) as adopted by 401 KAR 5:065 Sec. 2(1)(a) by failing to meet the Kentucky Pollutant Discharge Elimination System (KPDES) permit limit for KY0036226, Outfall 001-1, for **Total Residual Chlorine (TRC)** during the months of September and October of 2009, and for the month of March of 2009.

The permitted limits for TRC Concentration are a 30-day average of 0.015 mg/l and a daily maximum of 0.019 mg/l. The reported results were a 30-day average of 0.050 mg/l and a daily maximum of 0.14 mg/l for September of 2008; a 30-day average of 0.26 mg/l and a daily maximum of 0.80 mg/l for October of 2008; and a 30-day average of 0.41 mg/l and a daily maximum of 1.95 mg/l for March of 2009.

The remedial measure(s), and date(s) to be completed by are as follows:
Hillridge Facilities Inc. shall comply with the terms and conditions of KPDES Permit #KY0036226. [KRS 224.70-110]

3 Violation Description for Subject Item AIOO0000002067():
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

Description of Non Compliance:
Failing to comply with 40 CFR 122.41(a) as adopted by 401 KAR 5:065 Sec. 2(1)(a) by failing to comply with the Kentucky Pollutant Discharge Elimination System (KPDES) permit limits for KY0036226, Outfall 001-1, for **Dissolved Oxygen (DO)** during the month of February of 2009.

The permitted limit for DO Concentration is a minimum of 7 mg/l. The reported result was a minimum of 5.8 mg/l.

The remedial measure(s), and date(s) to be completed by are as follows:
Hillridge Facilities Inc. shall comply with the terms and conditions of KPDES Permit #KY0036226. [KRS 224.70-110]

4 Violation Description for Subject Item AIOO0000002067():
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

Description of Non Compliance:
Failing to comply with 40 CFR 122.41(a) as adopted by 401 KAR 5:065 Sec. 2(1)(a) by failing to comply with the Kentucky Pollutant Discharge Elimination System (KPDES) permit limits for KY0036226, Outfall 001-1, for **Total Suspended Solids (TSS)** during the month of February of 2009.
The permitted limits for TSS Concentration are a 30-day average of 30 mg/l and a daily maximum of 60 mg/l. The reported result was a daily maximum of 67 mg/l.

The remedial measure(s), and date(s) to be completed by are as follows:
Hillridge Facilities Inc. shall comply with the terms and conditions of KPDES Permit #KY0036226. [KRS 224.70-110]

5 Violation Description for Subject Item AIOO0000002067():
No person shall, directly or indirectly, throw, drain, run or otherwise discharge into any of the waters of the Commonwealth, or cause, permit or suffer to be thrown, drained, run or otherwise discharged into such waters any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth in contravention of the standards adopted by the cabinet or in contravention of any of the rules, regulations, permits, or orders of the cabinet or in contravention of any of the provisions of this chapter. [KRS 224.70-110]

Description of Non Compliance:
Failing to comply with 40 CFR 122.41(a) as adopted by 401 KAR 5:065 Sec. 2(1)(a) by failing to comply with the Kentucky Pollutant Discharge Elimination System (KPDES) permit limits for KY0036226, Outfall 001-1, for **Biochemical Oxygen Demand (BOD)** during the month of February of 2009.

The permitted limits for BOD Loading are a 30-day average of 40.9 lbs/dy and a daily maximum of 81.8 lbs/dy. The reported result was a daily maximum of 82.32 lbs/dy.

The permitted limits for BOD Concentration are a 30-day average of 15 mg/l and a daily maximum of 30 mg/l. The reported results were a 30-day average of 16 mg/l and a daily maximum of 35 mg/l.

The remedial measure(s), and date(s) to be completed by are as follows:
Hillridge Facilities Inc. shall comply with the terms and conditions of KPDES Permit #KY0036226. [KRS 224.70-110]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to $25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection
Division of Enforcement
300 Fair Oaks Lane
Frankfort, KY 40601
502-564-2150 ext. 266 (8:00 AM – 4:30 PM)
Lori E. Conway, Enforcement Specialist

AI: Hillridge Facilities Inc -- 2067

Issued By: _____

Lori E. Conway
Environmental Enforcement Specialist
Compliance and Operations Branch
Date: March 5, 2010

Issued By: _____

Mark J. Cleland, M.P.A., R.E.H.S.
Environmental Control Manager
Compliance and Operations Branch
Date: March 5, 2010

How Delivered: Certified Mail Certified/Registered # 7008 1830 0003 6510 1603

STEVEN L. BESHEAR
GOVERNOR

LEONARD K. PETERS
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF ENFORCEMENT
300 FAIR OAKS LANE
FRANKFORT KENTUCKY 40601
www.kentucky.gov

October 28, 2008

CERTIFIED MAIL No. 7007 0710 0004 2988 5709
Return Receipt Requested

Hillridge Facilities Inc.
Donald Ridge
17825 Bradbe Rd
Fisherville, KY 40023

Re: Notice of Violation
AI ID: 2067
AI Name: Hillridge Facilities Inc
Activity ID: ENV20080003
Facility No. KY0036226
Jefferson County, KY
Case No. DOW 080111

Dear Mr. Ridge:

The Kentucky Department for Environmental Protection (DEP) has issued the enclosed Notice of Violation for violations discovered at your facility. Please review this Notice of Violation carefully to ensure that all remedial measures are completed by the specified deadlines.

Your cooperation and attention to this matter is appreciated. If you have any questions, please contact Lori Conway of my staff at (502) 564-2150 at extension 266.

Sincerely,

Lori Conley

for Mark J. Cleland, M.P.A., R.E.H.S.
Environmental Control Manager
Compliance and Operations Branch

MJC/lec

Enclosure

MSD EXHIBIT 8

COMMONWEALTH OF KENTUCKY
ENERGY and ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Enforcement

NOTICE OF VIOLATION

To: Hillridge Facilities Inc.
Donald Ridge
17825 Bradbe Rd
Fisherville, KY 40023

AI Name: Hillridge Facilities Inc **AI ID:** 2067 **Activity ID:** ENV20080003
County: Jefferson
Enforcement Case ID: DOW 080111
Facility Number: KY0036226
Date(s) Violation(s) Observed: 10/22/2008

This is to advise that you are in violation of the provisions cited below:

1 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
Conditions Applicable to all KPDES Permits. All conditions applicable to KPDES permits shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to these administrative regulations shall be given in the permit. In addition to conditions required in all KPDES permits, the cabinet shall establish conditions as required on a case-by-case basis under Section 2 of this administrative regulation and 401 KAR 5:070. Duty to Comply, General Requirement: The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of KRS Chapter 224, among which are the following remedies: enforcement action, permit revocation, revocation and reissuance, or modification; or denial of a permit renewal application. [401 KAR 5:065 Section 1(1)(a)]

Description of Non Compliance:
Failing to comply with the Kentucky Pollutant Discharge Elimination System (KPDES) permit limits for KY0036226, Outfall 001-1, for Total Suspended Solids (TSS) during the month of April 2008. The permitted limits for TSS Concentration are a 30-day average of 30 mg/l and a daily maximum of 60 mg/l. The reported result was a daily maximum of 89 mg/l.

The remedial measure(s), and date(s) to be completed by are as follows:
Hillridge Facilities Inc. shall develop and submit a Corrective Action Plan: **Due 11/26/2008**. This plan shall provide a detailed written explanation of reasons for the violation, what is being done to maintain compliance at the facility, and a proposed schedule specifying when the corrective actions are to be completed. The KDEP will continue to monitor your DMRs. Hillridge Facilities Inc. shall comply with the terms and conditions of KPDES Permit number KY0036226. [401 KAR 5:065]

2 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
Conditions Applicable to all KPDES Permits. All conditions applicable to KPDES permits shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to these administrative regulations shall be given in the permit. In addition to conditions required in all KPDES permits, the cabinet shall establish conditions as required on a case-by-case basis under Section 2 of this administrative regulation and 401 KAR 5:070. Duty to Comply, General Requirement: The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of KRS Chapter 224, among which are the following remedies: enforcement action, permit revocation, revocation and reissuance, or modification; or denial of a permit renewal application. [401 KAR 5:065 Section 1(1)(a)]

Description of Non Compliance:

Failing to comply with the Kentucky Pollutant Discharge Elimination System (KPDES) permit limits for KY0036226, Outfall 001-1, for Total Ammonia Nitrogen (TAN) during the months of May and June of 2008. The permitted limits for TAN Loading during the months of May through October are a 30-day average of 5.45 lbs/dy and a daily maximum of 10.9 lbs/dy. The reported results were a 30-day average of 29.798 lbs/dy and a daily maximum of 38.65 lbs/dy for May 2008; and a 30-day average of 7.776 and a daily maximum of 38.11 mg/l for June 2008. The permitted limits for TAN Concentration during the months of May through October are a 30-day average of 2 mg/l and a daily maximum of 4 mg/l. The reported results were a 30-day average of 10.75 mg/l and a daily maximum of 15.30 mg/l for May 2008; and a 30-day average of 4.87 mg/l and a daily maximum of 24.79 mg/l for June 2008.

The remedial measure(s), and date(s) to be completed by are as follows:
The Kentucky Department for Environmental Protection (KDEP) acknowledges the explanation attached to the 2nd Quarter 2008 Discharge Monitoring Reports (DMRs) detailing Hillridge's determination of the cause of this violation. Hillridge Facilities Inc. shall comply with the terms and conditions KPDES Permit number KY0036226. The KDEP is already in negotiations with Hillridge Facilities regarding previous and current noncompliance by the facility. No additional submittals are required for these violations at this time. The KDEP will continue to monitor your DMRs. Hillridge Facilities Inc. shall comply with the terms and conditions of KPDES Permit number KY0036226. [401 KAR 5:065]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to $25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection
Division of Enforcement
300 Fair Oaks Lane
Frankfort, KY 40601
502-564-2150 extension 266 (8:00 AM – 4.30 PM)
Ms. Lori Conway, Enforcement Specialist

Issued By: Lori E. Conway

Ms. Lori E. Conway
Environmental Enforcement Specialist
Compliance and Operations Branch
Date: October 28, 2008

Issued By: Lori Conley

for Mark J. Cleland, M.P.A., R.E.H.S.
Environmental Control Manager
Compliance and Operations Branch
Date: October 28, 2008

How Delivered: Certified Mail Certified/Registered # 7007 0710 0004 2988 5709

STEVEN L. BESHEAR
GOVERNOR

LEONARD K. PETERS
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF ENFORCEMENT
300 FAIR OAKS LANE
FRANKFORT KENTUCKY 40601
www.kentucky.gov

June 27, 2008

CERTIFIED MAIL No. 7005 3110 0002 2395 6437
Return Receipt Requested

Donald Ridge
Hillridge Facilities Inc
17825 Bradbe Rd
Fisherville, KY 40023

Re: Notice of Violation
AI ID: 2067
AI Name: Hillridge Facilities Inc
Activity ID: ENV20080002
Facility No. KY0036226
Jefferson County, KY
Case No. DOW 080111

Dear Mr. Ridge:

The Kentucky Department for Environmental Protection (DEP) has issued the enclosed Notice of Violation for violations discovered at your facility. Please review this Notice of Violation carefully to ensure that all remedial measures are completed by the specified deadlines.

Your cooperation and attention to this matter is appreciated. If you have any questions, please contact Lori Conway of my staff at (502) 564-2150 at extension 266.

Sincerely,

E-Signed by Comley, Erin
VERIFY authenticity with ApproveIt
Erin Comley

for Mark J. Cleland, M.P.A., R.E.H.S.
Environmental Control Manager
Compliance and Operations Branch

MJC/lec

Enclosure

MSD EXHIBIT 9

COMMONWEALTH OF KENTUCKY
ENERGY and ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Enforcement

NOTICE OF VIOLATION

To: Donald Ridge
17825 Bradbe Rd
Fisherville, KY 40023

AI Name: Hillridge Facilities Inc **AI ID:** 2067 **Activity ID:** ENV20080002
County: Jefferson
Enforcement Case ID: DOW 080111
Facility Number: KY0036226
Date(s) Violation(s) Observed: 06/25/2008

This is to advise that you are in violation of the provisions cited below:

1 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
Conditions Applicable to all KPDES Permits. All conditions applicable to KPDES permits shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to these administrative regulations shall be given in the permit. In addition to conditions required in all KPDES permits, the cabinet shall establish conditions as required on a case-by-case basis under Section 2 of this administrative regulation and 401 KAR 5:070. Duty to Comply, General Requirement: The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of KRS Chapter 224, among which are the following remedies: enforcement action, permit revocation, revocation and reissuance, or modification; or denial of a permit renewal application. [401 KAR 5:065 Section 1(1)(a)]

Description of Non Compliance:
Failing to comply with the Kentucky Pollutant Discharge Elimination System (KPDES) permit limits for KY0036226, Outfall 001-1, for Fecal Coliform Bacteria (FCB) during the month of August 2007, and January of 2008. The permitted limits for FCB Concentration are a 30-day geometric average of 200 colony-forming units per 100ml (c.f.u./100ml) of water and a 7-day geometric average of 400 c.f.u./100ml. The reported results were a 30-day geometric average of 217 c.f.u./100ml and a 7-day geometric average of 1200 c.f.u./ml for August 2007; and a 7-day geometric average of 974 c.f.u./100ml for January of 2008.

The remedial measure(s), and date(s) to be completed by are as follows:
Hillridge Facilities Inc. shall develop and submit a Corrective Action Plan: Due 7/25/2008. This plan shall provide a detailed written explanation of reasons for the violation, what is being done to maintain compliance at the facility, and a proposed schedule specifying when the corrective actions are to be completed. The KDEP will continue to monitor your DMRs. Hillridge Facilities Inc. shall comply with the terms and conditions KPDES Permit number KY0036226. [401 KAR 5:065]

2 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
Conditions Applicable to all KPDES Permits. All conditions applicable to KPDES permits shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to these administrative regulations shall be given in the permit. In addition to conditions required in all KPDES permits, the cabinet shall establish conditions as required on a case-by-case basis under Section 2 of this administrative regulation and 401 KAR 5:070. Duty to Comply, General Requirement: The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of KRS Chapter 224, among which are the following remedies: enforcement action, permit revocation, revocation and reissuance, or modification; or denial of a permit renewal application. [401 KAR 5:065 Section 1(1)(a)]

Description of Non Compliance:
Failing to comply with the Kentucky Pollutant Discharge Elimination System (KPDES) permit limits for KY0036226, Outfall 001-1, for Biochemical Oxygen Demand (BOD) during the months of February and March of 2008. The permitted limits for BOD Loading are a 30-day average of 40.9 lbs/dy and a daily maximum of 81.8 lbs/dy. The reported results were a 30-day average of 44.68 lbs/dy and a daily maximum of 92.56 lbs/dy for February of 2008; and a 30-day average of 73.57 lbs/dy and a daily maximum of 158.2 lbs/dy for March of 2008. The permitted limits for BOD Concentration are a 30-day average of 15 mg/l and a daily maximum of 30 mg/l. The reported results were a daily maximum of 31 mg/l for February of 2008; and a 30-day average of 16 mg/l and a daily maximum of 34 mg/l for March of 2008.

The remedial measure(s), and date(s) to be completed by are as follows:
Hillridge Facilities Inc. shall develop and submit a Corrective Action Plan: Due 7/25/2008. This plan shall provide a detailed written explanation of reasons for the violation, what is being done to maintain compliance at the facility, and a proposed schedule specifying when the corrective actions are to be completed. The KDEP will continue to monitor your DMRs. Hillridge Facilities Inc. shall comply with the terms and conditions KPDES Permit number KY0036226. [401 KAR 5:065]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to $25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

If you have questions or need further information, write or call the undersigned:

Department for Environmental Protection
Division of Enforcement
300 Fair Oaks Lane
Frankfort, KY 40601
502-564-2150 extension 266 (8:00 AM – 4:30 PM)
Ms. Lori Conway, Enforcement Specialist

Issued By: Lori E. Conway

Ms. Lori E. Conway
Environmental Enforcement Specialist
Compliance and Operations Branch
Date: June 27, 2008

Issued By: Erin Conley

for Mark J. Cleland, M.P.A., R.E.H.S.
Environmental Control Manager
Compliance and Operations Branch
Date: June 27, 2008

How Delivered: Certified Mail Certified/Registered # 7005 3110 0002 2395 6437

STEVEN L. BESHEAR
GOVERNOR

ROBERT D. VANCE
SECRETARY

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF ENFORCEMENT
300 FAIR OAKS LANE
FRANKFORT KENTUCKY 40601
www.kentucky.gov

April 30, 2008

Hand Delivered

Hillridge Facilities Inc.
Donald Ridge
17825 Bradbe Rd
Fisherville, KY 40023

RE: Hillridge Facilities Inc
A.I. # 2067
Activity # ELW20080001
KPDES Permit # KY0036226
Jefferson County, Kentucky

Dear Mr. Ridge:

The Kentucky Department for Environmental Protection (KDEP) has reviewed the Discharge Monitoring Report (DMR) results for your facility. During this review, the KDEP has identified the following items that appear to be in violation of your KPDES permit and Kentucky's environmental regulations:

Failed to submit Discharge Monitoring Reports (DMRs) for the months of February, March, August, and October of 2007, as required by Part III (A) of the Kentucky Pollutant Discharge Elimination System (KPDES) permit # KY0036226. Monitoring results must be obtained for each month and reported on a preprinted DMR form. The completed DMRs for each month must be sent to the Division of Water postmarked no later than the 28th day of the month following the completed month.

Failing to comply with the Kentucky Pollutant Discharge Elimination System (KPDES) permit limits for KY0036226, Outfall 001-1, for Total Ammonia Nitrogen (TAN) during the month of July 2007. The permitted limits for TAN Concentration during the months of May through October are a 30-day average of 2 mg/l and a daily maximum of 4 mg/l. The reported result was a daily maximum of 7.90 mg/l for the month of July 2007.

Failing to comply with the Kentucky Pollutant Discharge Elimination System (KPDES) permit limits for KY0036226, Outfall 001-1, for Fecal Coliform Bacteria (FCB) during the month of June 2007. The permitted limits

for FCB Concentration are a 30-day geometric average of 200 colony-forming units per 100ml (c.f.u./100ml) of water and a 7-day geometric average of 400 c.f.u./100ml. The reported results were a 30-day geometric average of 230 c.f.u./100ml and a 7-day geometric average of 1200 c.f.u./100ml.

Failing to comply with the Kentucky Pollutant Discharge Elimination System (KPDES) permit limits for KY0036226, Outfall 001-1, for Total Suspended Solids (TSS) during the month of April 2007. The permitted limits for TSS Concentration are a 30-day average of 30 mg/l and a daily maximum of 60 mg/l. The reported result was a daily maximum of 71 mg/l.

In order to preserve the quality of Kentucky's water resources, it is important for all facilities to comply with the terms and conditions of their KPDES permits. Since you have reported that your facility is not in compliance with your permit, the KDEP would like to know the circumstances that caused your facility to be in violation of your permit, what actions you will take to bring your facility back into compliance, and when those actions will be taken. Failing to comply with the terms and conditions of your KPDES permit is a violation of 401 KAR 5:065. Please submit this information, in writing, along with any missing Discharge Monitoring Reports (DMRs), to the KDEP's Division of Enforcement at the above address, on or before May 30, 2008.

It is very important that KPDES permit violations be corrected. Compliance with these standards is essential in achieving the best water quality in our lakes, rivers, and streams. Failing to comply with KPDES permits can lead to the formal citation of violation, and potentially to the assessment of penalties that can be as high as $25,000 per day per violation.

The KDEP looks forward to receiving your submission and working toward the improvement of water quality in Kentucky. Please contact me at 502-564-2150 extension 266, if you have any questions.

Sincerely,

Lori E. Conway

Lori Conway
Environmental Enforcement Specialist
Division of Enforcement

STEVEN L. BESHEAR
GOVERNOR

ROBERT D. VANCE
SECRETARY

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water
9116 Leesgate Rd
Louisville, KY 40222-5084
www.kentucky.gov

February 15, 2008

Certified No. 7005 0390 0003 0864 0186
Return Receipt Requested

Donald Ridge
17825 Bradbe Rd
Fisherville, KY 40023

Re: Notice of Violation
AI ID: 2067
AI Name: Hillridge Facilities Inc
Activity ID: ENV20080001
Permit No. KY0036226
Jefferson County, KY

Dear Donald Ridge:

The Kentucky Department for Environmental Protection (DEP) has issued the enclosed Notice of Violation for violations discovered at your facility. Please review this Notice of Violation carefully to ensure that all remedial measures are completed by the specified deadlines. You will be required to attend an administrative enforcement meeting to be scheduled by the Division of Enforcement. Additional remedial measures and deadlines will be determined at that time.

Your cooperation and attention to this matter is appreciated. If you have any questions, please contact me at 502-429-7122.

Sincerely,

Brad Trivette

Mr. Brad Trivette,
Environmental Inspector III
Division of Water

Enclosure

MSD EXHIBIT //

AI

COMMONWEALTH OF KENTUCKY
ENVIRONMENTAL AND PUBLIC PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water

NOTICE OF VIOLATION

To: Donald Ridge
17825 Bradbe Rd
Fisherville, KY 40023

AI Name: Hillridge Facilities Inc **AI ID:** 2067 **Activity ID:** ENV20080001
County: Jefferson
Enforcement Case ID:
Date(s) Violation(s) Observed: 2/5/2008 & 02/11/2008

This is to advise that you are in violation of the provisions cited below:

1 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
Whenever, by reason of emergency or accident, a spill or discharge occurs which results in pollution of the waters of the Commonwealth, the Division of Water shall be notified by the most rapid means available. [401 KAR 5:015 Section 2]

Description of Non Compliance:
The manhole at the sewer plant was overflowing at the time of inspection. The surge basin was being pumped directly into the chlorine contact tank bypassing secondary treatment. The operator told me it was set up on a float switch and comes on automatically. It as never been reported as a bypass.

The remedial measure(s), and date(s) to be completed by are as follows:
Immediately report all overflows and bypasses from the sewer collection system or the waste water treatment plant. [401 KAR 5:015 Section 2, 401 KAR 5:065 Section 1(12)(f)]

2 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
Reporting Requirements - Monitoring Reports: Monitoring results shall be reported at the intervals specified in the permit. [401 KAR 5:065 Section 1(12)(d)]

Description of Non Compliance:
DMR's have not been received for the months of Feb., Mar, Aug., Oct. of 2007.

The remedial measure(s), and date(s) to be completed by are as follows:
Submit monitoring reports to the Division of Water by the 28th day of following month of the compliance period. [401 KAR 5:065 Section 1(12)(d)]

3 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
Reporting Requirements - Monitoring Reports: Monitoring results shall be reported on a Discharge Monitoring Report (DMR). [401 KAR 5:065 Section 1(12)(d)1]

Description of Non Compliance:
DMR's have not been received for the months of Feb., Mar, Aug., Oct. of 2007.

The remedial measure(s), and date(s) to be completed by are as follows:
Submit monitoring reports to the Division of Water by the 28th day of following month of the compliance period. [401 KAR 5:065 Section 1(12)(d)]

4 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
Twenty-four (24) hour reporting. The permittee shall follow the provisions of 401 KAR 5:015 and shall orally report any noncompliance which may endanger health or the environment, within 24 hours from the

time the permittee becomes aware of the circumstances. This report shall be in addition to and not in lieu of any other reporting requirement applicable to the noncompliance. [401 KAR 5:065 Section 1(12)(f)]

Description of Non Compliance:
The manhole at the sewer plant was overflowing at the time of inspection. The surge basin was being pumped directly into the chlorine contact tank bypassing secondary treatment. The operator told me it was set up on a float switch and comes on automatically. It as never been reported as a bypass.

The remedial measure(s), and date(s) to be completed by are as follows:
Immediately report all overflows and bypasses from the sewer collection system or the waste water treatment plant. [401 KAR 5:015 Section 2, 401 KAR 5:065 Section 1(12)(f)]

5 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls, and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. [401 KAR 5:065 Section 1(5)]

Description of Non Compliance:
Some of the bypasses are not being reported. On the day of the inspection the flow was very high and the smaller plants clarifier was losing some solids. The surge tank was bypassing directly to the chlorine tank to reduce flow to the plant. The chlorine was not sufficient for the flow. The fecal sample taken of the effluent resulted in > 1,200 colonies/ 100 ml. The collection system appears to have I & I problems during wet weather. The flow on the 5th and 6th was over the top of the v notch weir. The manhole at the plant overflowed both days. There have been repeated reports of overflows at the manhole located at the sewer plant. The dry weather flow is usually <200,000 gallons. The plant usually exceeds the design flow of 362,000 during wet weather. The max. daily flow was exceeded for the following months in 2007. Jan, Feb, Mar, Apr, May, Oct, Nov, Dec.

The remedial measure(s), and date(s) to be completed by are as follows:
Use proper operations and maintenance practices that will ensure compliance with all applicable regulations and KPDES permit requirements. [401 KAR 5:065 Section 1(5)]

6 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
All wastewater treatment plants shall have a disinfection process which meets the following requirements: An ultraviolet disinfection system designed to treat the anticipated peak hourly flow; a chlorination system with a flow or demand proportional feed system. The chlorine contact tank shall have a minimum detention time of thirty (30) minutes based on the average flow, or fifteen (15) minutes based on the peak hourly flow, whichever requires the larger tank size. Wastewater treatment plants shall also have a dechlorination system with a flow or demand proportional feed system if necessary to meet the effluent limits; or a chlorination system with a manually controlled feed system and a flow equalization basin designed to eliminate the diurnal flow variations. [401 KAR 5:005 Section 11(1)]

Description of Non Compliance:
There was a fecal violation in May 2007. The fecal sample taken of the effluent on 2/5/08 resulted in > 1,200 colonies/ 100 ml.

The remedial measure(s), and date(s) to be completed by are as follows:
Properly operate the disinfection system to meet permit limits. [401 KAR 5:005 Section 11(1)]

7 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
The flow measuring device shall measure all flow received at the wastewater treatment plant. An indicating, recording, and totalizing flow measuring device shall be installed at each large wastewater treatment plant. [401 KAR 5:005 Section 12]

Description of Non Compliance:
During very wet weather the flow is over the top of the V-notch weir and can not be measured properly. The flow was over the top of the weir 2-5-08 and on 2-6-08.

The remedial measure(s), and date(s) to be completed by are as follows:
Install a flow measuring device that can measure all of the flow entering the waste water facility. [401 KAR 5:005 Section 12]

8 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
Standard Permit Conditions: The permittee is also advised that all KPDES permit conditions in KPDES Regulation 401 KAR 5:065, Section 1 will apply to all discharges authorized by this permit. This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal, and local agencies. It is the responsibility of the permittee to demonstrate compliance with permit parameter limitations by utilization of sufficiently sensitive analytical methods. [401 KAR 5:065 Section 1(1)(a)]

Description of Non Compliance:
DMR, violations for 2007. June-fecal, July-NH3, Apr-TSS and Aug-fecal. The fecal sample taken on 2-5-08 resulted in >1,200 colonies/ 100ml.

The remedial measure(s), and date(s) to be completed by are as follows:
Use proper operations and maintenance practices that will ensure compliance with all applicable regulations and KPDES permit limits. [401 KAR 5:065 Section 1(1)(a)]

9 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
There shall be no discharge that causes the surface waters of the Commonwealth to be aesthetically or otherwise degraded by substances that: (a) settle to form objectionable deposits; (b) float as debris, scum, oil, or other matter to form a nuisance; (c) produce objectionable color, odor, taste, turbidity; (d) injure, are chronically or acutely toxic to or produce adverse physiological or behavioral responses in humans, animals, fish and other aquatic life. [401 KAR 5:031 Section 2]

Description of Non Compliance:
The high flow at the sewer plant during the period of 2-5-08 to 2-11-08 resulted in grey water and some lite sludge solids being discharged to the stream. A citizen complaint concerning grey water discoloring the stream was sent the Louisville regional office on 2-10-08 and on 2-11-08. The investigation on 2-11-08 confirmed grey water and a dusting of light sludge solids in the stream below the plants effluent discharge point. The plants discharge was cloudy on the 2-5-08 and was clear at 2:00 pm on 2-11-08. Joe Sanders, the plant operator, confirmed via phone conversation on 2-12-08 that the air at the plant had been reduced for several days due to the high flow. The reduction in air for the aeration basins had resulted in some grey water discharge. The stream below the plant was still discolored grey at the time of my 2-11-08 complaint investigation. The time was 2:00 pm to 4:00 pm.The water upstream of the plant was very clear and free of any sludge deposits.

The remedial measure(s), and date(s) to be completed by are as follows:
Immediately stop causing degradation to the waters of the Commonwealth of Kentucky. [401 KAR 5:031 Section 2(a,c)]

1 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
0

Applicability of the KPDES Requirements. The KPDES program shall require a permit to discharge pollutants from a point source into waters of the Commonwealth. Compliance with the KPDES program requirements shall constitute compliance with the operational permit requirements of 401 KAR 5:005 and requirements related to the operational permit. Failure to obtain a KPDES permit shall not relieve a discharger subject to the KPDES program from complying with the applicable performance standards of that program, 401 KAR 5:050 to 5:080, inclusive. [401 KAR 5:055 Section 1]

Description of Non Compliance:
The system has repeated overflows of untreated wastewater from the manhole at the plant. This overflow goes directly to the stream.

The remedial measure(s), and date(s) to be completed by are as follows:
Immediately stop all non-permitted discharges of untreated wastewater from entering the waters of the Commonwealth of Kentucky. [401 KAR 5:055 Section 1]

1 Violation Description for Subject Item GINS0000000001(KPDES Individual):
1

The KPDES program requires permits for the discharge of pollutants from a point source into the waters of the Commonwealth. [401 KAR 5:055 Section 1]

Description of Non Compliance:
The facility does not hold an active KPDES permit. The permit expired Dec. 31, 2007. The new permit has not been issued because a regional sewer system is now available.

The remedial measure(s), and date(s) to be completed by are as follows:
Stop all non-permitted discharges of wastewater from entering the waters of the Commonwealth of Kentucky. Comply with all of the terms of the KPDES permit and connect to the regional municipal sewer. [401 KAR 5:055 Section 1]

1 Violation Description for Subject Item GINS0000000001(KPDES Individual):
2

The permittee shall comply with all conditions of the permit. Any permit non-compliance shall constitute a violation of KRS 224, among which shall be the following remedies: Enforcement action, permit revocation, revocation and reissuance, or modification; or denial of permit renewal application. [401 KAR 5:065 Section 1(1)(a)]

Description of Non Compliance:
The facility has failed to comply with the terms of the permit. A regional sewer system is now available. The owner of the sewer system has failed to connect to the regional sewer system.

The remedial measure(s), and date(s) to be completed by are as follows:
Stop all non-permitted discharges of wastewater from entering the waters of the Commonwealth of Kentucky. Comply with all of the terms of the KPDES permit and connect to the regional municipal sewer. You will be required to attend an administrative enforcement meeting to be scheduled by the Division of Enforcement. Additional remedial measures will be determined at that time.
[401 KAR 5:055 Section 1]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to $25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

If you have questions or need further information, write or call the undersigned:

Division of Water
Louisville Regional Office
9116 Leesgate Rd
Louisville, KY 40222-5084
502-429-7122(8:00 AM – 4:30 PM)
Mr. Brad Trivette, Environmental Inspector III

Brad Trivette

Issued By: _____
Mr. Brad Trivette, Environmental Inspector III

Date: February 15, 2008

Charles A. Roth

Issued By: _____
Mr. Charles Roth, Environmental Control Supervisor
Date: February 15, 2008

How Delivered: Certified Certified/Registered # 7005 0390 0003 0864 0186

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water

NOTICE OF VIOLATION

TO:
Don Ridge
Hillridge Facilities Inc
17825 Bradbe Road
Fisherville, KY 40023

County: Jefferson

This is to advise that you are in violation of the provisions cited below:

Requirement	Subject Item	Description of Non-Compliance
Whenever, by reason of emergency or accident, a spill or discharge occurs which results in pollution of the waters of the Commonwealth, the Division of Water shall be notified by the most rapid means available at 1-800-928-2380. [401 KAR 5:015 Section 2]	GINS0000000001	No report was made to the Division about a loss of sludge to the stream. It was brought to our attention by a complaint.
Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit, which has a reasonable likelihood of adversely affecting human health or the environment. [401 KAR 5:065 Section 1(4)]	GINS0000000001	The facility failed to implement a stream clean. I had requested it on 12-16-03.
Minimum Criteria Applicable to All Surface Waters. (1) The following minimum water quality criteria are applicable to all surface waters including mixing zones, with the exception that toxicity to aquatic life in mixing zones shall be subject to the provisions of 401 KAR 5:029, Section 4. Surface waters shall not be aesthetically or otherwise degraded by substances that settle to form objectionable deposits. [401 KAR 5:031 Section 2(1)(a)]	GINS0000000001	The facility had a loss of sludge to the stream.

The required remedial measure(s), and date(s) to be completed by are as follows:

Remedial Measures
Report all system upsets and losses of sludge to the Division of Water within 24 hours. [401 KAR 5:015 Section 2]
Immediately remove sludge from the stream after a system upset or any other sludge loss incident, [401 KAR 5:065 Section 1(4)]
Properly operate and maintain the wastewater facility to prevent degradation to the waters of the Commonwealth of Kentucky. Attend a Regional Office Conference on 3/9/04 at 10:00 a.m. [401 KAR 5:031 Section 2(1)]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to $25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

MSD EXHIBIT 12

If you have questions or need further information, write or call the undersigned:

Division of Water
Louisville Regional Office
9116 Leesgate Rd.
Louisville, Kentucky 40222
502-425-4671 (8:00 AM – 4:30 PM)
Brad Trivette, Environmental Inspector III

Issued By: _____ Date: February 10, 2004
Brad Trivette, Environmental Inspector III

Issued By: _____ Date: February 10, 2004
Mike Mudd, Environmental Control Supervisor

How Delivered: Certified mail Certified/Registered # 700 0600 0026 2503 3473

COMMONWEALTH OF KENTUCKY
ENVIRONMENTAL & PUBLIC PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water

NOTICE OF VIOLATION

To: Don Ridge
17825 Bradbe Road
Fisherville, Kentucky 40023

AI Name: Hillridge Facilities Inc **AI ID:** 2067 **Activity ID:** ENV20040002
County: Jefferson
Enforcement Case ID:
Date(s) Violation(s) Observed: 11/13/03

This is to advise that you are in violation of the provisions cited below:

1 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
Twenty-four (24) hour reporting. The permittee shall follow the provisions of 401 KAR 5:015 and shall orally report any noncompliance which may endanger health or the environment, within 24 hours from the time the permittee becomes aware of the circumstances. This report shall be in addition to and not in lieu of any other reporting requirement applicable to the noncompliance. [401 KAR 5:065 Section 1(12)(f)]

Description of Non Compliance:
The plant appears to be losing some solids to the stream. There are some sewage solids in the stream below the plants outfall. The chlorine gas was empty. TRC was Non -detect. I took a fecal coliform sample which tested >1,200 colonies/100 ml.

The required remedial measure(s), and date(s) to be completed by are as follows:
Immediately report all non-compliance, which may endanger the health or impact the environment. [401 KAR 5:065 Section 1(12)(f)]

2 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls, and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. [401 KAR 5:065 Section 1(5)]

Description of Non Compliance:
There were three full chlorine gas cylinders in the chlorine room. The connected cylinder was either empty or all of the chlorine was being consumed by excess solids in the contact tank.

The required remedial measure(s), and date(s) to be completed by are as follows:
Use proper best management practices to operate the plant. [401 KAR 5:065 Section 1]

3 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
All wastewater treatment plants shall have a disinfection process which meets the following requirements: An ultraviolet disinfection system designed to treat the anticipated peak hourly flow; a chlorination system with a flow or demand proportional feed system. The chlorine contact tank shall have a minimum detention time of thirty (30) minutes based on the average flow, or fifteen (15) minutes based on the peak hourly flow, whichever requires the larger tank size. wastewater treatment plants shall also have a dechlorination system with a flow or demand proportional feed system if necessary to meet the effluent

ATTACHMENT B MSD EXHIBIT 13

limits; or a chlorination system with a manually controlled feed system and a flow equalization basin designed to eliminate the diurnal flow variations. [401 KAR 5:005 Section 11(1)]

Description of Non Compliance:
Chlorine was empty or the rate was not adjusted properly.

The required remedial measure(s), and date(s) to be completed by are as follows:
Chlorine gas must be on at all times to ensure compliance with fecal coliform limits. [401 KAR 5:005 Section 11]

4 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
The permittee shall comply with conditions of the permit. [401 KAR 5:065 Section 1,a]

Description of Non Compliance:
Past six months: One TSS. Two months have NH3 violations.(five NH3 violations in those two months)

The required remedial measure(s), and date(s) to be completed by are as follows:
Meet the KPDES permit limits at all times. [401 KAR 5:065 Section 1(a)]

5 **Violation Description for Subject Item GINS0000000001(KPDES Individual):**
Minimum Criteria Applicable to All Surface Waters. (1) The following minimum water quality criteria are applicable to all surface waters including mixing zones, with the exception that toxicity to aquatic life in mixing zones shall be subject to the provisions of 401 KAR 5:029, Section 4. Surface waters shall not be aesthetically or otherwise degraded by substances that settle to form objectionable deposits. [401 KAR 5:031 Section 2(1)(a)]

Description of Non Compliance:
There are some sewage solids in the stream. The contact tank confirms the loss of some excess solids.

The required remedial measure(s), and date(s) to be completed by are as follows:
Stop allowing solids that settle on the stream bottom to enter the stream. [401 KAR 5:031 Section 2]

Violations of the above cited statute(s) and/or regulation(s) are subject to a civil penalty per day per violation. Violations carry civil penalties of up to $25,000 per day per violation depending on the statutes/regulations violated. In addition, violations may be concurrently enjoined. Compliance with remedial measures and their deadlines does not provide exemption from liability for violations during the period of remediation, nor prevent additional remedial measures from being required.

If you have questions or need further information, write or call the undersigned:

Division of Water
Louisville Regional Office
9116 Leesgate Rd
Louisville, KY 402225084
502-425-4543 (8:00 AM – 4:30 PM)
Brad Trivette, Environmental Inspector III

Issued By: Brad Trivette

Brad Trivette, Environmental Inspector III
Date: March 9, 2004

AI: Hillridge Facilities Inc -- 2067

Issued By: Michael S. Mudd
Mike Mudd, Environmental Control Supervisor
Date: March 9, 2004

How Delivered: Hand

SSES Statistics

Project: Lea Ann Way West

Date: 8/31/2009

Property Service Connections

Total	4,473
Basements	2,415

Pump Stations

Facility ID	Name	Type	Owner
MSD1010-PS	LEA ANN WAY	BLDG	MSD
MSD0099-PS	POPLAR LEVEL	BLDG	MSD

Sewers

Manholes	1,357	Avg. Depth 7.7 ft
Force Mains	2,597 LF	
Main Sewers	287,784 LF	Avg. Length 177 ft

Main Sewer Pipe Diameters

Diameter	LF	% Total	
4	0	0.0%	
6	787	0.3%	
8	226,919	78.9%	
10	21,433	7.4%	
12	12,645	4.4%	
15	3,472	1.2%	
~~18~~	~~4,792~~	~~1.7%~~	18-inch and greater are included as
~~21~~	~~1,838~~	~~0.6%~~	part of ICA Phase III Project
~~24~~	~~4,678~~	~~1.6%~~	
~~27~~	~~1,068~~	~~0.4%~~	
~~30~~	~~0~~	~~0.0%~~	
~~36~~	~~9,971~~	~~2.5%~~	
~~42~~	~~179~~	~~0.1%~~	
~~48~~	~~0~~	~~0.0%~~	
~~54~~	~~0~~	~~0.0%~~	
~~60~~	~~0~~	~~0.0%~~	
~~66~~	~~0~~	~~0.0%~~	
~~72~~	~~0~~	~~0.0%~~	
~~78~~	~~0~~	~~0.0%~~	
~~84~~	~~0~~	~~0.0%~~	
~~96~~	~~0~~	~~0.0%~~	
~~108~~	~~0~~	~~0.0%~~	
~~120~~	~~0~~	~~0.0%~~	
~~132~~	~~0~~	~~0.0%~~	
~~144~~	~~0~~	~~0.0%~~	
~~152~~	~~0~~	~~0.0%~~	
~~162~~	~~0~~	~~0.0%~~	
Total	287,784		

Main Sewer Pipe Material

Material	LF	% Total	Description
ABP	0	0.0%	Paved Invert Asbestos-Bonded
ABS	0	0.0%	Acrylonitrile Butatiene Styre
ACP	0	0.0%	Asbestos Cement Pipe
ADS	0	0.0%	Corugated Plastic
BRK	0	0.0%	Brick
CIP	199	0.1%	Cast Iron Pipe
CMP	0	0.0%	Corrugated Metal Pipe
CON	2,618	0.9%	Poured-in-place Concrete
CPP	4,107	1.4%	Cured-in-place Pipe
DIP	200	0.1%	Ductile Iron Pipe
HDPE	0	0.0%	High Density Polyethylene
PEP	0	0.0%	Polyethyline Pipe
PVC	112,831	39.2%	Polyvinylchloride
RCP	18,632	6.5%	Reinforced Concrete Pipe
ST	0	0.0%	Segmented Tile
STL	0	0.0%	Steel
VCP	149,197	51.8%	Vitirfied Clay Pipe
Total	287,784		

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Lea Ann Way West
Defect Data and
Recommendations Table
CCTV Inspection

Upstream Structure	Downstream Structure	Segment Length	Pipe Diameter	Pipe Material	Defect	OPRI Rating	SCAP Credits (gpd)	Recommendation	Rehabilitation Cost ($)
17666	17671	280.0	8	VCP			25	CIPP	8,400
17667	17666	172.0	8	VCP			16	CIPP	5,160
17671	18019	353.0	8	VCP			32	CIPP	10,590
17672	17671	80.0	8	VCP			7	CIPP	2,400
17673	17674	177.0	8	VCP			16	CIPP	5,310
17677	17678	150.0	8	VCP			14	CIPP	4,500
18019	18018	246.0	8	VCP			22	CIPP	7,380
18023	18024	109.0	8	VCP			10	CIPP	3,270
18024	18025	270.0	8	VCP			25	CIPP	8,100
19343	19344	401.0	8	VCP			36	CIPP	12,030
19346	31064	319.0	8	VCP			16,433	CIPP	9,570
19348	19347	382.0	15	Conc			36,898	CIPP	19,100
19350	19349	398.0	15	Conc			68	CIPP	19,900
19351	19350	204.0	15	Conc			35	CIPP	10,200
19352	19351	197.0	8	VCP			10,148	CIPP	5,910
19354	19353	373.0	8	VCP			34	CIPP	11,190
19355	81965	20.0	8	PVC			2	CIPP	600
19356	19355	406.0	8	VCP			37	CIPP	12,180
19357	19356	375.0	8	VCP			34	CIPP	11,250
19360	19359	152.0	12	VCP			11,745	CIPP	4,560
19361	19360	215.0	8	VCP			11,076	CIPP	6,450
19362	19361	404.0	8	VCP			37	CIPP	12,120
19363	19362	262.0	8	VCP			24	CIPP	7,860
19364	19363	108.0	8	VCP			10	CIPP	3,240
19368	58608	146.0	12	VCP			11,282	CIPP	4,380
19369	19368	156.0	12	VCP			12,055	CIPP	4,680
19371	19370	165.0	8	VCP			8,500	CIPP	4,950
19374	58610	198.0	8	VCP			18	CIPP	5,940
19379	58580	154.0	12	VCP			11,900	CIPP	4,620
19380	19379	60.0	8	VCP			3,091	CIPP	1,800
19388	19391	402.0	8	VCP			37	CIPP	12,060
19391	19392	318.0	8	VCP			29	CIPP	9,540
19394	19395	263.0	8	VCP			24	CIPP	7,890
26990	26991	136.0	8	VCP			12	CIPP	4,080
26991	82417	353.0	8	VCP			32	CIPP	10,590
27225	19396	303.0	8	VCP			28	CIPP	9,090
27786	27787	155.1	8	VCP			14	CIPP	4,653
27788	96075	139.9	8	VCP			7,207	CIPP	4,197
27796	31265	378.0	8	VCP			34	CIPP	11,340
29709	29711	95.0	8	VCP			9	CIPP	2,850
29711	29712	196.0	8	VCP			18	CIPP	5,880
29712	29713	192.0	8	VCP			17	CIPP	5,760
29713	31070	386.0	8	VCP			19,885	CIPP	11,580
29714	29710	277.0	8	VCP			25	CIPP	8,310
29715	29716	150.0	8	VCP			14	CIPP	4,500
29716	29718	284.0	8	VCP			26	CIPP	8,520
29719	29720	194.4	8	VCP			10,015	CIPP	5,832

Lea Ann Way West
Defect Data and
Recommendations Table
CCTV Inspection

Upstream Structure	Downstream Structure	Segment Length	Pipe Diameter	Pipe Material	Defect	OPRI Rating	SCAP Credits (gpd)	Recommendation	Rehabilitation Cost ($)
29721	29722	242.0	10	VCP			28	CIPP	7,260
29722	29723	289.0	12	VCP			39	CIPP	8,670
29724	29725	318.0	15	VCP			54	CIPP	15,900
29725	29726	402.0	15	VCP			69	CIPP	20,100
29738	29739	296.0	8	VCP			15,248	CIPP	8,880
29740	29741	376.0	8	VCP			19,370	CIPP	11,280
29744	29743	324.0	8	VCP			16,691	CIPP	9,720
29745	29744	322.0	8	VCP			16,588	CIPP	9,660
29746	29747	241.0	8	VCP			Refer to Smoke	CIPP	7,230
29747	29748	300.0	8	VCP			15,455	CIPP	9,000
29749	29750	276.0	8	VCP			14,218	CIPP	8,280
29759	29758	136.0	8	VCP			12	CIPP	4,080
29760	29761	230.0	8	VCP			21	CIPP	6,900
29765	29764	114.0	8	VCP			10	CIPP	3,420
29767	29766	205.0	8	VCP			10,561	CIPP	6,150
29770	29771	400.0	8	VCP			20,606	CIPP	12,000
29777	29776	149.0	8	VCP			14	CIPP	4,470
29786	29785	169.0	8	VCP			15	CIPP	5,070
29789	29790	240.0	8	VCP			12,364	CIPP	7,200
29794	29793	363.0	8	VCP			18,700	CIPP	10,890
29854	29852	100.0	10	VCP			11	CIPP	3,000
29858	29857	251.0	8	VCP			23	CIPP	7,530
29863	29866	400.0	8	VCP			36	CIPP	12,000
29866	29854	318.0	8	VCP			16,382	CIPP	9,540
29870	29871	214.0	8	VCP			19	CIPP	6,420
29871	29872	403.0	8	VCP			37	CIPP	12,090
29872	29873	360.0	8	VCP			33	CIPP	10,800
29873	29875	398.0	8	VCP			36	CIPP	11,940
29875	29876	401.0	8	VCP			36	CIPP	12,030
29876	29877	422.0	8	VCP			38	CIPP	12,660
29877	29762	152.0	8	VCP			14	CIPP	4,560
29887	31069	279.4	10	VCP			32	CIPP	8,382
29889	29900	296.2	8	VCP			15,259	CIPP	8,886
29890	29891	180.2	8	VCP			16	CIPP	5,406
29891	29892	97.6	10	VCP			11	CIPP	2,928
29892	29904	184.7	8	VCP			9,515	CIPP	5,541
29895	29896	150.2	8	VCP			7,738	CIPP	4,506
29900	29899	209.0	10	VCP			Refer to Smoke	CIPP	6,270
29903	29901	317.4	8	VCP			16,351	CIPP	9,522
29906	29899	202.3	8	VCP			10,422	CIPP	6,069
29910	27788	252.5	8	VCP			23	CIPP	7,575
29916	31068	301.6	8	VCP			27	CIPP	9,048
29938	29936	282.0	8	VCP			26	CIPP	8,460
29939	29938	289.0	8	VCP			26	CIPP	8,670
29941	31084	158.9	8	VCP			8,186	CIPP	4,767
29942	29943	159.2	8	VCP			Refer to Smoke	CIPP	4,776
29957	29958	147.5	8	VCP			13	CIPP	4,425

Lea Ann Way West
Defect Data and
Recommendations Table
CCTV Inspection

Upstream Structure	Downstream Structure	Segment Length	Pipe Diameter	Pipe Material	Defect	OPRI Rating	SCAP Credits (gpd)	Recommendation	Rehabilitation Cost ($)
29962	29961	247.0	8	VCP			22	CIPP	7,410
29963	29962	284.0	8	VCP			26	CIPP	8,520
29969	29968	368.0	8	VCP			33	CIPP	11,040
29972	29971	357.0	8	VCP			32	CIPP	10,710
29973	29972	403.0	8	VCP			37	CIPP	12,090
29978	29976	251.0	8	VCP			23	CIPP	7,530
29979	29978	250.0	8	VCP			23	CIPP	7,500
29980	29979	302.0	8	VCP			27	CIPP	9,060
29982	29980	162.0	8	VCP			15	CIPP	4,860
29986	29985	268.0	8	VCP			13,806	CIPP	8,040
29987	27796	252.0	8	VCP			23	CIPP	7,560
29993	29992	233.0	8	VCP			21	CIPP	6,990
30239	30240	298.3	8	VCP			15,367	CIPP	8,949
30953	30954	400.0	8	VCP			36	CIPP	12,000
30954	54868	396.0	8	VCP			20,400	CIPP	11,880
30994	29872	191.0	8	VCP			17	CIPP	5,730
30995	29761	224.0	8	VCP			20	CIPP	6,720
31064	31065	102.0	8	VCP			5,255	CIPP	3,060
31065	19351	220.0	8	VCP			11,333	CIPP	6,600
31073	31075	375.0	12	VCP			Refer to Smoke	CIPP	11,250
31074	31073	73.1	12	VCP			5,649	CIPP	2,193
31075	87315	113.9	12	PVC			8,801	CIPP	3,417
31076	29906	260.8	8	VCP			13,435	CIPP	7,824
31077	31076	245.5	8	VCP			22	CIPP	7,365
31078	31077	245.5	8	VCP			22	CIPP	7,365
31086	29925	194.6	8	VCP			18	CIPP	5,838
31095	29967	97.0	8	VCP			9	CIPP	2,910
31096	29960	342.0	10	VCP			39	CIPP	10,260
31265	31264	258.0	8	VCP			23	CIPP	7,740
32228	32227	298.0	8	VCP			27	CIPP	8,940
47209	47210	135.4	8	PVC			6,975	CIPP	4,062
47244	63917	391.4	8	VCP			36	CIPP	11,742
47259	47254	400.9	8	VCP			Refer to Smoke	CIPP	12,027
54585	54604	196.5	12	VCP			27	CIPP	5,895
54590	54591	123.7	8	VCP			11	CIPP	3,711
54591	79083	399.3	8	VCP			36	CIPP	11,979
54595	54594	84.4	8	VCP			4,348	CIPP	2,532
54637	54638	194.9	8	VCP			10,040	CIPP	5,847
54894	54892	201.0	8	VCP			18	CIPP	6,030
54897	17676	107.0	8	VCP			10	CIPP	3,210
57850	29919	348.9	8	VCP			17,974	CIPP	10,467
57851	57850	237.0	8	VCP			12,209	CIPP	7,110
57852	57851	348.4	8	VCP			32	CIPP	10,452
58442	82502	260.9	8	VCP			24	CIPP	7,827
58443	82502	175.0	8	VCP			16	CIPP	5,250
58444	58447	237.0	8	VCP			22	CIPP	7,110
58445	58446	281.5	8	VCP			26	CIPP	8,445

Lea Ann Way West
Defect Data and
Recommendations Table
CCTV Inspection

Upstream Structure	Downstream Structure	Segment Length	Pipe Diameter	Pipe Material	Defect	OPRI Rating	SCAP Credits (gpd)	Recommendation	Rehabilitation Cost ($)
58448	58447	311.4	8	VCP			28	CIPP	9,342
58450	58448	401.8	8	VCP			37	CIPP	12,054
58464	58465	113.5	8	VCP			10	CIPP	3,405
58476	54895	240.0	8	VCP			22	CIPP	7,200
58477	58476	213.0	8	VCP			19	CIPP	6,390
58579	19374	210.0	8	VCP			19	CIPP	6,300
58581	19379	62.0	8	VCP			3,194	CIPP	1,860
58584	19372	289.0	8	VCP			26	CIPP	8,670
58585	58584	336.0	8	VCP			31	CIPP	10,080
58611	19399	198.0	8	VCP			18	CIPP	5,940
63273	58445	313.7	8	VCP			29	CIPP	9,411
63276	63277	145.5	8	VCP			13	CIPP	4,365
63282	63273	441.2	8	VCP			40	CIPP	13,236
63287	63288	254.1	8	VCP			23	CIPP	7,623
63294	58459	391.3	8	PVC			20,158	CIPP	11,739
63917	47246	192.0	8	VCP			9,891	CIPP	5,760
79080	79080A	194.5	10	VCP			22	CIPP	5,835
79084	54591	114.0	8	VCP			10	CIPP	3,420
79088	54602	154.2	8	VCP			14	CIPP	4,626
79090	79086	300.3	8	VCP			27	CIPP	9,009
79095	82414	400.4	8	VCP			20,627	CIPP	12,012
79097	74849	357.8	8	VCP			18,432	CIPP	10,734
82417	18027	285.0	8	VCP			26	CIPP	8,550
82429	54866	173.9	8	VCP			8,958	CIPP	5,217
83642	83643	219.7	8	VCP			20	CIPP	6,591
86535	19379	74.0	12	VCP			5,718	CIPP	2,220
86546	58589	237.0	8	VCP			22	CIPP	7,110
97000	58464	18.1	8	VCP			2	CIPP	543
19354-ST	19354	96.0	8	VCP			9	CIPP	2,880
29786-ST	29786	25.0	8	VCP			2	CIPP	750
29874-ST	29874	18.0	8	VCP			2	CIPP	540
54892A	54892	172.0	8	VCP			16	CIPP	5,160
57851-LH	57851	21.5	8	VCP			2	CIPP	645
58577-ST	58577	20.0	8	VCP			2	CIPP	600
17668	17667	218.0	8	VCP			20	CIPP2	6,540
17669	17670	181.0	8	VCP			16	CIPP2	5,430
17670	17671	68.0	8	VCP			6	CIPP2	2,040
17675	32228	148.0	8	VCP			13	CIPP2	4,440
17676	17677	161.0	8	VCP			15	CIPP2	4,830
17679	17675	102.0	8	VCP			9	CIPP2	3,060
17680	17679	121.0	8	VCP			11	CIPP2	3,630
18018	32221	171.3	8	VCP			16	CIPP2	5,139
19344	19345	364.0	8	VCP			33	CIPP2	10,920
19345	19346	333.0	8	VCP			17,155	CIPP2	9,990
19349	19348	307.0	15	Conc			Refer to Smoke	CIPP2	15,350
19353	19352	170.0	8	VCP			8,758	CIPP2	5,100
19358	19357	348.0	8	VCP			32	CIPP2	10,440

Lea Ann Way West
Defect Data and
Recommendations Table
CCTV Inspection

Upstream Structure	Downstream Structure	Segment Length	Pipe Diameter	Pipe Material	Defect	OPRI Rating	SCAP Credits (gpd)	Recommendation	Rehabilitation Cost ($)
19359	19351	308.0	12	VCP			42	CIPP2	9,240
19365	19364	129.0	8	VCP			12	CIPP2	3,870
19366	19367	209.0	8	VCP			19	CIPP2	6,270
19367	19368	52.0	10	VCP			6	CIPP2	1,560
19372	19371	118.0	8	VCP			11	CIPP2	3,540
19373	19372	131.0	8	VCP			12	CIPP2	3,930
19375	58610	180.0	8	VCP			16	CIPP2	5,400
19376	19375	75.0	8	VCP			7	CIPP2	2,250
19377	19376	88.0	8	VCP			8	CIPP2	2,640
19378	26145	237.0	8	VCP			22	CIPP2	7,110
19381	19380	16.0	8	VCP			824	CIPP2	480
19382	19381	223.0	8	VCP			11,488	CIPP2	6,690
19386	58611	110.0	8	VCP			10	CIPP2	3,300
19387	19386	130.0	8	VCP			12	CIPP2	3,900
19392	19393	139.0	8	VCP			13	CIPP2	4,170
19393	19394	391.0	8	VCP			36	CIPP2	11,730
19396	19367	85.0	8	VCP			8	CIPP2	2,550
19397	27225	209.0	8	VCP			19	CIPP2	6,270
19398	19399	125.0	8	VCP			11	CIPP2	3,750
19399	86534	11.0	8	VCP			1	CIPP2	330
26144	19370	144.0	12	VCP			11,127	CIPP2	4,320
26145	58581	91.0	8	VCP			8	CIPP2	2,730
26989	26990	127.0	8	PVC			12	CIPP2	3,810
29710	29709	57.0	8	VCP			Refer to Smoke	CIPP2	1,710
29717	29718	92.0	3	VCP			8	CIPP2	2,760
29718	29719	228.0	8	VCP			21	CIPP2	6,840
29723	29724	282.0	12	VCP			38	CIPP2	8,460
29739	29740	218.0	8	CPP			11,230	CIPP2	6,540
29741	29742	327.0	8	VCP			16,845	CIPP2	9,810
29748	29749	130.0	8	CPP			6,697	CIPP2	3,900
29758	29760	340.0	8	VCP			31	CIPP2	10,200
29761	29762	364.0	8	VCP			33	CIPP2	10,920
29762	29763	238.0	8	VCP			22	CIPP2	7,140
29763	29768	190.0	8	VCP			17	CIPP2	5,700
29764	29763	136.0	8	CPP			12	CIPP2	4,080
29766	29765	202.0	8	VCP			10,406	CIPP2	6,060
29768	29769	247.0	8	VCP			12,724	CIPP2	7,410
29769	29770	400.0	8	VCP			20,606	CIPP2	12,000
29771	29773	319.0	12	VCP			44	CIPP2	9,570
29773	29775	164.0	12	VCP			22	CIPP2	4,920
29775	29776	154.0	12	VCP			21	CIPP2	4,620
29776	29778	320.0	12	VCP			44	CIPP2	9,600
29778	29781	328.2	15	VCP			Refer to Smoke	CIPP2	16,410
29779	29778	318.0	12	VCP			43	CIPP2	9,540
29782	29779	300.0	12	VCP			41	CIPP2	9,000
29784	29782	255.0	12	VCP			35	CIPP2	7,650
29785	29784	208.0	12	VCP			28	CIPP2	6,240

Lea Ann Way West
Defect Data and
Recommendations Table
CCTV Inspection

Upstream Structure	Downstream Structure	Segment Length	Pipe Diameter	Pipe Material	Defect	OPRI Rating	SCAP Credits (gpd)	Recommendation	Rehabilitation Cost ($)
29787	29785	205.0	12	VCP			28	CIPP2	6,150
29788	29787	249.0	12	VCP			34	CIPP2	7,470
29790	29779	379.0	10	VCP			24,405	CIPP2	11,370
29791	29790	382.0	8	VCP			19,679	CIPP2	11,460
29793	29791	300.0	8	VCP			15,455	CIPP2	9,000
29799	29793	94.0	10	VCP			6,053	CIPP2	2,820
29800	29799	135.0	8	VCP			6,955	CIPP2	4,050
29856	29855	395.7	8	VCP			36	CIPP2	11,871
29857	29856	273.0	8	VCP			25	CIPP2	8,190
29864	29863	80.0	8	VCP			7	CIPP2	2,400
29865	29864	180.0	8	VCP			16	CIPP2	5,400
29867	29863	198.0	8	VCP			18	CIPP2	5,940
29868	29867	299.0	8	VCP			27	CIPP2	8,970
29869	29868	82.0	8	VCP			7	CIPP2	2,460
29874	29873	98.0	8	VCP			9	CIPP2	2,940
29886	29887	131.2	8	VCP			Refer to Smoke	CIPP2	3,936
29893	29890	117.8	8	VCP			11	CIPP2	3,534
29898	29899	168.6	8	VCP			8,685	CIPP2	5,058
29899	29901	125.1	12	VCP			9,667	CIPP2	3,753
29901	87309	96.2	15	VCP			9,292	CIPP2	4,810
29904	29905	28.5	8	VCP			1,468	CIPP2	855
29925	29946	124.3	8	VCP			6,403	CIPP2	3,729
29930	29931	116.5	8	VCP			11	CIPP2	3,495
29931	29932	264.4	8	VCP			13,621	CIPP2	7,932
29932	29933	40.0	8	VCP			2,061	CIPP2	1,200
29940	29941	112.0	8	VCP			10	CIPP2	3,360
29946	29947	36.1	8	VCP			1,860	CIPP2	1,083
29947	29948	193.6	12	CPP			14,960	CIPP2	5,808
29948	31074	245.6	12	VCP			18,978	CIPP2	7,368
29950	31073	105.7	8	VCP			5,445	CIPP2	3,171
29958	31093	203.9	12	VCP			15,756	CIPP2	6,117
29959	29958	230.1	8	VCP			21	CIPP2	6,903
29960	29959	312.1	8	VCP			28	CIPP2	9,363
29961	29940	206.0	8	VCP			19	CIPP2	6,180
29964	29963	205.0	8	VCP			19	CIPP2	6,150
29965	29964	192.0	8	VCP			17	CIPP2	5,760
29966	29964	295.0	8	VCP			27	CIPP2	8,850
29967	29966	160.0	8	VCP			15	CIPP2	4,800
29968	31095	39.0	8	VCP			4	CIPP2	1,170
29970	29969	150.0	8	VCP			14	CIPP2	4,500
29971	29970	209.0	8	VCP			19	CIPP2	6,270
29974	29960	118.0	8	VCP			11	CIPP2	3,540
29975	29974	226.0	8	VCP			21	CIPP2	6,780
29976	29975	228.0	8	VCP			21	CIPP2	6,840
29977	29976	125.0	8	VCP			11	CIPP2	3,750
29981	29982	93.0	8	VCP			8	CIPP2	2,790
29983	29982	133.0	8	VCP			12	CIPP2	3,990

Lea Ann Way West
Defect Data and
Recommendations Table
CCTV Inspection

Upstream Structure	Downstream Structure	Segment Length	Pipe Diameter	Pipe Material	Defect	OPRI Rating	SCAP Credits (gpd)	Recommendation	Rehabilitation Cost ($)
31063	29854	176.0	8	VCP			16	CIPP2	5,280
31070	29719	396.0	8	VCP			Refer to Smoke	CIPP2	11,880
31083	31084	246.4	10	VCP			15,867	CIPP2	7,392
31084	29943	269.4	10	VCP			17,348	CIPP2	8,082
31085	29941	113.2	8	VCP			10	CIPP2	3,396
31093	87319	43.4	12	RCP			3,354	CIPP2	1,302
31278	89138	119.0	8	PVC			Refer to Smoke	CIPP2	3,570
31644	29973	180.0	8	VCP			16	CIPP2	5,400
31764	29892	305.8	8	VCP			28	CIPP2	9,174
31911	79078	46.2	10	VCP			2,975	CIPP2	1,386
32236	32235	192.8	8	VCP			18	CIPP2	5,784
34876	86535	134.0	10	VCP			Refer to Smoke	CIPP2	4,020
47245	47246	43.5	8	VCP			2,239	CIPP2	1,304
47246	54537	235.9	8	VCP			12,152	CIPP2	7,077
54022	82429	399.0	8	VCP			20,555	CIPP2	11,970
54537	80536	315.1	8	VCP			16,232	CIPP2	9,453
54592	79084	107.8	8	VCP			10	CIPP2	3,234
54593	79077	350.9	10	VCP			22,596	CIPP2	10,527
54594	54593	398.4	8	VCP			20,524	CIPP2	11,952
54596	54594	177.2	8	VCP			9,128	CIPP2	5,316
54866	54867	207.9	8	PVC			10,710	CIPP2	6,237
54895	54894	352.0	8	VCP			32	CIPP2	10,560
58446	58452	71.3	8	VCP			6	CIPP2	2,139
58451	58450	141.5	8	VCP			7,289	CIPP2	4,245
58452	58453A	326.7	8	VCP			30	CIPP2	9,801
58454	58451	116.8	8	VCP			6,017	CIPP2	3,504
58455	63279	194.0	8	VCP			Refer to Smoke	CIPP2	5,820
58457	58455	272.7	8	VCP			14,048	CIPP2	8,181
58459	82503	107.0	8	VCP			5,512	CIPP2	3,210
58498	58457	268.5	8	VCP			13,832	CIPP2	8,055
58499	82504A	135.0	9	VCP			7,824	CIPP2	4,050
58577	58578	220.0	8	VCP			20	CIPP2	6,600
58578	58579	233.0	8	VCP			21	CIPP2	6,990
58580	58582	311.0	12	VCP			24,032	CIPP2	9,330
58582	58583	265.0	12	VCP			20,477	CIPP2	7,950
58583	26144	395.0	12	VCP			30,523	CIPP2	11,850
58587	19365	130.0	8	VCP			12	CIPP2	3,900
58588	58587	48.0	8	VCP			4	CIPP2	1,440
58589	58588	101.0	8	VCP			9	CIPP2	3,030
58607	19360	212.0	12	VCP			16,382	CIPP2	6,360
58608	58607	11.3	12	VCP			873	CIPP2	339
58609	19373	62.0	8	VCP			6	CIPP2	1,860
63279	58454	82.1	8	VCP			4,229	CIPP2	2,463
63288	58498	105.6	8	VCP			10	CIPP2	3,168
63292	63293	79.2	8	PVC			7	CIPP2	2,376
63293	63294	117.6	8	PVC			11	CIPP2	3,528
79077	31911	156.6	10	VCP			10,084	CIPP2	4,698

Lea Ann Way West
Defect Data and
Recommendations Table
CCTV Inspection

Upstream Structure	Downstream Structure	Segment Length	Pipe Diameter	Pipe Material	Defect	OPRI Rating	SCAP Credits (gpd)	Recommendation	Rehabilitation Cost ($)
79078	79079	141.3	12	VCP			10,919	CIPP2	4,239
79079	54585	129.3	12	VCP			18	CIPP2	3,879
79082	54593	58.1	8	VCP			2,993	CIPP2	1,743
79083	79082	399.5	8	VCP			36	CIPP2	11,985
79086	79087	165.4	8	VCP			15	CIPP2	4,962
79087	79088	40.9	8	VCP			4	CIPP2	1,227
80536	54595	311.8	8	VCP			16,062	CIPP2	9,354
82502	58444	294.1	8	VCP			27	CIPP2	8,823
82503	58499	74.0	8	VCP			3,812	CIPP2	2,220
82504	82504C	105.1	8	VCP			Refer to Smoke	CIPP2	3,153
86534	19397	95.0	8	VCP			9	CIPP2	2,850
87330	87329	50.3	10	PVC			3,239	CIPP2	1,509
89116	89115	275.3	10	PVC			17,728	CIPP2	8,259
89117	89116	60.9	10	PVC			3,922	CIPP2	1,827
89122	105980	102.1	10	PVC			Refer to Smoke	CIPP2	3,063
94425	94425A	100.1	8	VCP			Refer to Smoke	CIPP2	3,003
104216	29713	141.0	8	PVC			Refer to Smoke	CIPP2	4,230
104219	104218	149.0	8	PVC			7,676	CIPP2	4,470
106449	89117	156.0	10	PVC			10,045	CIPP2	4,680
)788-ST	29788	65.0	8	VCP			6	CIPP2	1,950
9903-ST	29903	41.7	8	VCP			2,148	CIPP2	1,251
57852-LH	57852	71.2	8	VCP			6	CIPP2	2,136
58453A	54853	45.7	8	VCP			4	CIPP2	1,371
63288A	63288	208.6	8	VCP			19	CIPP2	6,258
63292-ST	63292	5.0	8	PVC			0	CIPP2	150
79080A	79081	122.0	10	VCP			14	CIPP2	3,660
82504A	82504	18.8	8	VCP			968	CIPP2	564
82504B	82504A	128.0	8	VCP			6,594	CIPP2	3,840
82504C	82504D	87.9	8	VCP			4,528	CIPP2	2,637
82504D	58498	214.7	8	VCP			11,060	CIPP2	6,441
94425A	58459	14.0	8	VCP			721	CIPP2	420
18020	18021	110.0	8	VCP			0	CLEAN	110
18025	18022	196.0	8	VCP			0	CLEAN	196
19385	19388	135.0	8	VCP			0	CLEAN	135
21123	21124	203.0	8	VCP			0	CLEAN	203
21124	18025	225.0	8	VCP			0	CLEAN	225
29859	29862	400.0	8	VCP			0	CLEAN	400
29862	29853	175.0	8	VCP			0	CLEAN	175
29880	29879	101.3	8	VCP			0	CLEAN	101
29909	29896	235.9	10	VCP			0	CLEAN	236
29996	29997	270.7	8	VCP			0	CLEAN	271
31266	27796	164.0	8	VCP			0	CLEAN	164
31268	31267	232.0	8	VCP			0	CLEAN	232
31270	31269	375.0	8	VCP			0	CLEAN	375
32217	54888	171.3	8	VCP			0	CLEAN	171
33789	33787	163.0	8	VCP			0	CLEAN	163
)7243	80533	314.8	8	VCP			0	CLEAN	315

Lea Ann Way West
Defect Data and
Recommendations Table
CCTV Inspection

Upstream Structure	Downstream Structure	Segment Length	Pipe Diameter	Pipe Material	Defect	OPRI Rating	SCAP Credits (gpd)	Recommendation	Rehabilitation Cost ($)
47254	MSD0099-PS	242.1	10	VCP			0	CLEAN	242
47257	47256	253.7	10	VCP			0	CLEAN	254
54600	54603	255.2	8	VCP			0	CLEAN	255
54604	79075	369.6	12	VCP			0	CLEAN	370
54613	54614	289.3	8	VCP			0	CLEAN	289
54871	54868	196.7	10	VCP			0	CLEAN	197
55989	63895	80.0	10	VCP			0	CLEAN	80
55991	55990	197.1	10	VCP			0	CLEAN	197
63895	54872	335.2	8	VCP			0	CLEAN	335
78870	78871	317.2	10	PVC			0	CLEAN	317
103967	47226	196.3	8	PVC			0	CLEAN	196
113629	78871	222.6	10	PVC			0	CLEAN	223
18023-ST	18023	4.0	8	VCP			0	CLEAN	4
19343-ST	19343	63.0	8	VCP			0	CLEAN	63
19390-ST	19390	61.0	8	VCP			0	CLEAN	61
21123-ST	21123	5.0	8	VCP			0	CLEAN	5
29715-ST	29715	1.0	8	VCP			0	CLEAN	1
29777-ST	29777	33.0	8	VCP			0	CLEAN	33
29870-ST	29870	7.0	8	VCP			0	CLEAN	7
33787-ST	33787	13.0	8	VCP			0	CLEAN	13
33789-ST	33789	10.0	8	PVC			0	CLEAN	10
54592-ST	54592	7.0	8	VCP			0	CLEAN	7
54889-ST	54889	12.2	8	VCP			0	CLEAN	12
54892A-ST	54892A	8.0	8	VCP			0	CLEAN	8
63294-ST	63294	20.6	8	VCP			0	CLEAN	21
18021	54885	115.7	8	VCP			0	CLEAN2	116
18022	18021	103.0	8	VCP			0	CLEAN2	103
19383	19384	63.0	8	VCP			0	CLEAN2	63
19384	19385	93.0	8	VCP			0	CLEAN2	93
19389	19388	398.0	8	VCP			0	CLEAN2	398
19390	19389	95.0	8	VCP			0	CLEAN2	95
29853	29852	148.0	8	VCP			0	CLEAN2	148
29860	29859	122.0	8	VCP			0	CLEAN2	122
29861	29860	7.0	8	VCP			0	CLEAN2	7
29878	29709	367.0	8	VCP			0	CLEAN2	367
29879	29878	39.8	8	VCP			0	CLEAN2	40
29881	29880	332.3	8	VCP			0	CLEAN2	332
29882	29881	390.4	8	VCP			0	CLEAN2	390
29888	29887	136.0	8	VCP			0	CLEAN2	136
29897	29900	313.0	10	CPP			0	CLEAN2	313
29914	29879	211.7	10	VCP			0	CLEAN2	212
31069	29914	214.3	10	VCP			0	CLEAN2	214
31267	31266	57.0	8	VCP			0	CLEAN2	57
31269	31268	308.0	8	VCP			0	CLEAN2	308
31271	31270	287.0	8	VCP			0	CLEAN2	287
31272	31271	377.0	8	VCP			0	CLEAN2	377
31273	31272	271.0	8	VCP			0	CLEAN2	271

Lea Ann Way West
Defect Data and
Recommendations Table
CCTV Inspection

Upstream Structure	Downstream Structure	Segment Length	Pipe Diameter	Pipe Material	Defect	OPRI Rating	SCAP Credits (gpd)	Recommendation	Rehabilitation Cost ($)
33787	33786	317.0	8	PVC			0	CLEAN2	317
33788	33787	70.0	8	VCP			0	CLEAN2	70
33790	33789	11.0	8	VCP			0	CLEAN2	11
47214	78871	316.3	10	PVC			0	CLEAN2	316
47226	47227	371.6	10	PVC			0	CLEAN2	372
47227	47228	340.7	10	PVC			0	CLEAN2	341
47228	78870	176.6	10	PVC			0	CLEAN2	177
47255	47254	8.8	10	VCP			0	CLEAN2	9
47256	47255	87.5	10	VCP			0	CLEAN2	88
54599	54600	254.2	8	VCP			0	CLEAN2	254
54601	54600	173.6	8	VCP			0	CLEAN2	174
54602	54601	191.0	8	VCP			0	CLEAN2	191
54872	54871	404.3	8	VCP			0	CLEAN2	404
54885	87330	140.9	8	PVC			0	CLEAN2	141
54888	87329	87.9	8	PVC			0	CLEAN2	88
55990	90620	176.3	10	VCP			0	CLEAN2	176
83643	29888	229.6	8	VCP			0	CLEAN2	230
90620	90621	411.0	10	PVC			0	CLEAN2	904
90621	54872	224.8	10	PVC			0	CLEAN2	225
99524	54871	241.9	8	PVC			0	CLEAN2	242
29735	29736	330.0	8	VCP			30	IMMEDIATE ACTION	0
19370	19369	67.0	12	VCP			5,177	Point Repair	8,710
29720	29724	201.0	8	VCP			Refer to Smoke	Point Repair	26,130
29742	29750	321.0	15	VCP			31,006	Point Repair	41,730
29743	29742	140.0	8	VCP			7,212	Point Repair	18,200
29926	29925	288.3	8	VCP			26	Point Repair	115,320
29943	29947	283.6	10	VCP			18,262	Point Repair	36,868
29949	29948	122.1	8	VCP			6,290	Point Repair	48,840
29951	29950	234.3	8	VCP			21	Point Repair	93,720
31068	29915	257.4	8	VCP			23	Point Repair	33,462
31277	31278	290.0	8	VCP			Refer to Smoke	Point Repair	37,700
47208	47207	352.3	8	PVC			32	Point Repair	45,799
47215	47214	327.3	10	PVC			21,076	Point Repair	130,920
47242	63918	277.8	8	VCP			Refer to Smoke	Point Repair	111,120
47262	47260	113.2	8	VCP			10	Point Repair	45,280
54544	54596	273.4	8	VCP			25	Point Repair	109,360
54603	79078	186.5	8	VCP			9,608	Point Repair	24,245
54606	54602	297.8	8	VCP			27	Point Repair	119,120
54867	30953	227.3	8	VCP			11,709	Point Repair	29,549
54889	54890	72.5	8	VCP			7	Point Repair	9,425
58453	58451	172.5	8	VCP			8,886	Point Repair	22,425
58610	58609	232.0	8	VCP			21	Point Repair	30,160
63280	63279	184.6	8	VCP			9,510	Point Repair	23,998
63918	79099	279.7	8	VCP			25	Point Repair	36,361
89118	106449	263.0	10	PVC			16,936	Point Repair	34,190
89132	89131	249.9	10	PVC			16,092	Point Repair	32,487
04007	29742	198.0	15	VCP			19,125	Point Repair	25,740

Lea Ann Way West
Defect Data and
Recommendations Table
CCTV Inspection

Upstream Structure	Downstream Structure	Segment Length	Pipe Diameter	Pipe Material	Defect	OPRI Rating	SCAP Credits (gpd)	Recommendation	Rehabilitation Cost ($)
104220	104219	245.0	8	PVC			22	Point Repair	98,000
112091	112090	291.0	8	PVC			26	Point Repair	116,400
29851	29771	380.0	10	VCP			24,470	REPLACE	32,851
29852	29851	390.0	10	VCP			25,114	REPLACE	33,716
29855	29851	235.0	8	VCP			12,106	REPLACE	20,316
29905	29903	101.7	8	VCP			5,239	REPLACE	8,792
29933	31083	151.9	10	VCP			9,781	REPLACE	13,132
54892	81961	176.0	8	VCP			16	REPLACE	15,215
89115	29933	213.3	10	PVC			13,735	REPLACE	18,440
				Primary			920,908		2,957,529
				Secondary			727,664		1,015,679

Basis of Construction Costs

Manhole Point Repair	$200
Cover Replacement	$100
Lateral Point Repair	$1,000
Sanitary Sewer Line Replacement Program	$0
Cleanout Replacement	$500
Pump Station Seal	$500
Install Manhole Chimney Seal	$200
Replace PSC	$500
CIPP	$50/Linear Foot
Replace Pipe/Pipe Burst	$150/Linear Foot
Plumbing Modification Program	$5,000

CIPP	Cured-in-place pipe. (primary recommendation)
CIPP2	Cured-in-place pipe. (secondary recommendation)
Clean2	Secondary recommendation.
Conc	Concrete.
gpd	Gallons per day.
PMP	Plumbing Modification Program.
PSC	Property service connection.
PVC	Polyvinyl chloride.
SCAP	System Capacity Assurance Plan.
SSLRP	Sanitary Sewer Line Replacement Program.
VCP	Vitrified clay pipe.

Lea Ann Way West
Defect Data and Recommendations Table
Smoke Inspection

Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
17668	17667	6304 Sherlock Way	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
18015	18016	6310 May Pen Rd.	Service Connection	Smoke Inside Building	Minor	Non-Inundation / Low Groundwater	0	No Action	0
18019	18018	6304 Ocho Rios Ct.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
18021	54885	6205 Port Antonio Rd.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
18022	18021	6204 Port Antonio Rd.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
18028	18029	6500 Mandeville Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
18030	18031	6304 Mandeville Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
18030	18031	6305 Mandeville Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
18032	32221	6301 Mandeville Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
19343	19344	5325 Barnes Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
19344	19345	5309 Barnes Dr.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	50
19348	19347	4912 Woodhill Ln.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
19348	19347	4914 Woodhill Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
19348	19347	4918 Woodhill Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
19349	19348	5000 Woodhill Ln.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
19349	19348	4920 Woodhill Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
19349	19348	5002 Woodhill Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500

Lea Ann Way West
Defect Data and Recommendations Table
Smoke Inspection

Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
19349	19348	5003 Woodhill Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
19349	19348	5002 Woodhill Ln.	Mainline	Mainline	Minor	Non-Inundation / Low Groundwater	52	Refer to CCTV Recommendation	0
19351	19350	5110 Woodhill Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
19353	19352	5207 Woodhill Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
19354	19353	5306 Woodhill Ln.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
19354	19353	5210 Woodhill Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
19354	19353	5212 Woodhill Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
19354	19353	5310 Woodhill Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
19356	19355	4916 Ronwood Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
19356	19355	4917 Ronwood Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
19356	19355	4919 Ronwood Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
19356	19355	4921 Ronwood Dr.	Lateral	Defective PSC	Severe	Non-Inundation / Low Groundwater	3	Replace PSC	500
19358	19357	5103 Ronwood Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
19358	19357	5104 Ronwood Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
19358	19357	5102 Ronwood Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
19362	19361	5301 Ronwood Dr.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
19362	19361	5305 Ronwood Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500

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Defect Data and Recommendations Table
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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
19370	19369	5301 Layne Rd.	Service Connection	Soil Fissure/Ground	Moderate	Stream Inundation / High Groundwater	3	Televise SC and Refer to SSLRP	0
19378	26145	5414 Layne Rd.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
19387	19386	7606 Buena Vista Ct.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
19387	19386	7606 Buena Vista Ct.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
19388	19391	5302 Monaco Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
19389	19388	7623 Buena Vista Ct.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
19389	19388	5400 Monaco Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
19389	19388	7618 Buena Vista Ct.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
19389	19388	7620 Buena Vista Ct.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
19391	19392	5210 Monaco Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
19391	19392	5208 Monaco Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
19394	19395	5016 Monaco Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
27786	27787	7100 Billie Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
27796	31265	6219 Moorhaven Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
29710	29709	5328 Georgia Ln.	Mainline	Mainline	Minor	Non-Inundation / Low Groundwater	5	Refer to CCTV Recommendation	0
29718	29719	7008 Mary Laverne Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29720	29724	7002 Mary Laverne Dr.	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	10,303	Refer to CCTV Recommendation	0

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
29720	29724	7002 Mary Laverne Dr.	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	Redundant	Refer to CCTV Recommendation	0
29722	29723	5213 Barnes Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29736	29730	4905 Lea Ann Way	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29739	29740	4813 Rossmoor Dr.	Service Connection	Broken Cleanout	Moderate	Stream Inundation / High Groundwater	3	Replace Cleanout	500
29739	29740	4817 Rossmoor Dr.	Service Connection	Cleanout	Moderate	Stream Inundation / High Groundwater	3	Replace Cap on Cleanout	500
29739	29740	4811 Rossmoor Dr.	Lateral	Defective PSC	Minor	Stream Inundation / High Groundwater	3	Replace PSC	500
29739	29740	4813 Rossmoor Dr.	Lateral	Defective PSC	Moderate	Stream Inundation / High Groundwater	3	Replace PSC	500
29743	29742	4701 Rossmoor Dr.	Lateral	Defective PSC	Severe	Non-Inundation / Low Groundwater	3	Replace PSC	500
29744	29743	4606 Rossmoor Dr.	Service Connection	Smoke Inside Building	Moderate	Non-Inundation / Low Groundwater	0	No Action	0
29746	29747	7102 Dittmar Dr.	Lateral	Defective PSC	Moderate	Stream Inundation / High Groundwater	3	Replace PSC	500
29746	29747	7106 Dittmar Dr.	Lateral	Defective PSC	Moderate	Stream Inundation / High Groundwater	3	Replace PSC	500
29746	29747	7110 Dittmar Dr.	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	12,518	Refer to CCTV Recommendation	0
29747	29748	4600 Glenna Way	Lateral	Defective PSC	Moderate	Stream Inundation / High Groundwater	3	Replace PSC	500
29748	29749	4606 Glenna Way	Service Connection	Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
29748	29749	4610 Glenna Way	Service Connection	Smoke Inside Building	Minor	Non-Inundation / Low Groundwater	0	No Action	0
29748	29749	4607 Glenna Way	Service Connection	Soil Fissure/Ground	Moderate	Stream Inundation / High Groundwater	3	Televise SC and Refer to SSLRP	0
29749	29750	4614 Glenna Way	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
29749	29750	4616 Glenna Way	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29751	29753	4717 Glenna Way	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
29751	29753	4805 Glenna Way	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
29751	29753	4805 Glenna Way	Service Connection	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29759	29758	5124 Mile of Sunshine Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29763	29768	5020 Mile of Sunshine Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29763	29768	5018 Mile of Sunshine Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29766	29765	5111 Mediterranean Ct.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
29772	29771	6816 Orange Blossom Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29778	29781	6802 Tropic Ct.	Mainline	Mainline	Minor	Non-Inundation / Low Groundwater	56	Refer to CCTV Recommendation	0
29798	29799	6701 Tamarind Ct.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29798	29799	6701 Tamarind Ct.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29798	29799	6707 Tamarind Ct.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29798	29799	6711 Tamarind Ct.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29798	29799	6711 Tamarind Ct.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29852	29851	6800 Orange Blossom Rd.	Service Connection	Broken Cleanout	Moderate	Stream Inundation / High Groundwater	3	Replace Cleanout	500
29854	29852	6706 Orange Blossom Rd.	Lateral	Defective PSC	Moderate	Stream Inundation / High Groundwater	3	Replace PSC	500

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
29854	29852	6706 Orange Blossom Rd.	Service Connection	Soil Fissure/Ground	Moderate	Stream Inundation / High Groundwater	3	Televise SC and Refer to SSLRP	0
29857	29856	5004 Sunday Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29858	29857	5007 Sunday Dr.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
29858	29857	5010 Sunday Dr.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
29858	29857	5011 Sunday Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29858	29857	5011 Sunday Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29861	29860	5003 E. Bahama Ct.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29861	29860	5006 E. Bahama Ct.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29861	29860	5003 E. Bahama Ct.	Lateral	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise Lateral and Point Repair	1000
29861	29860	5007 E. Bahama Ct.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29863	29866	4903 Batalina Ct.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	50
29863	29866	4905 Batalina Ct.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29868	29867	6706 Bahama Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29868	29867	6707 Bahama Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29868	29867	6708 Bahama Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29868	29867	6706 Bahama Ln.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29872	29873	5101 Acapolca Way	Lateral	Defective PSC	Severe	Non-Inundation / Low Groundwater	3	Replace PSC	500

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
29872	29873	5103 Acapolca Way	Lateral	Defective PSC	Severe	Non-Inundation / Low Groundwater	3	Replace PSC	500
29874	29873	5017 Acapolca Way	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29874	29873	5019 Acapolca Way	Lateral	Defective PSC	Severe	Non-Inundation / Low Groundwater	3	Replace PSC	500
29875	29876	6712 Copra Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29875	29876	6714 Copra Ln.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
29876	29877	6810 Copra Ln.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
29876	29877	6815 Copra Ln.	Service Connection	Broken Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
29876	29877	6807 Copra Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29880	29879	5405 Georgia Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29882	29881	5511 Georgia Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29882	29881	5311 Georgia Ln.	Service Connection	Smoke Inside Building	Moderate	Non-Inundation / Low Groundwater	0	No Action	0
29882	29881	5607 Georgia Ln.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29886	29887	5503 Saxon Blvd.	Mainline	Mainline	Moderate	Non-Inundation / Low Groundwater	12	Refer to CCTV Recommendation	0
29889	29900	5412 Marble Ct.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
29890	29891	5411 Marble Ct.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29893	29890	5408 Marble Ct.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29893	29890	5408 Marble Ct.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
29894	29897	7008 Billie Ln.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
29900	29899	7001 Billie Ln.	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	13,330	Refer to CCTV Recommendation	0
29902	87309	5437 Ye Old Post Rd.	Service Connection	Smoke Inside Building	Moderate	Non-Inundation / Low Groundwater	0	No Action	0
29908	29885	5514 Saxon Blvd.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
29909	29896	7025 Billie Ln.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
29912	29913	5525 Maco Ln.	Lateral	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
29912	29913	5525 Maco Ln.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
29916	31068	5517 Saxon Blvd.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
29920	29921	6814 Rock Forest Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29920	29921	6906 Rock Forest Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29920	29921	6814 Rock Forest Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29920	29921	6906 Rock Forest Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29920	29921	6906 Rock Forest Dr.	Service Connection	Water Meter	Moderate	Non-Inundation / Low Groundwater	0	No Action	0
29921	29922	6805 Rock Forest Dr.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
29921	29922	6811 Rock Forest Dr.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
29921	29922	6812 Rock Forest Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29923	29924	6804 Rock Hollow Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
29923	29924	6805 Rock Hollow Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29924	31086	6811 Rock Hollow Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29928	29926	6909 Rock Hollow Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29928	29926	6911 Rock Hollow Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29928	29926	6913 Rock Hollow Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29928	29926	6915 Rock Hollow Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29928	29926	6917 Rock Hollow Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29928	29926	6917 Rock Hollow Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29929	29925	5802 Rocky Mountain Dr.	Service Connection	Broken Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
29929	29925	5804 Rocky Mountain Dr.	Service Connection	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29929	29925	5804 Rocky Mountain Dr.	Service Connection	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	
29930	29931	5820 Whispering Hills Blvd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29930	29931	7003 Rock Hollow Dr.	Lateral	Defective PSC	Severe	Non-Inundation / Low Groundwater	3	Replace PSC	500
29930	29931	5820 Whispering Hills Blvd.	Mainline	Drainage Channel/Ditch	Moderate	Non-Inundation / Low Groundwater	0	Refer to CCTV Recommendation	0
29930	29931	5900 Whispering Hills Blvd.	Mainline	Drainage Channel/Ditch	Moderate	Non-Inundation / Low Groundwater	0	Refer to CCTV Recommendation	0
29931	29932	6919 Rock Hollow Dr.	Service Connection	Broken Cleanout	20	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
29931	29932	6919 Rock Hollow Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
29931	29932	5905 Whispering Hills Blvd.	Service Connection	Soil Fissure/Ground	Moderate	Stream Inundation / High Groundwater	3	Televise SC and Refer to SSLRP	0
29933	31083	6926 Sandstone Blvd.	Service Connection	Broken Cleanout	Moderate	Stream Inundation / High Groundwater	3	Replace Cleanout	500
29934	29933	5911 Whispering Hills Blvd.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
29934	29933	5913 Whispering Hills Blvd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29934	29933	5915 Whispering Hills Blvd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29941	31084	6916 Sandstone Blvd.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
29942	29943	6908 Sandstone Blvd.	Mainline	Mainline	Minor	Non-Inundation / Low Groundwater	15	Refer to CCTV Recommendation	0
29942	29943	6908 Sandstone Blvd.	Mainline	Mainline	Minor	Non-Inundation / Low Groundwater	Redundant	Refer to CCTV Recommendation	0
29945	29944	6008 Red Rock Ct.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29954	29953	5904 Bluestone Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29954	29953	5904 Bluestone Rd.	Lateral	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise Lateral and Point Repair	100
29955	29954	5909 Bluestone Rd.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
29956	29955	5921 Bluestone Rd.	Service Connection	Broken Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
29961	29940	6002 Green Manor Dr.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
29961	29940	6002 Green Manor Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29962	29961	6004 Green Manor Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
29962	29961	6007 Green Manor Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
29962	29961	6008 Green Manor Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29962	29961	6010 Green Manor Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29962	29961	6011 Green Manor Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29963	29962	6101 Green Manor Dr.	Service Connection	Smoke Inside Building	Moderate	Non-Inundation / Low Groundwater	0	No Action	0
29964	29963	6017 Whispering Hills Blvd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29964	29963	6017 Whispering Hills Blvd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29964	29963	6112 Green Manor Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29965	29964	6913 Ledgerock Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29965	29964	6915 Ledgerock Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29965	29964	6914 Ledgerock Rd.	Lateral	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise Lateral and Point Repair	1000
29966	29964	6205 Green Manor Dr.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
29966	29964	6207 Green Manor Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29967	29966	6208 Green Manor Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29969	29968	6309 Green Manor Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29972	29971	6500 Green Manor Dr.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
29975	29974	6105 Lynnchester Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
29977	29976	6610 Buisson Ln.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
29978	29976	6202 Lynnchester Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29978	29976	6203 Lynnchester Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29978	29976	6204 Lynnchester Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29978	29976	6205 Lynnchester Dr.	Lateral	Water Meter	Moderate	Non-Inundation / Low Groundwater	0	No Action	0
29979	29978	6213 Lynnchester Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29979	29978	6213 Lynnchester Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29980	29979	6220 Lynnchester Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
29980	29979	6211 Lynnchester Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29986	29985	6709 Moorhampton Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29986	29985	6711 Moorhampton Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29986	29985	6805 Moorhampton Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29986	29985	6807 Moorhampton Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29986	29985	6807 Moorhampton Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29986	29985	6807 Moorhampton Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29986	29985	6807 Moorhampton Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29986	29985	6807 Moorhampton Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29990	29989	6805 Taffy Ann Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
29990	29989	6804 Taffy Ann Dr.	Service Connection	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
29993	29992	6804 Bebe Ct.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
29993	29992	6804 Bebe Ct.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29993	29992	6806 Bebe Ct.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29994	29993	6809 Bebe Ct.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29994	29993	6812 Bebe Ct.	Lateral	Defective PSC	Severe	Non-Inundation / Low Groundwater	3	Replace PSC	500
29997	31098	5915 Rocky Mountain Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
29997	31098	6000 Rocky Mountain Dr.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
30953	30954	5810 Fern Valley Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
31063	29854	6702 Orange Blossom Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
31067	27786	7107 Billie Ln.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	50[illegible]
31068	29915	5513 Saxon Blvd.	Service Connection	Area Drain	Moderate	Non-Inundation / Low Groundwater	6,000	Refer to PMP	5000
31069	29914	7203 Shepherdsville Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
31070	29719	5307 Georgia Ln.	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	Redundant	Refer to CCTV Recommendation	0
31070	29719	5307 Georgia Ln.	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	Redundant	Refer to CCTV Recommendation	0
31070	29719	5307 Georgia Ln.	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	Redundant	Refer to CCTV Recommendation	0
31070	29719	5307 Georgia Ln.	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	Redundant	Refer to CCTV Recommendation	0

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
31070	29719	5307 Georgia Ln.	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	Redundant	Refer to CCTV Recommendation	0
31070	29719	5307 Georgia Ln.	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	Redundant	Refer to CCTV Recommendation	0
31070	29719	5309 Georgia Ln.	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	20,194	Refer to CCTV Recommendation	0
31070	29719	5309 Georgia Ln.	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	Redundant	Refer to CCTV Recommendation	0
31073	31075	6802 Sandstone Blvd.	Mainline	Mainline	Minor	Stream Inundation / High Groundwater	28,591	Refer to CCTV Recommendation	0
31076	29906	5508 Whispering Hills Blvd.	Service Connection	Gas Meter	Moderate	Stream Inundation / High Groundwater	0	No Action	0
31078	31077	5608 Whispering Hills Blvd.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
31078	31077	5608 Whispering Hills Blvd.	Service Connection	Smoke Inside Building	Moderate	Non-Inundation / Low Groundwater	0	No Action	0
31078	31077	5608 Whispering Hills Blvd.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
31079	31078	5615 Whispering Hills Blvd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
31080	31079	5711 Whispering Hills Blvd.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	50
31081	31080	5804 Whispering Hills Blvd.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
31085	29941	6917 Sandstone Blvd.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
31096	29960	6016 Moorhaven Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
31096	29960	6018 Moorhaven Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
31098	31099	5913 Rocky Mountain Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
31100	29995	6105 Moorhaven Dr.	Lateral	Defective PSC	Severe	Non-Inundation / Low Groundwater	3	Replace PSC	500

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
31265	31264	6207 Moorhaven Dr.	Lateral	Defective PSC	Severe	Non-Inundation / Low Groundwater	3	Replace PSC	500
31268	31267	6303 Moorhaven Dr.	Service Connection	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
31269	31268	6311 Moorhaven Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
31270	31269	6410 Moorhaven Dr.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
31270	31269	6406 Moorhaven Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
31271	31270	6503 Moorhaven Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
31271	31270	6502 Moorhaven Dr.	Service Connection	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
31271	31270	6503 Moorhaven Dr.	Service Connection	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
31271	31270	6503 Moorhaven Dr.	Service Connection	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
31272	31271	6513 Moorhaven Dr.	Lateral	Defective PSC	Severe	Non-Inundation / Low Groundwater	3	Replace PSC	500
31272	31271	6513 Moorhaven Dr.	Lateral	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise Lateral and Point Repair	100
31274	31275	6812 Green Manor Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
31275	31276	6800 Green Manor Dr.	Service Connection	Broken Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
31275	31276	6800 Green Manor Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
31275	31276	6809 Green Manor Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
31277	31278	6602 Green Manor Dr.	Mainline	Mainline	Moderate	Non-Inundation / Low Groundwater	26	Refer to CCTV Recommendation	0
31278	89138	6600 Green Manor Dr.	Mainline	Mainline	Moderate	Non-Inundation / Low Groundwater	11	Refer to CCTV Recommendation	0

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
31278	89138	6600 Green Manor Dr.	Lateral	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise Lateral and Point Repair	1000
31278	89138	6602 Green Manor Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
31643	31642	7316 Edenderry Ln.	Service Connection	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
31910	31911	4932 Lagoona Dr.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
32227	32226	6.05 Linstead Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
32235	32234	6310 Linstead Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
33784	30994	6733 Carribean Ln.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
33786	33785	6733 Carribean Ln.	Service Connection	Broken Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
33789	33787	6712 Shepherdsville Rd.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
33789	33787	6714 Shepherdsville Rd.	Service Connection	Oil/Water Separator	Moderate	Non-Inundation / Low Groundwater	0	No Action	0
33790	33789	6733 Carribean Ln.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
33790	33789	6733 Carribean Ln.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
33790	33789	6733 Carribean Ln.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
33791	33785	6733 Carribean Ln.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
33791	33785	6733 Carribean Ln.	Service Connection	Broken Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
33791	33785	6733 Carribean Ln.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
33791	33785	6733 Carribean Ln.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
33851	47236	6322 Fern Valley Way	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
33854	33852	6322 Fern Valley Way	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
33854	33852	6322 Fern Valley Way	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
33854	33852	6322 Fern Valley Way	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
33857	33856	6322 Fern Valley Way	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
33858	33857	6322 Fern Valley Way	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
33859	33857	6322 Fern Valley Way	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
33861	33860	6214 Shepherdsville Rd.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
34802	34801	5504 Briscoe Ln.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
34802	34801	5508 Briscoe Ln.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
34808	34814	7812 Donegal Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
34808	34814	7813 Donegal Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
34808	34814	7810 Donegal Dr.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
34812	34811	5800 Outer Loop	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
34812	34811	5800 Outer Loop	Service Connection	Water Meter	Moderate	Non-Inundation / Low Groundwater	0	No Action	0
34818	34817	6002 Tralee Ln.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
34820	34813	7705 Donegal Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
34821	34820	5902 Colebrooke Ln.	Service Connection	Roof Drain	Moderate	Non-Inundation / Low Groundwater	4,000	Refer to PMP	5000
34841	34840	6018 Colebrooke Ln.	Service Connection	Broken Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
34843	34842	7712 Cecilia Way	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
34843	34842	7708 Cecilia Way	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
34844	34843	7716 Cecilia Way	Service Connection	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
34847	34846	7715 Cecilia Way	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
34857	34856	7711 Zenith Way	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
34859	34837	6009 Apex Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
34860	34859	6017 Apex Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
34874	34872	7803 Tip Top Ln.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
34876	86535	5422 Monaco Dr.	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	6,903	Refer to CCTV Recommendation	
34876	86535	5422 Monaco Dr.	Mainline	Mainline	Severe	Stream Inundation / High Groundwater	Redundant	Refer to CCTV Recommendation	0
34885	34884	7801 Shepherdsville Rd.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
34885	34884	7807 Shepherdsville Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
34885	34884	7807 Shepherdsville Rd.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
34885	34884	7807 Shepherdsville Rd.	Lateral	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise Lateral and Point Repair	1000
34889	34888	5509 Mary Layne Rd.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
34899	34898	5506 Knobview Ln.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
36563	29939	6116 Whispering Hills Blvd.	Service Connection	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
37482	29755	4808 Glenna Way	Lateral	Defective PSC	Minor	Stream Inundation / High Groundwater	3	Replace PSC	500
37482	29755	4900 Glenna Way	Service Connection	Smoke Inside Building	Minor	Stream Inundation / High Groundwater	0	No Action	0
47212	47211	5113 Lammers Ln.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
47213	60002	5103 Lammers Ln.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
47215	47214	6211 Gayle Dr.	Service Connection	Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
47217	47215	6205 Gayle Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
47220	47219	4893 Charlotte Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
47220	47219	4893 Charlotte Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
47221	47220	4879 Charlotte Dr.	Service Connection	Broken Cleanout	Severe	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
47221	47220	4879 Charlotte Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
47237	47236	6322 Fern Valley Way	Service Connection	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
47242	63918	6108 Oakdale Ln.	Mainline	Mainline	Severe	Non-Inundation / Low Groundwater	25	Refer to CCTV Recommendation	0
47243	80533	6005 Oakdale Ln.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
47243	80533	6012 Oakdale Ln.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
47243	80533	6000 Oakdale Ln.	Lateral	Defective PSC	Severe	Non-Inundation / Low Groundwater	3	Replace PSC	500

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
47243	80533	6001 Oakdale Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
47243	80533	6001 Oakdale Ln.	Service Connection	Gas Meter	Minor	Non-Inundation / Low Groundwater	0	No Action	0
47254	MSD0099PS	6211 Shepherdsville Rd.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
47254	MSD0099PS	6211 Shepherdsville Rd.	Service Connection	Broken Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
47254	MSD0099PS	6211 Shepherdsville Rd.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
47259	47254	5598 Poplar Level Rd.	Mainline	Mainline	Minor	Non-Inundation / Low Groundwater	36	Refer to CCTV Recommendation	0
47262	47260	5613 Fern Valley Way	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
47262	47260	6200 Poplar Level Rd.	Service Connection	Smoke Inside Building	Moderate	Non-Inundation / Low Groundwater	0	No Action	0
54022	82429	5800 Poplar Level Rd.	Service Connection	Broken Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
54022	82429	5800 Poplar Level Rd.	Service Connection	Broken Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
54022	82429	5800 Poplar Level Rd.	Service Connection	Cleanout	Severe	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	50
54538	54544	6000 Athens Dr.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
54539	54538	6004 Corinth Way	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
54539	54538	6007 Corinth Way	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
54539	54538	4701 Oaklawn Ln.	Lateral	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise Lateral and Point Repair	1000
54539	54538	6009 Corinth Way	Service Connection	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
54540	79091	6106 Corinth Way	Service Connection	Broken Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cleanout	500

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
54540	79091	6107 Corinth Way	Service Connection	Broken Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
54540	79091	6108 Corinth Way	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
54542	79099	5123 Poplar Level Rd.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
54543	54608	6125 Corinth Way	Service Connection	Broken Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
54544	54596	6002 Athens Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
54584	79085	4915 Lagoona Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
54585	54604	5061 Poplar Level Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
54585	54604	5063 Poplar Level Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
54591	79083	4907 Daleray Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
54591	79083	4910 Daleray Dr.	Service Connection	Broken Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
54598	54597	6025 Athens Dr.	Service Connection	Broken Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cleanout	50
54598	54597	4610 Gordon Rd.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
54598	54597	6029 Athens Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
54604	79075	6202 Hanses Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
54605	54604A	5073 Poplar Level Rd.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
54606	54602	6114 Frey Dr.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
54610	54609	6128 Athens Dr.	Service Connection	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
54610	54609	6129 Athens Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
54613	54614	5006 Roederer Dr.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
54613	54614	5074 Poplar Level Rd.	Service Connection	Oil/Water Separator	Moderate	Non-Inundation / Low Groundwater	0	No Action	0
54614	79094	5105 Roederer Dr.	Service Connection	Broken Cleanout	Moderate	Stream Inundation / High Groundwater	3	Replace Cleanout	500
54869	54870	5836 Fern Valley Rd.	Service Connection	Soil Fissure/Ground	Moderate	Stream Inundation / High Groundwater	3	Televise SC and Refer to SSLRP	0
54889	54890	6502 Mandeville Rd.	Lateral	Defective PSC	Severe	Non-Inundation / Low Groundwater	3	Replace PSC	500
57851	57850	5526 Saxon Blvd.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
57852	57851	5609 Briscoe Ridge Ln.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
57852	57851	5609 Briscoe Ridge Ln.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
57869	57870	5714 Outer Loop	Service Connection	Grease Trap	Moderate	Non-Inundation / Low Groundwater	0	No Action	0
57873	57874	5801 Outer Loop	Service Connection	Soil Fissure/Ground	Severe	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	
58442	82502	6701 Shareith Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
58442	82502	6707 Shareith Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
58442	82502	6708 Shareith Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
58442	82502	6701 Shareith Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
58443	82502	6714 Shareith Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
58443	82502	6712 Shareith Dr.	Lateral	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise Lateral and Point Repair	1000

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
58443	82502	6714 Shareith Dr.	Lateral	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise Lateral and Point Repair	1000
58445	58446	6900 Deep Spring Ct.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
58448	58447	6906 Norlynn Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
58449	58443	6900 Norlynn Dr.	Lateral	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise Lateral and Point Repair	1000
58449	58443	6907 Norlynn Dr.	Lateral	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise Lateral and Point Repair	1000
58450	58448	6915 Norlynn Dr.	Service Connection	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
58455	63279	7210 Blazier Ct.	Lateral	Defective PSC	Moderate	Stream Inundation / High Groundwater	3	Replace PSC	500
58455	63279	7205 Edcoe Rd.	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	9,994	Refer to CCTV Recommendation	0
58458	58456	6940 Norlynn Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
58458	58456	7002 Norlynn Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
58458	58456	7004 Norlynn Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	50
58458	58456	6938 Norlynn Dr.	Service Connection	Smoke Inside Building	Moderate	Non-Inundation / Low Groundwater	0	No Action	0
58464	58465	7011 Shareith Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
58466	58467	6820 Shareith Dr.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
58466	58467	6903 Shareith Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
58467	58449	6813 Shareith Dr.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
58467	58449	6814 Shareith Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
58467	58449	6817 Shareith Dr.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
58562	83640	5608 Outer Loop	Service Connection	Grease Trap	Minor	Non-Inundation / Low Groundwater	0	No Action	0
58577	58578	7502 Shepherdsville Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
63007	63006	5508 Pattie Ln.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
63273	58445	7204 Peppermill Ct.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
63274	63273	6900 Peppermill Ln.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
63279	58454	7207 Edcoe Rd.	Service Connection	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
63284	63285	6922 Peppermill Ln.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
63286	63281	7001 Peppermill Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
63287	63288	7203 Blazier Ct.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
63289	63286	7009 Peppermill Ln.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
63290	63289	7015 Peppermill Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
63290	63289	7015 Peppermill Ln.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
63290	63289	7103 Peppermill Ln.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
63294	58459	7206 Fegenbush Ln.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
63294	58459	7204 Fegenbush Ln.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
63294	58459	7204 Fegenbush Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
63294	58459	7219 Vaughn Mill Rd.	Lateral	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise Lateral and Point Repair	1000
63887	54637	5113 Braidwood Dr.	Service Connection	Broken Cleanout	Moderate	Stream Inundation / High Groundwater	3	Replace Cleanout	500
63887	54637	5116 Briarwood Dr.	Lateral	Defective PSC	Moderate	Stream Inundation / High Groundwater	3	Replace PSC	500
63918	79099	5131 Poplar Level Rd.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
63918	79099	5127 Poplar Level Rd.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
63992	58575	7612 Shepherdsville Rd.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
79076	31914	6312 Hanses Dr.	Service Connection	Soil Fissure/Ground	Minor	Stream Inundation / High Groundwater	3	Televise SC and Refer to SSLRP	0
79078	79079	5059 Poplar Level Rd.	Service Connection	Grease Trap	Minor	Non-Inundation / Low Groundwater	0	No Action	0
79080	79080A	5117 Poplar Level Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
79081	79098	5108 Patterson Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
79085	31910	4919 Lagoona Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
79085	31910	4921 Lagoona Dr.	Service Connection	Broken Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
79085	31910	4925 Lagoona Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
79090	79086	6105 Athens Dr.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
79091	54541	6109 Corinth Way	Service Connection	Broken Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
79091	54541	6111 Corinth Way	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
79094	79093	5114 Roederer Dr.	Service Connection	Cleanout	Moderate	Stream Inundation / High Groundwater	3	Replace Cap on Cleanout	500

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
79094	79093	5116 Roederer Dr.	Lateral	Soil Fissure/Ground	Moderate	Stream Inundation / High Groundwater	3	Televise Lateral and Point Repair	1000
79096	79095	5114 Frey Dr.	Lateral	Defective PSC	Moderate	Stream Inundation / High Groundwater	3	Replace PSC	500
79097	82415	5127 Patterson Dr.	Service Connection	Cleanout	Moderate	Stream Inundation / High Groundwater	3	Replace Cap on Cleanout	500
79097	82415	5123 Patterson Dr.	Service Connection	Soil Fissure/Ground	Moderate	Stream Inundation / High Groundwater	3	Televise SC and Refer to SSLRP	0
79098	79097	5111 Patterson Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
79098	79097	5119 Patterson Dr.	Lateral	Defective PSC	Moderate	Stream Inundation / High Groundwater	3	Replace PSC	500
79098	79097	5111 Patterson Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
80196	80195	6303 Fern Valley Rd.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
80533	80532	6104 Oakdale Ln.	Service Connection	Broken Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
80533	80532	6104 Oakdale Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
82083	82086	6322 Fern Valley Way	Service Connection	Broken Cleanout	Moderate	Stream Inundation / High Groundwater	3	Replace Cleanout	500
82083	82086	6212 Shepherdsville Rd.	Service Connection	Broken Cleanout	Severe	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
82083	82086	6322 Fern Valley Way	Service Connection	Cleanout	Moderate	Stream Inundation / High Groundwater	3	Replace Cap on Cleanout	500
82085	82084	5340 Poplar Level Rd.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
82085	82084	5340 Poplar Level Rd.	Service Connection	Oil/Water Separator	Moderate	Non-Inundation / Low Groundwater	0	No Action	0
82087	47237	6322 Fern Valley Way	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
82501	58450	6926 Norlynn Dr.	Lateral	Defective PSC	Severe	Non-Inundation / Low Groundwater	3	Replace PSC	500

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
82502	58444	6710 Shareith Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
82504	82504C	7100 Blazier Ct.	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	5,358	Refer to CCTV Recommendation	0
82504	82504C	7100 Blazier Ct.	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	Redundant	Refer to CCTV Recommendation	0
82504	82504C	7100 Blazier Ct.	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	Redundant	Refer to CCTV Recommendation	0
82504	82504C	7100 Blazier Ct.	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	Redundant	Refer to CCTV Recommendation	0
82504	82504C	7100 Blazier Ct.	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	Redundant	Refer to CCTV Recommendation	0
82504	82504C	7100 Blazier Ct.	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	Redundant	Refer to CCTV Recommendation	0
82536	82537	6511 Brightstone Pl.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
82539	83670	6617 Brook Valley Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
86534	19397	5217 Charmane Dr.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
89115	29933	5910 Whispering Hills Blvd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
89122	105980	7902 Briscoe Woods Dr.	Mainline	Mainline	Severe	Stream Inundation / High Groundwater	8,371	Refer to CCTV Recommendation	0
89122	105980	7902 Briscoe Woods Dr.	Mainline	Mainline	Severe	Stream Inundation / High Groundwater	Redundant	Refer to CCTV Recommendation	0
89122	105980	7902 Briscoe Woods Dr.	Mainline	Mainline	Severe	Stream Inundation / High Groundwater	Redundant	Refer to CCTV Recommendation	0
89134	89133	7117 Welchire Falls Dr.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
89413	89412	5189 Poplar Level Rd.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
89414	89413	5177 Poplar Level Rd.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
90621	54872	6600 Artisan Way	Service Connection	Cleanout	Severe	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
93144	93143	7210 Calico Ct.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
93145	93144	7209 Calico Ct.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
93151	93150	7203 Astin Ct.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
93156	93155	6113 Port Antonio Rd.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
93158	93157	6107 Port Antonio Rd.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
93158	93157	6108 Port Antonio Rd.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
93158	93157	6109 Port Antonio Rd.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
93285	93284	7905 Bridlewood Pl.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
93286	93285	7910 Bridlewood Pl.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
93286	93285	7910 Bridlewood Pl.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
93286	93285	7913 Bridlewood Pl.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
93286	93285	7913 Bridlewood Pl.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
93286	93285	7915 Bridlewood Pl.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
93288	93287	6530 Bridleview Cir.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
93290	93283	7832 Bridlewood Pl.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
93290	93283	7831 Bridlewood Pl.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
93290	93283	7834 Bridlewood Pl.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
94425	58459	7200 Fegenbush Ln.	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	5,873	Refer to CCTV Recommendation	0
94425	58459	7202 Fegenbush Ln.	Service Connection	Soil Fissure/Ground	Moderate	Stream Inundation / High Groundwater	3	Televise SC and Refer to SSLRP	0
96073	96072	5703 Georgia Ln.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
96917	96916	7808 Lariat Rd.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
96920	96919	5905 Saddle Blanket Dr.	Service Connection	Broken Cleanout	Severe	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
96976	54866A	5803 Fern Valley Rd.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
97001	97000	7105 Fegenbush Ln.	Service Connection	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
97002	97001	7211 Fegenbush Ln.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
97002	97001	7211 Fegenbush Ln.	Service Connection	Smoke Inside Building	Moderate	Non-Inundation / Low Groundwater	0	No Action	0
97002	97001	7211 Fegenbush Ln.	Service Connection	Smoke Inside Building	Severe	Non-Inundation / Low Groundwater	0	No Action	0
97002	97001	7211 Fegenbush Ln.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
97002	97001	7211 Fegenbush Ln.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
98067	98066	5018 Lea Ann Way	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
99112	99111	6400 Geil Ln.	Service Connection	Cleanout	Moderate	Stream Inundation / High Groundwater	3	Replace Cap on Cleanout	500
99114	99113	4049 Tower Rd.	Service Connection	Soil Fissure/Ground	Severe	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
101791	31274	6902 Green Manor Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500

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Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
101791	31274	6915 Fernhaven Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
101791	31274	7001 Fernhaven Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
101792	101791	7000 Green Manor Dr.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
101792	101791	6913 Green Manor Dr.	Lateral	Defective PSC	Severe	Non-Inundation / Low Groundwater	3	Replace PSC	500
101793	101792	7004 Green Manor Dr.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
101793	101792	7003 Green Manor Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
101796	31273	6611 Moorhaven Dr.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
101796	31273	6613 Moorhaven Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
101796	31273	6615 Moorhaven Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
101797	101796	6704 Moorhaven Dr.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
101797	101796	6707 Moorhaven Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
101797	101796	6704 Moorhaven Dr.	Service Connection	Roof Drain	Moderate	Non-Inundation / Low Groundwater	4,000	Refer to PMP	5000
101797	101796	6711 Moorhaven Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
101798	101797	6804 Moorhaven Dr.	Lateral	Defective PSC	Minor	Non-Inundation / Low Groundwater	3	Replace PSC	500
101798	101797	6715 Moorhaven Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
101798	101797	6800 Moorhaven Dr.	Service Connection	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
101798	101797	6802 Moorhaven Dr.	Lateral	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise Lateral and Point Repair	1000

Lea Ann Way West
Defect Data and Recommendations Table
Smoke Inspection

Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
101799	101798	6808 Moorhaven Dr.	Service Connection	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	1000
101808	101807	6810 Cozy Ct.	Service Connection	Cleanout	Moderate	Stream Inundation / High Groundwater	3	Replace Cap on Cleanout	50
101809	101808	6812 Fenwick Dr.	Lateral	Defective PSC	Severe	Non-Inundation / Low Groundwater	3	Replace PSC	500
101809	101808	6814 Fenwick Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
101809	101808	6715 Fernbush Dr.	Service Connection	Soil Fissure/Ground	Minor	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
101810	101809	6804 Fernhaven Rd.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
101811	101810	6809 Fernhaven Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
101811	101810	6809 Fernhaven Rd.	Service Connection	Smoke Inside Building	Minor	Non-Inundation / Low Groundwater	0	No Action	0
101818	101817	6712 Fenwick Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
101818	101817	6710 Fenwick Dr.	Lateral	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise Lateral and Point Repair	1000
101825	101824	6708 Fegenbush Ln.	Lateral	Defective PSC	Severe	Non-Inundation / Low Groundwater	3	Replace PSC	5(
101825	101824	6708 Fegenbush Ln.	Lateral	Soil Fissure/Ground	Moderate	Stream Inundation / High Groundwater	3	Televise Lateral and Point Repair	1000
101826	101825	6712 Fegenbush Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
101827	101826	6802 Fegenbush Ln.	Lateral	Defective PSC	Severe	Non-Inundation / Low Groundwater	3	Replace PSC	500
101828	101827	6806 Fegenbush Ln.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
101829	101828	6816 Fegenbush Ln.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
101829	101828	6812 Fegenbush Ln.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0

Lea Ann Way West
Defect Data and Recommendations Table
Smoke Inspection

Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
101831	101830	6708 Fernhaven Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
101832	101831	6720 Fernhaven Rd.	Service Connection	Broken Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
101832	101831	6720 Fernhaven Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
101832	101831	6720 Fernhaven Rd.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
101833	101810	6803 Fernhaven Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
101834	101810	6813 Moorhaven Dr.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
102677	102676	4112 Fern Valley Rd.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
103967	47226	5220 Poplar Level Rd.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
103967	47226	5222 Poplar Level Rd.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
104012	104011	7311 Jefferson Blvd.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
104012	104011	7311 Jefferson Blvd.	Service Connection	Grease Trap	Moderate	Non-Inundation / Low Groundwater	0	No Action	
104218	29713	5301 Carolina Crossings Way	Mainline	Mainline	Moderate	Stream Inundation / High Groundwater	7,264	Refer to CCTV Recommendation	0
104415	104414	6405 Canterview Ct.	Service Connection	Broken Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
104417	104416	6405 Saddleview Ct.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
104417	104416	6417 Saddleview Ct.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
104804	83672	7201 Wynde Manor Ct.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
104968	104967	6904 Brook Valley Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0

Lea Ann Way West
Defect Data and Recommendations Table
Smoke Inspection

Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
104976	104975	7316 Brook Meadow Dr.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
105275	89132	7106 Welchire Falls Dr.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
105282	105281	7100 Welchire Falls Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
105282	105281	7100 Welchire Falls Dr.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
106452	106451	6014 Ledgerock Cove Pl.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
106452	106451	6014 Ledgerock Cove Pl.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
106452	106451	6014 Ledgerock Cove Pl.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
106452	106451	6014 Ledgerock Cove Pl.	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0
108131	108130	6405 Stableview Pl.	Service Connection	Broken Cleanout	Minor	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
108131	108130	6408 Stableview Pl.	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
108131	108130	6406 Stableview Pl.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
108140	108141	7809 Bridlewood Pl.	Service Connection	Cleanout	Severe	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
108554	101812	6900 Fegenbush Ln.	Service Connection	Grease Trap	Minor	Non-Inundation / Low Groundwater	0	No Action	0
114221	114212	5402 Lowerfield Dr.	Service Connection	Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cap on Cleanout	500
54892A	54892	6506 Montego Bay Rd.	Lateral	Defective PSC	Moderate	Non-Inundation / Low Groundwater	3	Replace PSC	500
58561A	58562	5700 Outer Loop	Service Connection	Broken Cleanout	Moderate	Non-Inundation / Low Groundwater	3	Replace Cleanout	500
58561A	58562	5700 Outer Loop	Service Connection	Soil Fissure/Ground	Moderate	Non-Inundation / Low Groundwater	3	Televise SC and Refer to SSLRP	0

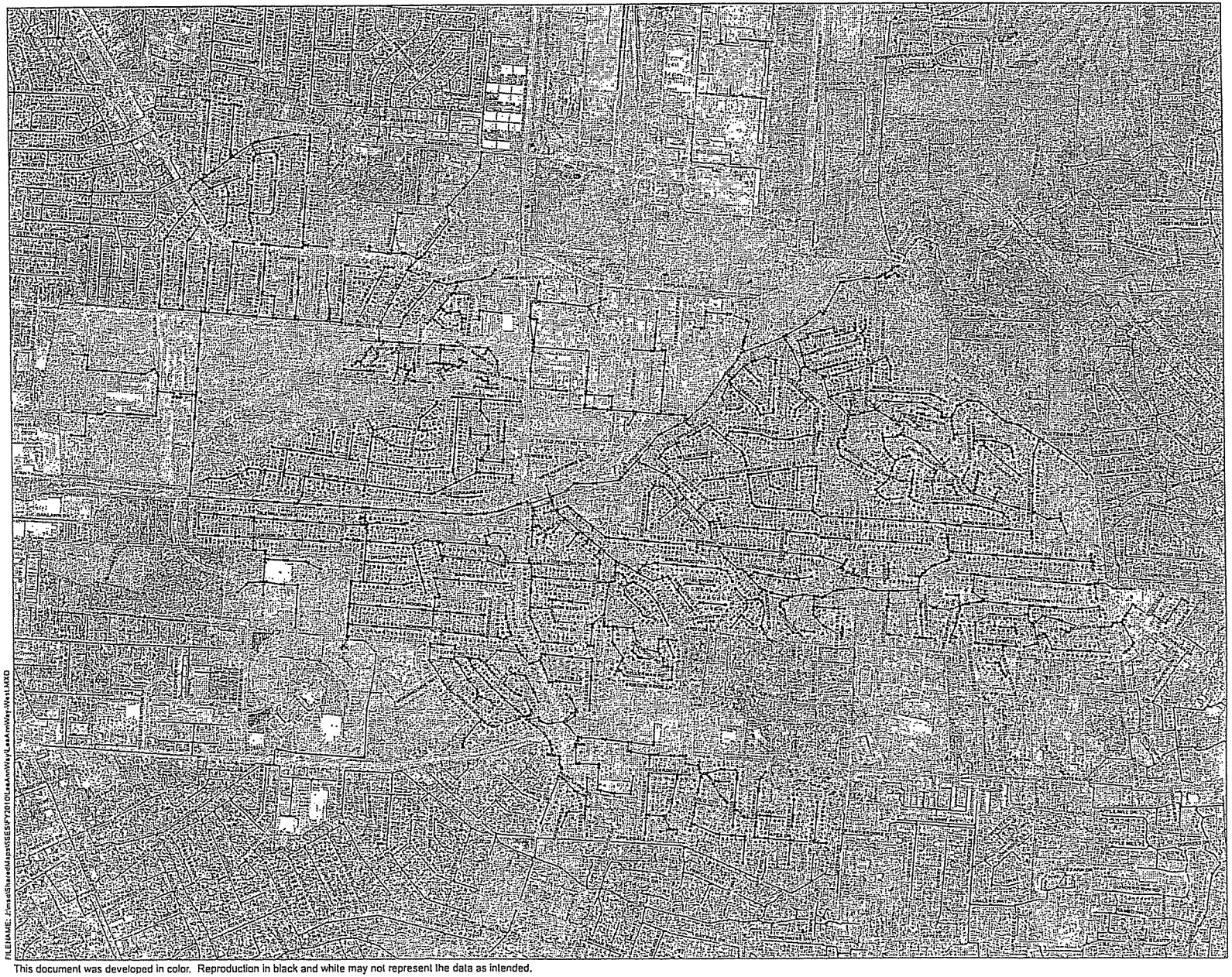
Lea Ann Way West
Defect Data and Recommendations Table
Smoke Inspection

Upstream Structure	Downstream Structure	Address	Source	Type	Size	Severity Factor	SCAP Credits (gpd)	Recommendation	Cost ($)
63288A	63288	7106 Blazier Ct.	Mainline	Catch Basin	Severe	Non-Inundation / Low Groundwater	338,947	Refer to CCTV Recommendation	0
63288A	63288	7106 Blazier Ct.	Mainline	Catch Basin	Moderate	Non-Inundation / Low Groundwater	Redundant	Refer to CCTV Recommendation	0
63288A	63288	7107 Blazier Ct.	Lateral	Defective PSC	Severe	Non-Inundation / Low Groundwater	3	Replace PSC	500
					Subtotal		483,417		$ 216,000

Basis of Construction Costs

Manhole Point Repair	$200
Cover Replacement	$100
Lateral Point Repair	$1,000
Sanitary Sewer Line Replacement Program	$0
Cleanout Replacement	$500
Pump Station Seal	$500
Install Manhole Chimney Seal	$200
Replace PSC	$500
CIPP	$50/Linear Foot
Replace Pipe/Pipe Burst	$150/Linear Foot
Plumbing Modification Program	$5,000

CCTV	Closed Circuit Television.
CIPP	Cured-in-place pipe.
gpd	Gallons per day.
OPRI	Overall pipe rating index.
PMP	Plumbing Modification Program.
PSC	Property service connection.
SC	Service Connection.
SCAP	System Capacity Assurance Plan.
SSLRP	Sanitary Sewer Line Replacement Program.
VCP	Vitrified clay pipe.



FY10 SSES Projects

Pond Creek
Lea Ann Way West

Legend

N

Lea Ann Way Areas

- East
- West
- Project MHs
- Project Sewers

Project PSCs

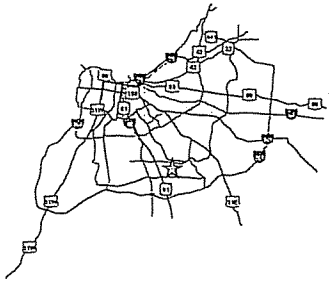
- MSD
- Private

Pump Stations

- MSD
- Private
- P - Operated by MSD
- Sewers

0 350 700 1,400 Feet

Map Locator



Map Revision: September 2009 Aerial Date: 2006

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401 KAR 5:002. Definitions for 401 KAR Chapter 5.

RELATES TO: KRS 224.01-010, 224.01-070, 224.01-400, 224.70-100, 224.70-120, 224.99-010, 40 C.F.R. 35, 116, 122, 130, 131, 133, 136, 141, 401-471, 15 U.S.C. 2601 - 2629, 33 U.S.C. 1251 - 1387, 42 U.S.C. 6901-6992k, 7401 - 7671q, 9601, 11023, EO 2008-507, 2008-531

STATUTORY AUTHORITY: KRS 224.10-100(5), 224.10-110, 224.16-050, 224.16-060, 224.70-110, 40 C.F.R. 116, 130, 131, 136, 401-471, 15 U.S.C. 2601 - 2629, 33 U.S.C. 1251 - 1387, EO 2008-507, 2008-531

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100(5) authorizes the cabinet to promulgate administrative regulations for the prevention, abatement, and control of all water pollution. EO 2008-507 and 2008-531, effective June 16, 2008, abolish the Environmental and Public Protection Cabinet and establish the new Energy and Environment Cabinet. This administrative regulation establishes definitions for terms used in 401 KAR Chapter 5. These definitions are not more stringent than the federal counterparts.

Section 1. Definitions. (1) "Activity" means, in 401 KAR 5:050 through 401 KAR 5:080 and if used in conjunction with "facility", a KPDES point source, or other activity, including land or related appurtenances, that is subject to regulation under the KPDES program.

(2) "Administrator" is defined by 40 C.F.R. 122.2, effective July 1, 2008.

(3) "Agricultural wastes handling system" means a structure or equipment that conveys, stores, or treats manure from an animal feeding operation prior to land application.

(4) "Alternative effluent limitations" is defined by 40 C.F.R. 125.71(a), effective July 1, 2008.

(5) "Animal feeding operation" or "AFO" means a lot or facility, other than an aquatic animal production facility, that meets one (1) of the following descriptions:

(a)1. "Large animal feeding operation" as defined in subsection (71) of this section; or

2. "Medium animal feeding operation" as defined in subsection (83) of this section; and

(b) If:

1.a. Animals other than aquatic animals, have been, are, or will be stabled or confined and fed or maintained for a total of forty-five (45) days or more in a twelve (12) month period; and

b. Crops, vegetation forage growth, or postharvest residues are not sustained in the normal growing season over any portion of the lot or facility.

(c) Two (2) or more animal feeding operations under common ownership are considered to be a single animal feeding operation because they adjoin each other or if they use a common area or system for the disposal of wastes.

(6) "Applicable standards and limitations" means all standards and limitations to which a discharge or a related activity is subject pursuant to KRS Chapter 224 and 401 KAR Chapters 4 through 11, including effluent limitations, water quality standards, standards of performance, or toxic effluent standards.

(7) "Application" means the document submitted by an applicant to the cabinet that provides information used by the cabinet in the issuance of a permit or approval.

(8) "Approved POTW pretreatment program", "POTW pretreatment program", "pretreatment program", or "program" means a program administered by a POTW that meets the criteria established in 401 KAR 5:057 and that has been approved by the cabinet.

(9) "Aquaculture project" is defined by 40 C.F.R. 122.25(b)(1), effective July 1, 2008.

(10) "Available" means located within the planning area and:

(a) Located within one and zero-tenths (1.0) mile of a regional facility for a WWTP with an average daily design capacity larger than 1,000 gpd; or

(b) For new construction if the distance is one and zero-tenths (1.0) mile or more, where it is cost-effective to connect as determined by a twenty (20) year present worth cost analysis.

(11) "BAT" means best available technology economically achievable.

(12) "Best management practices" or "BMPs" means:

(a) For agriculture operations, as defined by KRS 224.71-100(3); or

(b) For all other purposes:

1. Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the commonwealth; and

2. Treatment requirements, operating procedures, practices to control site run-off, pollution of surface water and groundwater from nonpoint sources, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

(13) "Biochemical oxygen demand", "BOD", or "BOD_5" is defined by 40 C.F.R. 133.101(d), effective July 1, 2008.

(14) "BPT" means best practicable technology currently available.

(15) "Building sewer" means that part of the drainage system that extends from the end of the building drain, beginning two (2) feet outside the building wall, and conveys its discharge to a downstream manhole, sewer line, pump station, or sewage disposal system.

(16) "Bypass" means the intentional diversion of sewage or waste-streams from a portion of a facility or industrial user's treatment facility.

(17) "Carbonaceous biochemical oxygen demand" or "CBOD" means BOD, not including the nitrogenous oxygen demand of the wastewater.

(18) "Certified operator" means an individual who holds an active certified operator's certificate issued in accordance with 401 KAR 11:050.

(19) "cfm" means cubic feet per minute.

(20) "Chronic toxicity" means lethality, reduced growth or reproduction or other harmful effect sustained by either indigenous aquatic organisms or representative indicator organisms used in toxicity tests due to long-term exposures, relative to the life span of the organisms or a significant portion of their life span, due to toxic substances or mixtures of toxic substances.

(21) "Combined sewer" or "combined sewer line" means a sewer or sewer line designed to carry storm water runoff as well as sanitary wastewater.

(22) "Combined sewer overflow" or "CSO" means the flow from a combined sewer in excess of the interceptor or regulator capacity that is discharged into a receiving water without going to a POTW.

(23) "Concentrated animal feeding operation" or "CAFO" means one (1) of the following:

(a) "Large concentrated animal feeding operation" as defined in subsection (72) of this section;

(b) "Medium concentrated animal feeding operation" as defined in subsection (84) of this section; or

(c) "Small concentrated animal feeding operation" as defined in subsection (150) of this section.

(24) "Consolidation sewer" means a conduit, without direct sanitary connections that intercepts and transports combined sewer storm overflows to a treatment facility or a single combined sewer overflow point.

(25) "Continuous facility discharge" means a discharge that occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities.

MSD EXHIBIT 15

(26) "Conventional pollutant" means biochemical oxygen demand (BOD), chemical oxygen demand (COD), total organic carbon (TOC), total suspended solids (TSS), ammonia (as N), bromide, chlorine (total residual), color, fecal coliform, fluoride, nitrate, kjeldahl nitrogen, oil and grease, E. coli, or phosphorus.

(27) "Criteria" means specific concentrations or ranges of values, or narrative statements of water constituents that represent a quality of water expected to result in an aquatic ecosystem protective of designated uses of surface waters. Criteria are derived to protect legitimate uses such as aquatic life, domestic water supply, and recreation and to protect human health.

(28) "Date of program approval" means September 30, 1983, the effective date of the administrator's approval of Kentucky's KPDES regulatory program pursuant to 33 U.S.C. Section 1342.

(29) "Day" means a twenty-four (24) hour period.

(30) "Design flow" means the long-term daily average flow the wastewater treatment plant can treat and remain in compliance with the overall performance requirements during its design life.

(31) "Direct discharge" means the discharge of a pollutant into waters of the commonwealth if the discharge is not included under the definition of indirect discharger and does not include a discharge of animal waste onto land by land application if the discharge does not reach the waters of the commonwealth.

(32) "Disappearing stream" means an intermittent or perennial surface stream that terminates and drains underground through caves, fractures, or swallets in the stream bed.

(33) "Discharge" or "discharge of a pollutant" means the addition of a pollutant or combination of pollutants to waters of the commonwealth from a point source.

(34) "Discharge monitoring report" or "DMR" means the report including any subsequent additions, revisions, or modifications, for the reporting of self-monitoring results by KPDES permittees.

(35) "Division" means the Kentucky Division of Water, within the Department for Environmental Protection, Energy and Environment Cabinet.

(36) "Domestic" means relating to household wastes or other similar wastes. It is used to distinguish municipal, household, or commercial water or wastewater services from industrial water or wastewater services.

(37) "Domestic sewage" means sewage devoid of industrial or other wastes and that is typical of waste received from residential facilities. It may include wastes from commercial developments, schools, restaurants, and other similar developments.

(38) "Draft permit" means a document prepared pursuant to 401 KAR 5:075 indicating the cabinet's preliminary decision to issue or deny, modify, revoke and reissue, revoke, or reissue a permit. It includes a notice of intent to revoke a permit and a notice of intent to deny a permit as provided in 401 KAR 5:075. It does not include a proposed permit; a denial of a request for modification, revocation, and reissuance; or a denial of a request for revocation.

(39) "Effluent ditch" means that portion of a treatment system that is a discrete, person-made conveyance, either totally owned, leased or under valid easement by the discharger that transports a discharge to surface waters of the commonwealth.

(40) "Effluent limitation" is defined by KRS 224.01-010(12).

(41) "Effluent limitations guideline" is defined by 40 C.F.R. 122.2, effective July 1, 2008.

(42) "Environmental Protection Agency", "EPA", or "U.S.EPA" means the U.S. Environmental Protection Agency.

(43) "E. coli" or "Escherichia coli" means an aerobic and facultative anaerobic gram negative, nonspore forming, rod shaped bacterium that can grow at forty-four and five tenths (44.5) degrees Celsius, that is ortho-nitrophenyl-B-D-galactopyranoside (ONPG) positive, and Methylumbelliferyl glucuronide (MUG) positive. It is a member of the indigenous fecal flora of warm-blooded animals.

(44) "Exceptional water" means a surface water categorized as exceptional by the cabinet pursuant to 401 KAR 10:030.

(45) "Excessive infiltration" means a high groundwater period induced peak infiltration rate that:

(a) Results in an operational problem and permit violation at the WWTP or results in recurring overflows from the sewer system or the WWTP; and

(b) Does not include:

1. An overflow that results from blockages, power failures or other temporary mechanical failures, or flood waters entering the sewer system directly; or

2. A resulting overflow if an overflow occurs at a KPDES permitted overflow point that is in compliance with its permit requirements.

(46) "Excessive inflow" means a rainfall induced peak inflow rate that:

(a) Results in operational problems and permit violations at the WWTP or results in recurring overflows from the sewer system or the WWTP; and

(b) Does not include:

1. A combined sewer system if an overflow occurs at a KPDES permitted overflow point that is in compliance with its permit requirements; or

2. An overflow that results from blockages, power failures or other temporary mechanical failures, or flood waters entering the sewer system directly.

(47) "Facility" means:

(a) In 401 KAR 5:005 or 401 KAR 5:006, a sewage system as defined in KRS 224.01-010 except for septic tanks, pretreatment facilities regulated by an approved pretreatment program or intermunicipal agreement, and disposal wells as used in 401 KAR 5:090; or

(b) In 401 KAR 5:050 through 401 KAR 5:080 and if used in conjunction with activity, any KPDES point source, or any other facility, including land or related appurtenances, that is subject to regulation under the KPDES program.

(48) "Fecal coliform" means the portion of the coliform group of bacteria that are present in the intestinal tract or the feces of warm-blooded animals. It includes organisms that are capable of producing gas from lactose broth in a suitable culture medium within twenty-four (24) hours at forty-four and five-tenths (44.5) degrees plus or minus two-tenths (0.2) degrees C.

(49) "Flood relief sewer" means a conduit, without direct sanitary connections, that is used to transport sewage if a flood control structure or overflow detention basin is in operation.

(50) "Force main" means a conduit used to transport sewage from a pump discharge to a sewer line, pump station, or WWTP.

(51) "General permit" means a KPDES permit authorizing a category of discharges under KRS Chapter 224 within a geographical area, issued pursuant to 401 KAR 5:055.

(52) "GPD" or "gpd" means gallons per day.

(53) "Groundwater" means the subsurface water occurring in the zone of saturation beneath the water table and perched water zones below the B soil horizon including water circulating through fractures, bedding planes, and solution conduits.

(54) "Industrial wastewater treatment plant" or "IWWTP" means a privately owned WWTP with more than ninety (90) percent of the influent flow from sources of industrial waste.

(55) "Infiltration" is defined by 40 C.F.R. 35.905, effective July 1, 2008.

(56) "Inflow" is defined by 40 C.F.R. 35.905, effective July 1, 2008.

(57) "Injection" means a type of land application in which the waste is placed directly beneath the land surface.

(58) "Interference" is defined by 40 C.F.R. 403.3(k), effective July 1, 2008.

(59) "Intermediate facility" means an intermediate WWTP or a sewer line of 2,500 feet to 5,000 feet in length including appurtenances.

(60) "Intermediate nonpublicly-owned treatment works" means a facility with a design flow rate of between 10,000 gpd and 49,999 gpd of wastewater containing only conventional pollutants and that is not a POTW.

(61) "Intermediate WWTP" means a WWTP with an average daily design capacity of 10,000 to 49,999 gpd.

(62) "Interstate agency" means an agency of which Kentucky and one (1) or more states is a member established by or under an agreement or compact, or any other agency, of which Kentucky and one (1) or more other states are members, having substantial powers or duties pertaining to the control of pollution as determined and approved by the secretary or administrator pursuant to 33 U.S.C. 1251 -- 1387 or KRS Chapter 224.

(63) "Karst" means the type of geologic terrain underlain by carbonate rocks where significant solution of rock has occurred due to flowing groundwater.

(64) "Kentucky Intersystem Operational Permit" or "KISOP" means a permit issued pursuant to 401 KAR 5:005 for operating a sewer system that has more than 5,000 linear feet of sewer line that discharges to a sewer system, or a WWTP that is owned by another person.

(65) "Kentucky No Discharge Operational Permit" or "KNDOP" means a permit issued pursuant to 401 KAR 5:005 for operating a WWTP that does not have a discharge to a stream, including agricultural waste handling systems and spray irrigation systems.

(66) "Kentucky Pollutant Discharge Elimination System" or "KPDES" means the Kentucky program for issuing, modifying, revoking and reissuing, revoking, monitoring and enforcing permits to discharge, and imposing and enforcing pretreatment requirements.

(67) "KPDES permit" means a Kentucky Pollutant Discharge Elimination System permit issued to a facility, including a POTW, or activity pursuant to KRS Chapter 224 for the purpose of operating the facility or activity.

(68) "Land application" means the uniform placement of animal waste on or in the soil by spraying or spreading on the surface, incorporation into the soil, or injection directly beneath the surface.

(69) "Land application area" is defined by 40 C.F.R. 122.23(b)(3), effective July 1, 2008.

(70) "Land treatment" or "land disposal" means the application or incorporation of a pollutant onto or into the soil.

(71) "Large animal feeding operation" means an AFO that stables or confines as many as or more than the numbers of animals specified in any of the following categories:

(a) 700 mature dairy cows, whether milked or dry;

(b) 1,000 veal calves;

(c) 1,000 cattle other than mature dairy cows or veal calves. Cattle includes heifers, steers, bulls, or cow or calf pairs;

(d) 2,500 swine each weighing fifty-five (55) pounds or more;

(e) 10,000 swine each weighing less than fifty-five (55) pounds;

(f) 500 horses;

(g) 10,000 sheep or lambs;

(h) 55,000 turkeys;

(i) 30,000 laying hens or broilers, if the AFO uses a liquid manure handling system;

(j) 125,000 chickens other than laying hens, if the AFO uses other than a liquid manure handling system;

(k) 30,000 ducks, if the AFO uses other than a liquid manure handling system; or

(l) 5,000 ducks, if the AFO uses a liquid manure handling system.

(72) "Large concentrated animal feeding operation" is defined by 40 C.F.R. 122.23(b)(4), effective, July 1, 2008.

(73) "Large facility" means a WWTP with an average daily design capacity of 50,000 GPD or more, or a sewer line of more than 5,000 feet in length including appurtenances.

(74) "Large nonpublicly-owned treatment works" means a facility that has a design flow rate of greater than or equal to 50,000 gpd of wastewater containing only conventional pollutants and that is not a POTW.

(75) "Large WWTP" means a WWTP with an average daily design capacity of 50,000 GPD or more.

(76) "Long-term CSO control plan" means a control plan that complies with the Combined Sewer Overflow Control Policy issued by the U.S. EPA in the "Federal Register" on April 19, 1994 (59 FR 18688).

(77) "Manure" is defined by 40 C.F.R. 122.23(b)(5), effective, July 1, 2008.

(78) "Maintenance replacement" means replacement of:

(a) Existing component parts with component parts that have similar characteristics and capacity; or

(b) A section of sewer or force main with the same size, alignment, and slope;

(c) The term does not include replacement of an entire WWTP with a new WWTP.

(79) "Major facility" means a KPDES facility or activity classified as a KPDES facility by the cabinet in cooperation with the regional administrator. Designation as a major industry as used in KRS 224.70-120, does not indicate automatic classification as a major facility.

(80) "Major industry" means an industry that generates and discharges process-related wastewater while engaged in commercial activities including resource recovery, manufacturing, products distribution, or wholesale and retail trade. Each industry has a design flow rate of greater than or equal to 50,000 gpd of process wastewater containing conventional, nonconventional, or thermal pollutants. A major industry designation is not a criterion for classification as a major facility.

(81) "Major municipal separate storm sewer outfall" or "major outfall" is defined by 40 C.F.R. 122.26(b)(5), effective, July 1, 2008.

(82) "Measurement" means the ability of the analytical method or protocol to quantify as well as identify the presence of the substance in question.

(83) "Medium animal feeding operation means an AFO that stables or confines the type and number of animals within any of the following ranges:

(a) 200 to 699 mature dairy cows, whether milked or dry;

(b) 300 to 999 veal calves;

(c) 300 to 999 cattle other than mature dairy cows or veal calves. Cattle includes heifers, steers, bulls, or cow or calf pairs;

(d) 750 to 2,499 swine each weighing fifty-five (55) pounds or more;

(e) 3,000 to 9,999 swine each weighing less than fifty-five (55) pounds;

(f) 150 to 499 horses;

(g) 3,000 to 9,999 sheep or lambs;

(h) 16,500 to 54,999 turkeys;

(i) 9,000 to 29,999 laying hens or broilers, if the AFO uses a liquid manure handling system;

(j) 37,500 to 124,999 chickens, other than laying hens, if the AFO uses other than a liquid manure handling system;

(k) 25,000 to 81,999 laying hens, if the AFO uses other than a liquid manure handling system;

(l) 10,000 to 29,999 ducks, if the AFO uses other than a liquid manure handling system; or

(m) 1,500 to 4,999 ducks if the AFO uses a liquid manure handling system.

(84) "Medium concentrated animal feeding operation is defined by 40 C.F.R. 122.23(b)(6), effective, July 1, 2008.

(85) "µg/l" means micrograms per liter, same as ppb, assuming unit density.

(86) "mgd" or "MGD" means million gallons per day.

(87) "Milligrams per liter" or "mg/l" means the milligrams of substance per liter of solution and is equivalent to parts per million in water, assuming unit density.

(88) "Minor industry" means an industry that generates and discharges process-related wastewater while engaged in commercial activities and has a design flow rate of less than 50,000 gpd of process wastewater containing conventional, nonconventional, or thermal pollutants.

(89) "Minor modification to a WWTP" means, a modification that does not change the WWTP average daily design hydraulic or organic treatment capacity of the WWTP or discharge location.

(90) "Mixing zone" means a domain of a water body contiguous to a treated or untreated wastewater discharge with quality characteristics different from those of the receiving water. The discharge is in transit and progressively diluted from the source to the receiving system. The mixing zone is the domain where wastewater and receiving water mix.

(91) "Municipal separate storm sewer system" or "MS4" is defined by 40 C.F.R. 122.26(b)(8), effective, July 1, 2008.

(92) "Municipality" means a city, district, or other public body created by or under the Kentucky Revised Statutes and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or a designated and approved management agency pursuant to 33 U.S.C. 1288.

(93) "National Pollutant Discharge Elimination System" or "NPDES" is defined by 40 C.F.R. 122.2, effective, July 1, 2008.

(94) "National pretreatment standard", "pretreatment standard", or "standard" is defined by 40 C.F.R. 403.3(l), effective July 1, 2008.

(95) "Natural Resources Conservation Service" or "NRCS" means the organization created pursuant to 7 U.S.C. 6962 in the U.S. Department of Agriculture.

(96) "New discharger" means, as used in 401 KAR 5:060 through 5:080, a building, structure, facility or installation:

(a)1. From which there is or may be a discharge of pollutants;

2. That did not commence the discharge of pollutants at a particular site prior to August 13, 1979;

3. That has never received a finally effective NPDES or KPDES permit for discharges at that site; and

4. That is not a new source.

(b) This definition includes an indirect discharger that commences discharging into the waters of the commonwealth after August 13, 1979. It also includes any existing mobile point source that begins discharging at a site for which it does not have a permit.

(97) "New source" means as used in 401 KAR 5:060 through 5:080, a building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

(a) After promulgation of U.S. EPA's standards of performance pursuant to 33 U.S.C. 1316 that are applicable to the source; or

(b) After publication of U.S. EPA's standards of performance pursuant to 33 U.S.C. 1316 that are applicable to the source, but only if the federal standards are promulgated within 120 days of publication.

(98) "Nonpoint" means any source of pollutants not defined by a point source.

(99) "Nutrient management plan" means the plan for an individual operation developed for the purpose of recycling nutrients from animal waste onto cropland or pasture.

(100) "Operator" means a person involved in the operation of a facility or activity.

(101) "Other wastes" means sawdust, bark or other wood debris, garbage, refuse, ashes, offal, tar, oil, chemicals, acid drainage, wastes from agricultural enterprises, and other foreign substances not included within the definitions of industrial wastes and sewage that may cause or contribute to the pollution of waters of the commonwealth.

(102) "Outfall" means, for municipal separate storm sewers, a point source at the point where a municipal separate storm sewer discharges to waters of the Commonwealth, but does not include open conveyances connecting two (2) municipal separate storm sewers, or pipes, tunnels, or other conveyances that connect segments of the same stream or other waters of the Commonwealth and are used to convey waters of the Commonwealth.

(103) "Outstanding state resource water" means a surface water designated by the cabinet as an outstanding state resource water pursuant to 401 KAR 10:031.

(104) "Overburden" means material of any nature, consolidated or unconsolidated, that overlies a mineral deposit, excluding topsoil or similar naturally-occurring surface materials that are not disturbed by mining operations.

(105) "Overflow" means any intentional or unintentional diversion of flow from a facility.

(106) "Owner" means a person who has legal ownership of a facility or activity regulated pursuant to 401 KAR Chapter 5.

(107) "Package WWTP" means a factory-built WWTP that is transported to and assembled or set in place at the site.

(108) "Permit" means:

(a) As used in 401 KAR 5:005 or 401 KAR 5:006, a document issued by the cabinet that authorizes the permittee to construct, modify, or operate a facility; or

(b) As used in 401 KAR 5:050 through 5:080, a KPDES permit.

(109) "Plan of study" means a report that contains the following information required for a regional facility plan by 401 KAR 5:006, Section 4:

(a) Planning area maps;

(b) A discussion of the need for sewer service in the area;

(c) Population projections; and

(d) An estimation of the twenty (20) year cost by category.

(110) "Planning area" means the geographic area proposed to be served by a regional planning agency in a projected twenty (20) year period.

(111) "Point source" is defined by 33 U.S.C. 1362(14). The term does not include agricultural storm water run-off or return flows from irrigated agriculture.

(112) "POTW" means publicly-owned treatment works as defined in KRS 224.01-010.

(113) "POTW treatment plant" is defined by 40 C.F.R. 403.3(r), effective July 1, 2008.

(114) "Pretreatment" is defined by 40 C.F.R. 403.3(s), effective July 1, 2008.

(115) "Pretreatment requirement" is defined by 40 C.F.R. 403.3(r), effective July 1, 2008.

(116) "Pretreatment standard" means a national pretreatment standard.

(117) "Primary responsibility" means personal, first-hand responsibility to conduct or actively oversee and direct procedures and practices necessary to ensure that the wastewater treatment plant or wastewater collection system is operated in accordance with accepted practices and with KRS Chapter 224 and 401 KAR Chapters 5 and 11 having the authority to conduct the procedures and practices necessary to ensure that the wastewater system or any portion thereof is operated in accordance with accepted practices, laws, and administrative regulations of the commonwealth, or to supervise others in conducting these practices.

(118) "Privately-owned treatment works" is defined by 40 C.F.R. 122.2, effective July 1, 2008.

(119) "Production area" means, for animal feeding operations, the area defined by 40 C.F.R. 122.23(b)(8), effective July 1, 2008.

(120) "Professional engineer" or "engineer" is defined by KRS 322.010(2).

(121) "Project priority list" means the list developed by the cabinet pursuant to KRS Chapter 224A that includes a priority ranking of applicants for the construction of wastewater treatment works under 33 U.S.C. 1313(e)(3)(H).

(122) "Proposed permit" means a KPDES permit prepared after the close of the public comment period and, if applicable, any public

hearing and administrative appeals that is sent to U.S. EPA for review before final issuance by the cabinet. A proposed permit is not a draft permit.

(123) "Public water system" is defined by 40 C.F.R. 141.2, effective July 1, 2008.

(124) "RCRA" means the Resource Conservation Recovery Act as amended, 42 U.S.C. 6901 - 6992k.

(125) "Recommencing discharger" means a source that recommences discharge after terminating operations.

(126) "Recurring discharge" means, as it relates to a sewer system overflow, a discharge that occurs two (2) or more times in a twelve (12) month period.

(127) "Regional administrator" means the regional administrator of the Region IV office of the U.S. EPA or the authorized representative of the regional administrator.

(128) "Regional facility" means a facility that is:

(a) Owned by a city, county, or other public body created by KRS Chapter 67, 67A, 74, 76, 96, 108, or 220; and

(b) Designated by a regional facility plan or water quality management plan to provide wastewater collection, transportation, or treatment services for a specific area.

(129) "Regional facility plan" means a type of water quality management plan addressing point sources of pollution for the purpose of areawide waste treatment management planning prepared by the designated regional planning agency pursuant to 33 U.S.C. 1251 - 1387 to control point sources of pollution within a planning area.

(130) "Regional planning agency" means a governmental agency, such as a city, county, or other public body created by KRS Chapter 67, 67A, 74, 76, 96, 108, or 220, that has been designated pursuant to 33 U.S.C. 1288 and 40 C.F.R. 130 to provide planning for the treatment of wastewater and for controls and recommendations relating to wastewater for a particular area; and those existing agencies that have developed plans pursuant to 33 U.S.C. 1281, 1285, 1288, and 1313(e) to provide planning related to wastewater collection, transportation, or treatment for a particular area.

(131) "Regional sewage collection system" means a sewage collection system designated by a regional planning agency that is owned by a city, county, or other public body that was created by KRS Chapter 67, 67A, 74, 76, 96, 108, or 220.

(132) "Run-off coefficient" means the fraction of total rainfall that will appear at a conveyance as run-off.

(133) "SARA" means the Superfund Amendments and Reauthorization Act, 42 U.S.C. 9601 – 9675.

(134) "Schedule of compliance" means a schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements leading to compliance with KRS Chapter 224 and 401 KAR Chapters 4 through 11.

(135) "SDWA" means Safe Drinking Water Act, 42 U.S.C. 300f – 300j-26.

(136) "Secondary treatment" means that degree of treatment that results in an effluent quality that meets the minimum requirements of 401 KAR 5:045.

(137) "Service area" means that geographic area currently being served by a regional facility.

(138) "Seven-Q-ten" or "$7Q_{10}$" means that minimum average flow that occurs for seven (7) consecutive days with a recurrence interval of ten (10) years.

(139) "Sewage" means the water-carried human or animal wastes from residences, buildings, or other places together with industrial wastes or underground, surface, storm or other water, as may be present.

(140) "Sewage sludge" is defined by 40 C.F.R. 122.2, effective July 1, 2008.

(141) "Sewer line" means a device used for collecting, transporting, pumping, or disposing of sewage, but not a building sewer that serves an individual building. A sewer line begins at the junction of two (2) building sewers that serve different buildings. Sewer lines include gravity sewer lines, pump stations, and force mains.

(142) "Sewer line extension" means a proposed construction project which extends a sewer system; it includes gravity sewer lines, pump stations, and force mains.

(143) "Sewer system" means the network of sewer lines, pump stations, and force mains that discharge to a common WWTP.

(144) "SIC" means standard industrial classification.

(145) "Significant industrial user" or "SIU" is defined by 40 C.F.R. 403.3(v), effective July 1, 2008.

(146) "Silvicultural point source" is defined by 40 C.F.R. 122.27.27(b(1), effective July 1, 2008.

(147) "Sinkhole" means a naturally occurring topographic depression in a karst area. Its drainage is subterranean and serves as a recharge source for groundwater. It is formed by the collapse of a conduit or the solution of bedrock.

(148) "Site" means, as used in 401 KAR 5:060 through 5:080, the land or water area where a facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity.

(149) "Sludge requirements" is defined by 40 C.F.R. 403.7(a)(ii), effective July 1, 2008.

(150) "Small concentrated animal feeding operation is defined by 40 C.F.R. 122.23(b)(9), effective July 1, 2008.

(151) "Small facility" means a WWTP with an average daily design capacity less than 10,000 GPD or a sewer line of less than 2,500 feet in length including appurtenances.

(152) "Small nonpublicly-owned treatment works" means a facility that has a design flow rate of less than 10,000 gpd of wastewater containing only conventional pollutants and that is not a POTW.

(153) "Small WWTP" means a WWTP with an average daily design capacity of less than 10,000 gpd.

(154) "Source" means a building, structure, facility, or installation from which there is or may be a discharge of pollutants.

(155) "Storm water" is defined by 40 C.F.R. 122.26(b)(13), effective July 1, 2008.

(156) "Storm water discharge associated with industrial activity" is defined by 40 C.F.R. 122.26(b)(14), effective July 1, 2008.

(157) "Storm water discharge associated with small construction activity" is defined by 40 C.F.R. 122.26(b)(15), effective July 1, 2008, except that:

(a) Waters of the "United States" means waters of the Commonwealth of Kentucky; and

(b) "Director" means "cabinet" if "director" refers to the director of an approved state program.

(158) "Supernatant" means the water that accumulates in the upper portion of a lagoon and contains not greater than two and zero-tenths (2.0) percent total solids by dry weight analysis.

(159) "Surface mining operation" means only those facilities required to have a permit by 405 KAR Chapters 7 through 26.

(160) "Surface waters" means those waters having well-defined banks and beds, either constantly or intermittently flowing; lakes and impounded waters; marshes and wetlands; and any subterranean waters flowing in well-defined channels and having a demonstrable hydrologic connection with the surface. Lagoons used for waste treatment and effluent ditches that are situated on property owned, leased, or under valid easement by a permitted discharger are not considered to be surface waters of the commonwealth.

(161) "Total dissolved solids" or "TDS" is defined by 40 C.F.R. 122.2, effective July 1, 2008.

(162) "Total maximum daily load" or "TMDL" means a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources.

(163) "Total suspended solids" or "TSS" means the total suspended solids (nonfilterable residue) as determined by use of the method specified in 40 C.F.R. 136.

(164) "Toxic pollutant" means, as used in 401 KAR 5:060 through 5:080, a pollutant listed as being toxic in 401 KAR 5:080.

(165) "UIC" means Underground Injection Control.

(166) "Underground injection control well" means a well used for the emplacement of fluids into the subsurface.

(167) "Upset" is defined by 40 C.F.R. 122.41(n), effective July 1, 2008.

(168) "USGS" means the U.S. Geological Survey.

(169) "Variance" means a mechanism or provision pursuant to 401 KAR Chapter 5 that allows modification to or waiver of the generally applicable effluent limitation requirements or time deadlines.

(170) "Wastewater system" means a sewage system as defined in KRS 224.01-010(25).

(171) "Wastewater treatment plant" or "WWTP" means a facility used for the treatment and disposal of sewage.

(172) "Water" or "Waters of the Commonwealth" is defined by KRS 224.01-010(33).

(173) "Water quality management plan" or "WQM plan" means:

(a) A plan consisting of initial plans produced in accordance with 33 U.S.C. 1288 and 1313 and certified and approved updates to those plans; or

(b) A state or areawide waste treatment management plan developed and updated in accordance with 33 U.S.C. 1281, 1285j, 1288, and 1313e and 40 C.F.R. Part 130.

(174) "Water quality standard" means an administrative regulation promulgated by the cabinet establishing the designated use of a surface water and the water quality criteria necessary to maintain and protect that designated use.

(175) "Well" or "water well" means:

(a) For 401 KAR 5:005, as defined by KRS 223.400(7).

(176) "Wellhead protection area" means:

(a) The surface and subsurface area surrounding a water well, well field, or spring, supplying a public water system, through which pollutants are reasonably likely to move toward and reach the water well, well field, or spring; or

(b) An area defined as a wellhead protection area in a county water supply plan.

(177) "Wetlands" is defined by 40 C.F.R. 122.2, effective July 1, 2008.

Section 2. Incorporation by Reference. (1) "Combined Sewer Overflow Control Policy", 59 Fed. Reg. 18688, April 19, 1994, is incorporated by reference.

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Kentucky Division of Water, 200 Fair Oaks Lane, Frankfort, Kentucky, Monday through Friday, 8 a.m. to 4:30 p.m. (25 Ky.R. 690; eff. 11-18-98; Am. 26 Ky.R. 118; 792; 1119; eff. 12-8-99; 29 Ky.R. 1018;1533; eff. 12-18-2002; 30 Ky.R. 997; eff. 9-8-04; TAm eff. 9-8-2007; TAm eff. 11-25-2008; 35 Ky.R. 2493; 36 Ky.R. 337; eff. 9-25-2009.)

401 KAR 5:005. Permits to construct, modify, or operate a facility.

RELATES TO: KRS 224.10-100, 224.16-050, 224.16-060, 224.70-100, 224.70-110, 40 C.F.R. 144.26, 26 U.S.C. 501(c)(3), 42 U.S.C. 300f-300j, EO 2008-507, 2008-531

STATUTORY AUTHORITY: KRS 224.10-100(5), 224.10-110, 224.16-050, 224.16-060, 224.70-100, 224.70-110

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100(5) requires the cabinet to develop and conduct a comprehensive program for the management of water resources and to provide for the prevention, abatement, and control of water pollution. EO 2008-507 and 2008-531, effective June 16, 2008, abolish the Environmental and Public Protection Cabinet and establish the new Energy and Environment Cabinet. This administrative regulation establishes administrative procedures for the issuance of permits for the construction, modification, and operation of facilities authorized by KRS Chapter 224 and establishes conditions for construction of facilities under 401 KAR Chapter 5. The administrative regulation also establishes a schedule of fees to recover the costs of issuance for certain classes of permits. There is not a federal law or regulation relating to construction requirements for wastewater treatment plants or the operational requirements for no discharge operations; therefore, this administrative regulation is not more stringent than the federal requirements.

Section 1. Applicability. (1) This administrative regulation shall apply to an owner and an operator of a sewage system, except:

(a) A septic tank with a subsurface discharge;

(b) A pretreatment facility regulated by a pretreatment program or intermunicipal agreement, approved pursuant to 401 KAR 5:057; or

(c) An authorization by permit or rule that is prepared to assure that underground injection will not endanger a drinking water supply, pursuant to the Safe Drinking Water Act, 42 U.S.C.300f-300j, and that are issued pursuant to a state or federal Underground Injection Control program; and

(d) An underground injection control well that is permitted pursuant to 40 C.F.R. 144 if:

1. The permit is protective of public health and welfare; and

2. The permit prevents the pollution of ground and surface waters.

(2) Unless exempted pursuant to subsection (3)(b) of this section or paragraph (a) of this subsection, a person shall not construct, modify, or operate a facility without having received a permit from the cabinet.

(a) A construction or modification permit shall not be required for maintenance replacement for components of an existing facility or for changes that do not affect the treatment processes of the facility, but shall be required for replacement of an entire wastewater treatment plant (WWTP).

(b) The operational permit provisions of Section 27 of this administrative regulation shall be satisfied by those facilities that have a valid KPDES permit.

(3) This subsection shall apply to an agricultural waste handling system, industrial WWTP, or a storm water WWTP.

(a) The following requirements shall apply to an agricultural waste handling system:

1. An agricultural waste handling system that conveys, stores, or treats manure from a concentrated animal feeding operation shall:

a. Obtain a permit to construct or modify the facility, pursuant to Sections 2 and 24of this administrative regulation; and

b. Obtain a KPDES permit; and

2. All other agricultural waste handling systems shall:

a. Obtain a permit to construct, modify, or operate the facility pursuant to Sections 2, 24, 25, 27, and 30(1)(h) and (i) of this administrative regulation; and

b. Obtain a Kentucky No Discharge Operational Permit (KNDOP).

(b) The following shall apply to industrial wastewater treatment plants (IWWTPs):

1. An IWWTP with a closed loop system or a system that uses spray irrigation for disposal shall:

a. Obtain a KNDOP permit;

b. Comply with Sections 2, 25, 27, and 30(1)(e) through (h) of this administrative regulation; and

c. Not be required to obtain a permit to construct or modify the facility;

2. An IWWTP with a discharge to the waters of the Commonwealth shall:

a. Comply with the Five Mile Limit Policy;

b. Obtain a KPDES permit to discharge into the waters of the Commonwealth;

c. Comply with any other applicable standard or requirement of 401 KAR Chapter 5; and

d. Not be required to obtain a permit to construct or modify the facility; and

3. A sewer line that conveys wastewater to an IWWTP shall not be required to obtain a construction permit.

(c) The following requirements shall apply to a WWTP that collects, conveys, or treats only storm water:

1. A permit to construct or modify the facility shall not be required for a WTTP that collects, conveys, or treats only storm water and discharges into the waters of the Commonwealth.

a. These facilities shall comply with 401 KAR 5:035 through 5:080 and 401 KAR 10:026 through 10:031.

b. 401 KAR 5:060 establishes if these facilities shall obtain a KPDES permit.

2. A WTTP that collects, conveys, or treats only storm water and does not discharge into the waters of the Commonwealth shall obtain an operational permit pursuant to Sections 2, 25, 27, and 30(1)(e) through (h) of this administrative regulation.

Section 2. Application Submittal. (1) An application to construct, modify, or operate a facility, or renew the operational permit for a facility shall be submitted on the applicable forms established in this subsection and shall include the applicable supporting information pursuant to Section 3 of this administrative regulation, applicable construction permit fees pursuant to Section 5 of this administrative regulation, applicable modification or operating permit fees, and plans and specifications for the proposed construction or modification pursuant to Section 6 of this administrative regulation.

(a) For construction of a sewer line extension, the applicant shall submit a completed Construction Permit Application for Sewer Line Extension.

(b) For construction of a WWTP or WWTP with a sewer line with a direct discharge, the applicant shall submit or shall have submitted:

1. The completed KPDES applications pursuant to 401 KAR 5:060; and

2. A completed Construction Permit Application for Wastewater Treatment Plant.

(c) For a WWTP construction project without a discharge other than an agricultural waste handling system, the applicant shall submit:

1. A completed Construction Permit Application for Wastewater Treatment Plant, Form W-1; and

2. A completed Kentucky No Discharge Operational Permit Application, Form ND.

(d) For an operational permit or renewal of a Kentucky No Discharge Operational Permit (KNDOP) other than an agricultural waste handling system, the applicant shall submit a completed Kentucky No Discharge Operational Permit Application, Form ND.

(e)1. For construction, renewal, modification, or operation of agricultural waste handling systems that do not discharge and do not intend to discharge, the applicant shall submit a completed Kentucky No Discharge Operational Permit Application for Agricultural Wastes Handling Systems, Short Form B.

2. For a construction approval, an applicant shall also submit a completed Site Survey Request.

(f) For construction of minor modifications to a WWTP, the applicant shall submit a completed Construction Permit Application for Wastewater Treatment Plant.

(g) For WWTP construction projects with a discharge for an individual residence, the applicant shall submit a completed notice of intent for coverage under a general permit issued pursuant to 401 KAR 5:055.

(h) For operational permits or renewals of operational permits for publicly owned sewer systems that have at least 5,000 linear feet of sewer line and that discharge to a sewer system or a WWTP that is owned by another person, the applicant shall submit a completed Kentucky Inter-System Operational Permit Application.

(2) Signatures.

(a) An application and all reports required by the permit shall be signed by the responsible corporate officer or the person having primary responsibility for the overall operation of the facility.

1. For a municipality, state, federal, or other public agency, the signee shall be a principal executive officer or ranking elected official or the designee.

2. An application or report may be signed by a duly authorized representative, if the authorization has been made in writing by the responsible person.

(b) Certification. A person signing a document in accordance with paragraph (a) of this subsection shall make the following certification: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for known violations."

Section 3. Application; Construction Permit Supporting Information. For those facilities required to submit a Construction Permit Application for Wastewater Treatment Plant or Construction Permit Application for Sewer Line Extensions, the following information shall be submitted

with the application pursuant to Section 2 of this administrative regulation:

(1)(a) The applicant shall identify who will inspect and certify that the facility under construction conforms to the plans and specifications approved by the cabinet in accordance with this administrative regulation.

(b) Facilities designed by an engineer shall be inspected and certified by an engineer;

(2) The applicant shall provide:

(a) An estimate for the cost of the facility and the sources of project funding;

(b) A USGS 7.5 minute topographic map with the proposed project site identified;

(c) The North American Datum 1983 (NAD 83), degree, minutes, and seconds measurement of the proposed project's latitude and longitude; and

(d) An estimate, and the basis for the estimate, for the average daily flow added by the proposed project;

(3) Closure plan.

(a) If an existing facility or a portion of a facility will be taken out of service, the applicant shall submit a closure plan discussing the following items:

1. How the facility will be constructed and how the sewage will be diverted to the new construction without a bypass to a stream. If a bypass is unavoidable during construction, the applicant shall submit:

a. An explanation of why construction cannot occur without the bypass;

b. An estimate of the shortest duration for the construction to be completed;

c. A description of all equipment, material, labor, and any other item necessary to complete the construction; and

d. An estimate of when the necessary items for the construction will be on-site;

2. How the contents of the facility will be removed and properly disposed;

3. How the abandoned facility will be removed or filled and covered; and

4. How the abandoned sewers will be plugged and manholes filled and covered.

(b) If an existing WWTP discharge is eliminated, the owner of the WWTP shall submit a completed No Discharge Certification within thirty (30) days after the elimination of the discharge;

(4) Preliminary submittal. Applicants for WWTP construction permits may submit the following information prior to formal submittal of the construction application, to allow the applicant to receive a preliminary determination on the suitability of the proposed discharge location and preliminary effluent limits used in the design of the facility.

(a) If the information in this subsection is not submitted prior to the formal submittal, the information shall be submitted with the construction application.

(b) The preliminary determination shall be valid for up to one (1) year after issuance of the preliminary determination or until the issuance of the KPDES permit, whichever occurs first.

(c) The preliminary determination shall not be a guarantee of final permit limits and may be changed as a result of information presented during the public notice phase of the KPDES permitting procedure.

(d) The preliminary effluent limits shall be contingent upon the validity, accuracy, and completeness of the following information that the applicant shall submit:

1. A reproducible copy of a USGS 7.5 minute topographic map with the projected service area outlined, the proposed WWTP location, and the discharge point identified on the map;

2. A letter from the regional planning agency stating whether the applicant's project is compatible with the regional facility plan or water quality management plan;

3.a. For a new or an expansion of an existing regional facility pursuant to 401 KAR 5:006, a regional facility plan or water quality management plan.

b. The planning requirements of Recommended Standards for Wastewater Facilities (Ten States' Standards) shall be satisfied by the cabinet's approval of a regional facility plan or a water quality management plan;

4. For a WWTP project, a demonstration that the users of the proposed WWTP cannot be served by an existing regional facility. The applicant shall provide a detailed evaluation of alternatives by conducting a twenty (20) year present worth cost analysis.

a. The distance criteria for determining availability shall not apply to a WWTP with an average daily design capacity less than or equal to 1,000 gpd.

b. The distance shall be measured along the most feasible route of connection to a point where the downstream sewer has capacity to carry the additional flow; and

5. An estimate and the basis for the estimate of the average daily flow added by the proposed project;

(5) For a WWTP project, the applicant shall submit the following influent design values:

(a) Average daily flow;

(b) Peak daily flow;

(c) Peak hourly flow;

(d) Peak instantaneous flow;

(e) BOD;

(f) Influent suspended solids;

(g) Phosphorus; and

(h) Ammonium nitrogen (NH_3-N);

(6) For a WWTP project, if the discharge point of a proposed WWTP fails to coincide with a stream indicated as a blue line on a USGS 7.5 minute topographic map, the applicant shall demonstrate that the applicant has a recorded deed, recorded other right of ownership, or recorded right of easement to discharge the applicant's effluent across any land owner's property that comes between the point of discharge and a blue line stream;

(7) For a WWTP project, the applicant shall submit a copy of the plat or survey clearly indicating the property boundaries, the position of the proposed facility, and the position of the dwellings within 200 feet of the WWTP;

(8) For a WWTP project, the applicant shall provide a sludge management plan that includes the method of sludge processing and ultimate sludge disposal;

(9) For a WWTP project, the applicant shall indicate that laboratory services shall be provided for self-monitoring and process control to ensure that the WWTP operation complies with the permit; and

(10) For a WWTP project, the applicant shall submit:

(a) A schematic drawing of the WWTP layout and detailed explanation of the proposed facility and its method of operation;

(b) The WWTP's reliability category and a demonstration of how the WWTP complies with the reliability requirements in Section 13 of this administrative regulation; and

(c) The design calculations used to size the unit processes.

Section 4. Application; Preliminary Considerations. (1) A permit shall not be granted to a facility that is not compatible with a regional facility plan or with a water quality management plan approved by the cabinet or the U.S. EPA.

(2) A new open-top component of a WWTP shall not be located within 200 feet of an existing dwelling or property line; except:

(a) A WWTP that serves an individual residence shall not be required to be at least 200 feet from the dwelling that it serves; and

(b) An open-top component of a WWTP may be located within 200 feet of another dwelling that the WWTP does not serve or a property line if:

1. The WWTP or component is enclosed within a building that controls odors and dampens noise; or

2. The applicant demonstrates that an equivalent method for noise and odor control shall be provided.

(3) A discharge point or direct discharge into a wellhead protection area shall comply with Water Policy Memorandum No. 84-02, Five Mile Limit Policy, if that public drinking water well or spring is under the direct influence of surface water.

(4) The initial suitability of a location for a proposed discharge point or spray irrigation field shall be determined by the cabinet after site inspection. In determining the suitability of the location, the cabinet shall consider the:

(a) distance to the nearest dwelling;

(b) Distance to water intake used for a public water supply;

(c) Downstream land use;

(d) Physical characteristics and current use of the stream;

(e) Physical characteristics of the proposed spray field including karst topography;

(f) Need for easements;

(g) Location of property boundaries; and

(h) Other items consistent with this administrative regulation and KRS Chapter 224.

(5) If the discharge from the WWTP enters a sinkhole directly or enters a disappearing stream, the applicant shall submit a proposal for a groundwater tracer study or results from a previously conducted study to the cabinet.

(a) The cabinet shall accept a groundwater tracer study or a proposal for a groundwater tracer study if it is sufficiently scientifically rigorous

to:

1. Establish if a hydrologic connection exists with surface waters that may result in additional or more stringent permit limitations;

2. Establish if a hydrologic connection exists with domestic water supply intakes within five (5) miles; and

3. Establish if a hydrologic connection exists with drinking water wells within five (5) miles.

(b) The cabinet shall notify that applicant of the cabinet's acceptance or denial of a proposed groundwater tracer study.

(c) If the cabinet accepts a proposal for a groundwater tracer study, the applicant shall conduct the groundwater tracer study and submit the completed groundwater tracer study to the cabinet.

(d) The cabinet shall issue, deny, or modify the permit based upon the findings of a scientifically rigorous groundwater tracer study.

(6) The cabinet may condition or deny a permit to construct or expand a facility based on its compatibility with a regional facility plan or the availability of a regional facility.

(a) Permits to construct, expand, or operate a sewage system shall require connection to a regional facility if one (1) becomes available and shall not be renewed, reissued, or modified to remove that requirement unless a regional facility is no longer available.

(b) The distance criteria to determine if a regional facility is available shall be measured along the most feasible route of connection to a point where the downstream sewer has capacity to carry the additional flow.

(7) Pursuant to 401 KAR 5:300, the cabinet may coordinate issuance of a construction permit for WWTPs that require a new KPDES permit or modification to a KPDES permit with the issuance of the KPDES permit to ensure that public comments received as a result of the public notice requirements of 401 KAR 5:075 shall be considered in the issuance of the construction permit.

(a) The cabinet may also coordinate issuance of construction approval for the associated sewer lines with the issuance of the construction permit for the WWTP.

(b) The cabinet may condition or deny the construction permit based on those public comments.

(8)(a) The cabinet shall issue a notice of deficiency for the deficiencies in the application, fees, supporting information, or plans and specifications.

(b) Failure of the applicant to respond to a notice of deficiency within thirty (30) days shall result in the application being terminated without the issuance of a construction permit.

Section 5. Fees. (1) Except as specified in KRS 224.10-100, 224.16-050, and subsection (5) of this section, the applicant shall submit a construction permit fee as provided in subsection (4) of this section with the construction permit application and any applicable KPDES fee.

(2) If the cabinet denies a construction permit for a WWTP or sewer line, the fee for the construction permit shall be retained by the cabinet, unless the fee is for a WWTP that serves only an individual residence.

(3) The applicant shall make checks or money orders payable to the Kentucky State Treasurer.

(4) Construction permit fees shall be as shown on the following schedule, except as provided in subsection (5) of this section.

Facility Category	Construction Permit Fee
Large Facility: WWTP	$1,800
Intermediate Facility: WWTP	$900
Small Facility: WWTP	$450
Minor Modification to a WWTP:	$200
Small Facility for Nonprofit Organizations pursuant to KRS 224.16-050(5):	$50
Large Facility: Sewer Lines	$800
Intermediate Facility: Sewer Lines	$400
Small Facility: Sewer Lines	$200

(5) Fees established in this section shall not apply to an agricultural waste handling system or to a renewal of a KNDOP permit.

(6) The WWTP fee shall apply to the WWTP project and sewers or pump stations located on the plant property.

(a) A sewer fee shall apply to all sewers, force mains, and pump stations that are bound together as one (1) set of plans.

(b) If a WWTP project includes sewers, force mains, or pump stations located off of the plant property, at least two (2) fees shall be submitted.

(7) To qualify for the reduced fee in subsection (4) of this section, nonprofit organizations shall submit proof that they are qualified pursuant to 26 U.S.C. 501(c)(3).

Section 6. Plans and Specifications. (1) The applicant shall submit to the cabinet at least three (3) sets of detailed plans and specifications for the facility. Plans for gravity sewer lines and force mains shall include a plan view and a profile view.

(2) The cabinet may request additional information as is necessary to evaluate the facility to ensure compliance with this administrative regulation.

(3) If cabinet approval is obtained, changes shall not be made to the plans and specifications that would alter or affect the location, capacity, type of treatment process, discharge location, or quality of effluent without issuance of a modified permit from the cabinet.

(4) If a proposed facility will become a part of a sewer system served by a regional facility or has a projected average daily design capacity of 10,000 gpd or more, the plans and specifications shall be prepared, stamped, signed, and dated by a professional engineer.

(5) The plans shall be accompanied by engineering calculations necessary for the understanding of the basis and design of the facility.

(6) If a proposed facility's design capacity is less than 10,000 gpd, the cabinet may require the plans to be prepared, stamped, signed, and dated by a professional engineer if there is not sufficient operating data available from previous similar installations. Operation data shall demonstrate that water quality standards have not been violated and that there have not been significant operational problems.

Section 7. Design Considerations. (1)(a) Facilities, except an extended aeration package WWTP with an average daily design capacity less than 100,000 gpd, shall be designed in accordance with the Recommended Standards for Wastewater Facilities of the Great Lakes-Upper Mississippi River Board of State Public Health and Environmental Managers, commonly referred to as Ten States' Standards.

1. A deviation from the Ten States' Standards requirements shall be approved if the applicant submits a written request for a deviation with the basis for the request pursuant to this paragraph.

2. The basis for the deviation request shall be supported by current engineering practice. Some references to current engineering practice may be found in the Wastewater Engineering Treatment, Disposal, Reuse by Metcalfe and Eddy, Inc.

3. Design calculations and other supporting documentation to support the deviation shall be submitted to the cabinet.

(b) Other practices may be required by the cabinet based on the cabinet's best professional judgment that the practices are necessary for the protection of public health and the environment.

(c) Other practices shall be approved by the cabinet if sufficient operational experience is available from previous similar installations to indicate operational problems have not occurred, that water quality standards have not been violated, and design calculations and documentation to support the other practice have been submitted to the cabinet.

(2) The applicant shall demonstrate that the effluent from a proposed facility shall:

(a) Protect those minimum conditions listed in 401 KAR 10:031 that are applicable to all waters of the Commonwealth;

(b) Not cause those waters designated by 401 KAR 10:026 or categorized by 401 KAR 10:030 to be of lesser quality than the numeric criteria applicable to those waters in 401 KAR 10:031 or the requirements of 401 KAR 10:030; and

(c) Be in accordance with any facility requirement established in 401 KAR Chapter 5.

(3) Each WWTP shall have a flow measuring device at the plant capable of measuring the anticipated flow, including variations, with an accuracy of ± ten (10) percent.

(a) The flow measuring device shall measure all flow discharged by the WWTP including any bypasses.

(b) An indicating, recording, and totalizing flow measuring device shall be installed at each large WWTP.

(c) A flow measuring device for new large WWTPs shall meet the requirements of Section 12 of this administrative regulation.

(4) A of any type shall not be constructed in a sewer line or pump station or at a WWTP unless construction of the bypass or overflow structure is necessary to prevent loss of life, personal injury, or severe property damage and there is not a alternative.

Section 8. Requirements for Sewer Line Extensions. (1) If the applicant does not own all of the proposed sewer line extension, the applicant shall identify the owner and the portion of the sewer line extension owned by the other person.

(2) The applicant shall submit letters from:

(a) The owner of the sewer line extension stating that the owner shall accept operation and maintenance responsibilities for the sewer line extension as it is constructed;

(b) The owner of the sewer system stating that the owner approves the connection and accepts responsibility for the additional flow; and

(c) The owner of the WWTP stating that the owner approves the connection and accepts responsibility for the additional flow.

(3)(a) The applicant shall demonstrate that the portion of the sewer system used by the connection has adequate capacity to transport the current and anticipated peak flow to the WWTP and that the portion of the sewer system used by the connection shall not be subject to

excessive infiltration or excessive inflow.

(b) The cabinet may deny a sewer line extension for that portion of the sewer system if the portion of the system is subject to excessive infiltration or excessive inflow unless a plan for investigation and remediation that addresses these conditions has been submitted and is being implemented.

(4)(a) The applicant shall demonstrate that the WWTP that receives the waste has adequate capacity to treat the current and the anticipated flow and is not subject to excessive infiltration or excessive inflow.

(b) The cabinet may deny the sewer line extension if the WWTP does not have adequate capacity to treat the flow or is subject to excessive infiltration or excessive inflow unless a plan for investigation and remediation that addresses these conditions has been submitted and the plan is being implemented.

(5) The entrance of groundwater into, or loss of waste from, a new gravity sewer line shall be limited to 200 gpd per inch of diameter per mile of the gravity sewer line. This limitation includes manholes, gravity sewer lines, and appurtenances.

(6)(a) The integrity of a new gravity sewer line shall be verified by either the infiltration-exfiltration or low pressure air testing method.

1. An infiltration-exfiltration test shall be performed with a minimum positive head of two (2) feet.

2. A deflection test shall be performed for each new flexible pipe; pipe deflection shall not exceed five (5) percent.

3. Each new manhole shall be tested for watertightness.

(b) The integrity of a new force main shall be verified by leakage tests. The applicant shall describe the proposed testing methods and leakage limits in the specifications submitted with the permit application.

(7) The construction of a new combined sewer shall not be permitted unless it is a consolidation sewer, flood relief sewer, or a replacement of a combined sewer that:

(a) Conforms with the long-term CSO control plan;

(b) Enhances water quality; and

(c) Protects public health and safety.

(8) A gravity sewer line and a force main shall be designed and constructed to give mean velocities, when flowing full, of not less than two and zero-tenths (2.0) feet per second.

(a) The roughness coefficient used in the Manning or Kutter's formula shall be 0.013, or the "C" factor used in the Hazen-Williams Formula shall be 100.

(b) If the specifications allow only plastic pipe, a roughness coefficient of 0.011 or a "C" factor of 120 may be used.

(c) A roughness coefficient between 0.013 and 0.011 may be used for other pipe materials if sufficient documentation of experimental testing is submitted to the cabinet and if the testing supports the use of the design roughness coefficient.

(9) A gravity sewer line and a force main shall have a minimum of thirty (30) inches of cover or provide comparable protection.

(10) If a gravity sewer line and a force main are to be constructed in fill areas, the fill areas shall be compacted to ninety-five (95) percent density as determined by the Standard Proctor Density test or to a minimum of ninety (90) percent density as determined by the Modified Proctor Density test prior to the installation of the sewer lines.

(11) The minimum diameter for a conventional gravity sewer line shall be eight (8) inches, except that:

(a) The minimum diameter for an extension to an eight (8) inch or larger sewer line if a future extension is not feasible shall be six (6) inches;

(b) The minimum diameter for an extension to a six (6) inch sewer line shall be six (6) inches; and

(c) A sewer line shall be sized based upon engineering calculations consistent with current engineering practices.

(12) A manhole shall be provided at the junction of two (2) building sewers. This subsection shall not apply to building sewers that serve a single-family residence.

(13) The following building sewers shall be exempt from the requirements of this administrative regulation:

(a) A gravity sewer that:

1. Discharges directly to the sewer main; and

2. Serves a single building; and

(b) A force main sewer, regardless of the location of the pump station that:

1. Discharges directly to a gravity sewer main; and

2. Serves a single building.

(14) Except as provided in paragraph (b) of this subsection, a sewer line shall be located at least fifty (50) feet away from an intermittent or perennial stream except where the sewer alignment crosses the stream.

(a) The distance shall be measured from the top of the stream bank.

(b) The applicant may request a variance from the requirement established in this subsection.

(15) A gravity sewer line and a force main that cross streams shall be constructed by a method that maintains normal stream flow and allows for a dry excavation.

(a) Water pumped from the excavation shall be contained and allowed to settle prior to reentering the stream.

(b) Excavation equipment and vehicles shall operate outside of the flowing portion of the stream.

(c) Spoil material from the sewer line excavation shall not be allowed to enter the flowing portion of the stream.

(16) A pump station wetwell shall be sized such that, based on the average flow, the time to fill the wetwell from the pump-off elevation to the pump-on elevation shall not exceed thirty (30) minutes.

(17) A pump station wetwell shall have a vent.

(18) A pump station shall provide a minimum of two (2) hours of detention, based on the average design flow, above the high level alarm elevation or provide an alternate source of power with wetwell storage providing sufficient time for the alternative power source to be activated.

(19) Each high point in the force main shall have an automatic air release valve.

(20) The applicant shall submit a performance curve for a proposed pump station.

(21) A simplex design shall be used only for a pump station that serves an individual residence or business, and a spare pump shall be available for immediate installation.

Section 9. Municipal Water Pollution Prevention Program. This section applies to owners of regional WWTPs, sewer systems served by regional WWTPs, and political subdivision facilities with KISOPs.

(1) For each regional WWTP, the cabinet shall review the WWTP's reported monthly flows and organic loads for the most recent twelve (12) months. If the annual average flow or organic load, or for systems with combined sewer lines the lowest monthly flow and associated organic load, exceed the following values, the cabinet shall advise the owner of the WWTP of the need to address the potential overload condition pursuant to subsection (2) of this section:

(a) For a regional WWTP with a design capacity of ten (10) mgd or less, ninety (90) percent of the WWTP's average daily design capacity; or

(b) For a regional WWTP with a design capacity of more than ten (10) mgd, ninety-five (95) percent of the WWTP's average daily design capacity.

(2) The cabinet shall deny the approval of a sewer line extension until the owner of the WWTP agrees to address the potential overload condition identified in subsection (1) of this section. The owner shall address the condition by:

(a)1. Demonstrating, with supporting documentation, that the average daily design capacity of the plant is greater than the permitted amount.

2. The cabinet shall review the request and if justified, shall issue a revised average daily design capacity for the WWTP by issuing a modification to the KPDES permit;

(b) Expanding the WWTP to a size sufficient to handle the anticipated flows and loads; or

(c) Performing other remedial measures that address the condition.

(3) The cabinet shall deny a sewer line extension that is of sufficient flow or adds load sufficient to exceed the remaining design capacity of the WWTP or exacerbate water quality problems until the owner of the WWTP agrees to address the design capacity or water quality problem.

(4) The owners of the following facilities shall conduct a study of the sewer system or the affected portion of the sewer system that complies with subsections (5) and (6) of this section:

(a) A regional WWTP with a reported average flow or organic load that exceeds the percent identified in subsection (1)(a) or (b) of this section, as applicable, or a political subdivision KISOP facility that either:

1. Receives more than 275 gallons per capita per day of sewage flow based on the maximum flow received during a twenty-four (24) hour period exclusive of industrial flow; or

2. Receives more than 120 gallons per capita per day of sewage flow based on the annual average of daily flows exclusive of industrial flow; or

(b) If subject to excessive infiltration or excessive inflow, a regional WWTP, sewer system served by a regional WWTP, or a political subdivision facility with a KISOP.

(5) The study shall determine if the infiltration-inflow can be removed in a cost-effective manner by using a twenty (20) year present worth cost analysis and if it cannot be, shall identify the modifications to the sewer system, affected portion of the sewer system, or affected portion

of the WWTP necessary to transport and treat the infiltration-inflow.

(a) A schedule for completion of the necessary modifications shall also be prepared.

(b)1. The study and schedule shall be submitted to the cabinet for review and approval.

2. Approval shall be based on cost and length of time required to correct the infiltration-inflow.

(6) For the infiltration-inflow study of the sewer system or the affected portion of the sewer system, the owner shall:

(a) Use a map of the sewer system or the affected portion of the sewer system to select manholes for the installation of flow monitoring equipment;

(b) Install equipment to monitor flow at the key manholes, groundwater levels, and rainfall volume and duration for a period of thirty (30) to ninety (90) days;

(c) Conduct physical surveys, smoke tests, and dye water studies of the affected portion of the sewer system;

(d) Evaluate the cost-effectiveness of transportation and treatment versus correction of the infiltration-inflow sources by using a twenty (20) year present worth cost analysis;

(e) Internally inspect the sewer lines in the affected portion of the sewer system to determine the rehabilitation locations and methods if the rehabilitation locations and methods cannot be established by other analysis;

(f) Develop plans for rehabilitation of the affected portion of the sewer system or modifications to the affected portion of the facility necessary to transport and treat all flows; and

(g) Develop a schedule for completion of the rehabilitation or modifications.

(7)(a) The owner of the facility shall complete the necessary rehabilitation or modifications in accordance with the schedule to which the applicant and cabinet agree.

(b) The cabinet may deny a further sewer line extension if the owner is not meeting the schedule or is not making progress that follows the schedule.

Section 10. Extended Aeration Package WWTP Requirements. This section shall apply to an extended aeration package WWTP intended to treat only domestic sewage but shall not apply to an extended aeration package WWTP that serves an individual residence.

(1) A bar screen shall be provided for each plant, except those with trash traps pursuant to Section 14 of this administrative regulation.

(2) The aeration chamber shall have a minimum detention time of twenty-four (24) hours based on the average design flow.

(3) A minimum of 2,050 cubic feet of air shall be provided per pound of BOD.

(4) The clarifier shall have:

(a) A minimum detention time of four (4) hours based on the average design flow;

(b) A surface overflow rate of less than 1,000 GPD/ft^2; and

(c) A solids loading of less than thirty-five (35) lb/ft^2 based on the peak daily design flow rate.

(5) A positive sludge return shall be provided.

(6)(a) A source of water shall be provided for cleanup.

(b) If a potable source is provided, backflow preventers shall be installed to protect the water supply.

(7) Fencing with a lockable gate shall be installed around the plant site.

(8) An all-weather access road to the plant shall be provided.

(9) A sludge holding system shall be provided for each large WWTP. The sludge holding system shall:

(a) Provide two (2) cubic feet of volume per 100 gallons of WWTP design treatment capacity;

(b) Provide thirty (30) cubic feet per minute (cfm) of air per 1,000 cubic feet of tank volume;

(c) Be designed to prevent overflows; and

(d) Transport supernatant to the aeration chamber.

(10) For a large WWTP, motors and blowers shall be installed sufficient to handle the load if the largest unit is taken out of service.

(11) Post aeration, if required by effluent limits, shall be designed to raise the effluent dissolved oxygen from two (2) mg/l to the required effluent concentration.

(a) If a diffused air system is used, a minimum blower capacity of 0.154 cubic feet per minute (cfm) per 1,000 gallons of average daily design capacity shall be provided.

(b) If a step aeration ladder is used, a minimum drop of nineteen (19) feet shall be provided.

(12) A WWTP with a monthly average permit limit for CBOD of twenty (20) mg/l or less shall provide additional treatment.

(13) A WWTP that serves a restaurant or other similar establishment where food is prepared and served and a food grinder is used shall

be designed to treat the additional BOD loading.

(14) Effluent discharge piping for a new WWTP, except a regional facility, shall be designed to transport sewage to facilitate a future connection to a regional facility.

(15) A used package extended aeration WWTP may be used if the manufacturer or a professional engineer certifies that the tank is structurally sound and all mechanical equipment has been reconditioned.

Section 11. Disinfection. (1) All WWTPs shall have a disinfection process that meets the following requirements:

(a) An ultraviolet disinfection system designed to treat the anticipated peak hourly flow;

(b) A chlorination system with a flow or demand proportional feed system.

1. The chlorine contact tank shall have a minimum detention time of thirty (30) minutes based on the average flow, or fifteen (15) minutes based on the peak hourly flow, whichever requires the larger tank size.

2. A WWTP shall also have a dechlorination system with a flow or demand proportional feed system if necessary to meet the effluent limits;

(c) A chlorination system with a manually controlled feed system and a flow equalization basin designed to eliminate the diurnal flow variations.

1. The flow equalization basin shall meet the requirements of Section 17 of this administrative regulation.

2. The chlorine contact tank shall have a minimum detention time of thirty (30) minutes based on the average design flow or fifteen (15) minutes based on peak hourly flow.

3. A WWTP shall also have a dechlorination system if necessary to meet the effluent limits; or

(d) Other disinfection processes may be approved if they provide equivalent treatment.

(2) Tablet type chlorination equipment shall not be used in an intermediate or large WWTP.

Section 12. Requirements for Flow Measuring Devices. This section shall apply to a new large WWTP.

(1)(a) Each flow measuring device shall be capable of measuring the anticipated flow, including variations, with an accuracy of ± ten (10) percent.

(b) The flow measuring device shall measure all flow received at the WWTP.

(c) An indicating, recording, and totalizing flow measuring device shall be installed at each large WWTP.

(2)(a) If the influent and effluent flow are expected to be significantly different, flow measuring devices shall be provided for both the influent and the effluent flow.

(b) Multiple flow measuring devices shall be provided for the following:

1. A WWTP that stores and hydrographically controls the release of effluent;

2. A WWTP with flow equalization facilities that are designed to store more than the volume required to dampen the diurnal flow variations;

3. A WWTP with a lagoon that has a detention time of greater than twenty-four (24) hours;

4. A WWTP with the capability to bypass a treatment process; and

5. A WWTP with more than one (1) discharge point.

(3) Sharp crested weirs shall be used for measuring effluent flow only and shall have the following characteristics:

(a) The weir shall be installed perpendicular to the axis of flow, and there shall not be leakage at the weir edges or bottom;

(b) The weir plate shall be level and adjustable;

(c) The sides of a rectangular contracted weir shall be vertical;

(d) The angles of a V-notch weir shall be cut precisely;

(e) The thickness of the weir crest shall be less than one-tenth (0.1) of an inch;

(f) The distance from the weir crest to the bottom of the approach channel shall be more than one (1) foot or two (2) times the maximum weir head, whichever is greater;

(g) For a weir other than a suppressed, rectangular weir, the distance from the sides of the weir to the sides of the approach channel shall be more than (1) foot or two (2) times the maximum weir head, whichever is greater;

(h) Air shall circulate freely under, and on both sides of, the nappe;

(i) The measurement of head on the weir shall be made at least four (4) times the maximum weir head upstream from the weir crest;

(j)1. The cross-sectional area of the approach channel shall be at least eight (8) times the area of the nappe.

2. The approach channel shall be straight and uniform upstream from the weir for a distance of fifteen (15) times the maximum weir head;

(k) The minimum acceptable weir head shall be two-tenths (0.2) foot;

(l) The maximum downstream pool level shall be at least two-tenths (0.2) foot below the crest elevation;

(m) The weir length for a rectangular, suppressed, or cipolletti weir shall be at least three (3) times the maximum weir head; and

(n) A reference staff gauge shall be provided.

(4) Parshall flumes may be used to measure influent or effluent flows and shall have the following characteristics:

(a) The approach channel upstream of the flume shall be straight and have a width uniform for the length required by the following:

1. If the flume throat width is less than one-half (1/2) the width of the approach channel, the straight upstream channel length shall be twenty (20) times the throat width;

2. If the flume throat width is equal to or larger than one-half (1/2) the width of the approach channel, the straight upstream length shall be greater than ten (10) times the approach channel width; and

3. If the cross-sectional area of the inlet to the approach channel is smaller than the cross-sectional area of the approach channel, additional straight upstream channel length may be required to dissipate the velocity if necessary to maintain laminar flow;

(b) The throat section walls shall be vertical;

(c) The head measuring point shall be at two-thirds (2/3) the length of the converging sidewall;

(d) The flow shall be evenly distributed across the channel, shall be free of turbulence or waves, and shall not be located after transition sections;

(e) The longitudinal and lateral axes of the converging crest floor shall be level;

(f) Free flow conditions shall be maintained; and

(g) A reference staff gauge shall be provided for H_a and H_b to determine if submergence occurs.

(5) Other types of flow measuring devices shall be approved if the device reasonably and accurately measures the flow.

Section 13. Reliability Categories. (1) A WWTP design shall:

(a) Provide sufficient treatment units to allow for cleaning and repair without causing a violation of effluent limitations or a bypass from the sewer system or WWTP; and

(b) Provide storage or treatment capability sufficient to:

1. Contain or treat the volume of the largest tank if that tank is out of service; and

2. Contain or treat the flow received during the time needed to drain, complete cleaning, and accomplish an anticipated repair without causing a permit violation or bypass of a treatment process.

(2) The cabinet shall determine the reliability grade of a WWTP based on the water quality use designation of the receiving stream, pursuant to 401 KAR 10:031.

(a) A Grade A WWTP shall have:

1. Treatment units and alternate power sufficient for the continuous use of all treatment processes and disinfection, with the exception of alternate power for the aeration equipment used in an activated sludge process; and

2. Full alternate power capacity for a discharge to a stream segment within five (5) miles of a public water supply intake.

(b) A Grade B WWTP shall have:

1.a. Treatment units sufficient for the continuous use of the preliminary, primary, and secondary treatment processes and disinfection; and

b. If an intermediate or large facility, alternate power sufficient for the continuous use of the preliminary, primary, secondary treatment, and disinfection processes, with the exception of alternate power for the aeration equipment used in an activated sludge process; or

2. If a small facility, a design that enables the small facility to connect to an emergency generator.

(c) A Grade C WWTP shall have:

1.a. Treatment units sufficient for the continuous use of the preliminary treatment, primary treatment, and disinfection processes; and

b. If an intermediate or large facility, alternate power sufficient for the continuous use of the preliminary treatment, primary treatment, and disinfection processes; or

2. If a small facility, a design that enables the small facility to connect to an emergency generator.

(d) If alternate power is required pursuant to this subsection:

1. Alternative power shall be provided from the connection to at least two (2) independent power sources or an emergency generator; or

2. The cabinet may approve alternative measures for an intermediate or small facility if:

a. The applicant can demonstrate that those measures provide protection comparable to alternative power; and

b. The receiving stream is not an OSRW, within five (5) miles of a public water supply intake, or within five (5) miles of a wellhead protection area.

(3) The following WWTPs shall meet the requirements for a Grade A WWTP:

(a) A WWTP approved to discharge to a water body designated as an Outstanding State Resource Water pursuant to 401 KAR 10:031.

(b) A WWTP approved to discharge into a sinkhole or disappearing stream; and

(c) A WWTP approved to discharge within five (5) miles of a public water supply intake or discharge directly into a wellhead protection area.

(4) A WWTP shall meet the requirements for a Grade B WWTP if it discharges within five (5) miles upstream of the head of an embayment if the lake is at normal elevation.

(5) Except as provided in subsection (6) of this section, a WWTP shall, at minimum, meet the requirements for a Grade C WWTP.

(6) The cabinet shall not assign a grade to:

(a) A WWTP treating less than or equal to 1,000 gallons per day; or

(b) A WWTP serving an individual family residence.

Section 14. Requirements for Trash Traps. A trash trap shall not be used on a WWTP with a design capacity of larger than 100,000 gpd. A

trash trap shall have an outlet baffle, be accessible to cleaning equipment, have air-tight access openings for cleaning, allow for cleaning in front of baffles, and have a volume required by this section.

(1) For a small WWTP, the trash trap volume shall be fifteen (15) percent of the average daily design flow; and

(2) For an intermediate or large WWTP with a design capacity of 100,000 gpd or less, the trash trap volume shall be as indicated in the following table for the appropriate WWTP capacity. For capacities not included, the volume shall be interpolated.

WWTP Capacity (GPD)	Trash Trap Volume (Gallons)
10,000	1,500
20,000	2,400
30,000	2,900
40,000	3,200
50,000	3,430
60,000	3,600
70,000	3,740
80,000	3,840
90,000	3,920
100,000	4,000

Section 15. Requirements for Slow Sand Filters. (1) Wastewater loading shall not exceed five (5) GPD per square foot of filter surface area.

(2) Filter areas larger than 900 square feet shall have multiple beds.

(3) The discharge piping on the filter bed shall be located so that the maximum lateral travel over the sand is less than twenty (20) feet.

(4) Each discharge point shall serve a maximum of 300 square feet of filter surface.

(5) Each discharge point shall have a splash block with a minimum surface area of nine (9) square feet and a square or circular shape.

(6) Distribution piping shall be designed to drain properly.

(7) An underdrain shall be spaced on ten (10) foot centers or less.

(8) Gravel shall be placed around the underdrain and to a depth of six (6) inches over the top of the underdrain.

(9) The filter bed shall have at least thirty (30) inches of sand with an effective size between three-tenths (0.3) and five-tenths (0.5) millimeter.

(10) The dosing chamber shall have a volume sufficient to provide a depth of two (2) inches over the entire filter bed.

Section 16. Requirements for Rapid Sand or Mixed Media Filters.

(1) Rapid sand or mixed media filter loadings shall not exceed one (1) gallon per minute per square foot of filter surface area.

(2) If flow equalization is provided, the allowable loading may be increased to two (2) gallons per minute per square foot.

(3) A backwash system shall be provided.

Section 17. Requirements for Flow Equalization Basins. (1) A flow equalization basin shall have:

(a) A variable flow weir box set to deliver flow at a treatable rate;

(b) A minimum of 1.25 cfm of diffused air per 1,000 gallons of flow equalization volume;

(c) An emergency overflow to an appropriate point in the treatment scheme; and

(d) Sufficient volume to dampen the diurnal flow variations.

(2) If site specific information or similar flow pattern is not available, the flow equalization basin volume shall be based on the following formula:

$$V = (1 - \frac{t}{24}) \times Q$$

Where:

V is the required volume for the flow equalization basin;

t is the number of hours flow is generated; and

Q is the volume of flow anticipated to be received at the WWTP during a twenty-four (24) hour period.

(3) A flow equalization basin with earth embankments shall be constructed with a slope not steeper than 1:3 (one to three) unless a

steeper slope is supported by geotechnical and slope stability studies.

(4) For a flow equalization basin constructed in material other than earth, the applicant shall indicate how the basin will be properly sealed.

Section 18. Requirements for Wastewater Treatment Lagoons. (1) BOD loading shall be less than:

(a) Thirty-five (35) pounds per day per acre of lagoon surface for a nonaerated primary lagoon system;

(b) Fifty (50) pounds per day per acre of lagoon surface for a nonaerated polishing lagoon; and

(c) 150 pounds per day per acre of lagoon surface for an aerated lagoon.

(2)(a) The lagoon design submittal shall provide details on the aeration system proposed including:

1. The type, location, and capacity of the aeration units;

2. The operating depth;

3. The area of the lagoon at the operating depth;

4. Permeability and thickness of the lagoon liner;

5. Anticipated ultimate wastewater flow; and

6. Influent wastewater characteristics.

(b) A new lagoon system shall be designed to treat a raw wastewater BOD of at least 240 mg/l.

(c) The lagoon design shall be evaluated by the method established in Ten States' Standards and the predicted BOD remaining shall be less than the required effluent concentration.

(3) A lagoon shall be at least 200 feet from any present residence or adjacent property line.

(4) A nonaerated primary lagoon shall have a minimum detention time of ninety (90) days.

(5) The Ten States' Standards requirement for vegetation to be established prior to filling the lagoon shall not apply.

(6) An applicant proposing a lagoon with an embankment slope steeper than one to three (1:3) shall provide geotechnical and slope stability studies to support the design.

(7) The applicant shall indicate how a basin constructed in material other than earth will be properly sealed.

Section 19. Additional Requirements for WWTPs That Serve Schools. In addition to the requirements of Sections 10 through 18 of this administrative regulation, the following requirements shall apply to a WWTP that serves a school:

(1) If a flow equalization basin is provided it shall meet the requirements of Section 17 of this administrative regulation;

(2) The aeration tank shall have at least ten (10) gallons of capacity per day per student for elementary and middle schools, or at least twenty (20) gallons of capacity per day per student for an elementary or middle school, and a high school; and

(3) The secondary clarifier shall be sized to provide a maximum surface loading, at the average design flow, of 300 GPD per square foot of clarifier surface area. If a flow equalization basin is not provided, the secondary clarifier shall be sized to provide a maximum surface loading of 100 GPD per square foot at average daily design flow.

Section 20. Additional Requirements for WWTPs That Serve Multifamily Residential Developments. In addition to the requirements of Sections 10 through 18 of this administrative regulation, the following requirements shall apply to a WWTP that serves a multifamily residential development. A multifamily residential development including subdivisions, condominiums, apartments, and mobile home parks shall provide one (1) or more of the following measures for additional reliability:

(1) Blowers and motors shall be installed sufficient to handle the organic load if the largest unit is not available for service;

(2) An alternate source of power; or

(3) Additional treatment units or processes.

Section 21. Additional Requirements for WWTPs That Propose Effluent Disposal by Spray Irrigation. In addition to the requirements of Sections 10 through 18 of this administrative regulation, the requirements in this section shall apply to a WWTP that proposes effluent disposal by spray irrigation.

(1) One (1) acre of spray field shall be provided for each 1,000 GPD of treated wastewater. An applicant proposing higher application rates shall provide detailed design based on site-specified information.

(2) The following plans and specifications shall be signed, sealed, and dated by a professional engineer licensed in Kentucky:

(a) Plans for a WWTP with a design capacity of more than 1,000 gallons per day that propose an application rate greater than 1,000 gallons per acre per day; and

(b) Plans that propose a final slope equal to or greater than ten (10) percent.

(3) A spray field that has a slope greater than twenty-five (25) percent on any portion of the spray field shall not be permitted.

(4) The soil of a spray irrigation field shall have an average saturated hydraulic conductivity of not less than six-tenths (0.6) inch per hour, as established by:
(a) The saturated hydraulic conductivity value provided by an NRCS soil survey; or
(b) A saturated soil test of the spray field.
(5) The spray field shall have less than a six (6) percent slope unless:
(a) The average saturated hydraulic conductivity for the spray field is more than six (6) inches per hour; and
(b) The average soil depth of the spray field is at least twenty-four (24) inches.
(6) The spray irrigation field shall have sufficient vegetative growth to promote absorption, evaporation, and transpiration.
(a) Vegetative growth shall be perennial.
(b) Vegetative growth shall cover not less than ninety-five (95) percent of the spray field area.

(7) A twenty (20) foot buffer zone shall be provided between the outer boundary of the spray field and the property boundary or the applicant shall provide screening to inhibit the transport of aerosols and windborne spray across property boundaries.

(8) A spray irrigation field for an individual residence shall have a temporal or physical barrier that inhibits human contact with the airborne spray.

(9) Effluent from the spray irrigation field shall be contained on the owner's property.

(10) Setbacks.

(a) A construction permit shall not be issued if a portion of the spray field is closer than 200 feet from an existing dwelling.

(b) A portion of a spray field shall not be closer than the minimum setback requirements for a leach bed as established in 902 KAR 10:085, Section 8.

(c) If a setback provision of 902 KAR 10:085, Section 8, is less stringent than the setback requirements of this subsection, the more stringent setback shall apply.

(11) Effluent derived from a wastewater that contained human waste shall not be applied to an area in active production of food for human consumption.

(12) A spray irrigation field for an individual residence shall have the following additional requirements'

(a) At least three (3) sprinkler heads;

(b) A spray area larger than 0.19 acre; and

(c) A spray area larger than 0.38 acres if the slope is equal to or greater than six (6) percent.

Section 22. Requirements for WWTPs that Serve an Individual Residence. (1) A wastewater plant intended to serve an individual residence and eligible for a general KPDES permit pursuant to 401 KAR 5:055 shall have, at minimum, the following treatment processes:

(a) Extended aeration;

(b) Filtration; and

(c) Disinfection.

(2) The WWTP shall be capable of meeting the final effluent limitations of the general permit.

(3) The WWTP shall be capable of meeting secondary treatment requirements of 401 KAR 5:045 prior to filtration.

(4) The cabinet may allow an alternative or additional treatment process to extended aeration if an alternative process is necessary to meet the requirements of a general permit issued pursuant to 401 KAR 5:055.

(5) A minimum lot size of one (1) acre shall be provided for WWTPs located within a residential subdivision.

(6) A WWTP serving an individual residence and proposing effluent disposal by spray irrigation shall also comply with Section 21 of this administrative regulation.

(7) Setback restrictions for a treatment system serving an individual residence shall not be less than the setback restrictions established by 902 KAR 10:085, Section 8, Table 7.

(8) An applicant may submit only one (1) of the three (3) copies of the plans and specifications required pursuant to Section 6 of this administrative regulation.

Section 23. Additional Requirements for extended aeration WWTPs that Serve Car Washes or Laundries. An extended aeration WWTP that serves a commercial or fleet car wash, commercial laundry, or laundry serving commercial or institutional establishment, shall have an average daily flow from other biochemically degradable sources that is at least four (4) times greater than the anticipated flow of the car wash, commercial laundry, or laundry serving a commercial or institutional establishment.

Section 24. The Construction Permit. (1)(a) A permit to construct a facility shall be effective upon issuance unless otherwise conditioned.

(b) If construction is not commenced within the twenty-four (24) months following a permit's issuance, a new permit shall be obtained before construction may begin.

(2)(a) The permittee shall submit the certification from an engineer that the facility was constructed in conformity with the plans and specifications approved by the cabinet in accordance with this administrative regulation within thirty (30) days from the completion of construction.

(b) The permittee shall certify the completion of construction for a project not designed by an engineer.

(3) Permit conditions.

(a) Permits may contain special conditions that in the best professional judgment of the cabinet are necessary to comply with KRS Chapter 224 and 401 KAR Chapters 4 through 11. The conditions shall be in writing and treated as a part of the permit.

(b) The following conditions shall apply to all construction permits:

1. There shall not be deviations from the plans and specifications submitted with the application or the conditions specified in this subsection, unless authorized in writing by the cabinet; and

2. The permittee shall ensure that the effluent is of satisfactory quality to prevent violations of the standards in 401 KAR Chapter 5 and 401 KAR Chapter 10.

(c) The following conditions shall also apply to a construction permit issued to a WWTP that discharges to waters of the Commonwealth:

1. If a sewer system served by a regional facility becomes available, the WWTP shall be abandoned and the influent flow shall be diverted to the regional facility; and

2. Issuance of this permit shall not relieve the permittee from the responsibility of obtaining other permits or licenses required by this cabinet and other state, federal, or local agencies.

(4) The construction permit for agricultural waste handling system may be used as an interim operational permit until the operational permit is issued or denied.

(5) The issuance of a permit by the cabinet shall not convey any property rights of any kind or any exclusive privilege.

Section 25. Kentucky No Discharge Operational Permits (KNDOPs). A Kentucky No Discharge Operational Permit (KNDOP) shall only be issued to a facility that does not discharge and does not intend to discharge to waters of the Commonwealth, including agricultural waste handling systems and facilities that dispose of effluent by spray irrigation.

(1) Nutrient Management Plans. An animal feeding operation shall have a nutrient management plan consistent with the Agriculture Water Quality Act, KRS 224.71-100 through 224.71-145 and the NRCS Conservation Practice Standard Code 590 for Kentucky.

(2) The plan shall, to the extent applicable, also address the following elements:

(a) Ensure adequate storage of manure, litter, and process wastewater, including procedures to ensure proper operation and maintenance of the storage facilities;

(b) Ensure proper management of animal mortalities to ensure that they shall not be disposed of in liquid manure, storm water, or process wastewater storage or treatment system;

(c) Ensure that clean water shall be diverted from the production area;

(d) Prevent direct contact of confined animals with waters of the Commonwealth;

(e) Ensure that chemicals and other contaminants handled on-site shall not be disposed of in manure, litter, process wastewater, or storm water storage or treatment system, unless specifically designed to treat chemicals and other contaminants;

(f) Identify site-specific conservation practices to be implemented to control runoff of pollutants to waters of the Commonwealth;

(g) Identify protocols for testing of manure, litter, process wastewater, and soil;

(h) Establish protocols to land apply manure, litter, or process wastewater in accordance with site-specific nutrient management practices that ensure agricultural utilization of the nutrients in the manure, litter, or process wastewater; and

(i) Identify records that shall be maintained to document the implementation and management of the minimum elements described in paragraphs (a) through (h) of this subsection.

(3) Additional Measures for Animal Feeding Operations.

(a) Visual inspections. There shall be routine visual inspections of the production area. The following shall be visually inspected:

1. Weekly inspections of all storm water diversion devices, runoff diversion structures, and devices channeling contaminated storm water to the wastewater and manure storage and containment structure;

2. Daily inspections of drinking water or cooling water lines; and

3. Weekly inspections of the manure, litter, and process wastewater impoundments. The inspection shall note the level in liquid impoundments as indicated by the depth marker in paragraph (b) of this subsection.

(b) Depth marker. An open surface liquid impoundment shall have a depth marker that clearly indicates the storage capacity.

(c) Corrective actions. A deficiency found as a result of an inspection shall be corrected.

(d) Mortality handling. A mortality shall not be disposed of in liquid manure or process wastewater system and shall be handled in a way that prevents the discharge of pollutants to surface water.

(4) Record Keeping Requirements for the Production Area. Each AFO shall maintain on-site, for a period of five (5) years from the date they are created, a complete copy of the information required by subsection (2)(i) of this section, and the records specified in paragraphs (a) through (f) of this subsection. The AFO shall make these records available to the cabinet for review upon request.

(a) Records documenting the inspections required pursuant to subsection (3)(a) of this section;

(b) Weekly records of the depth of the manure and process wastewater in the liquid impoundment as indicated by the depth marker pursuant to subsection (3)(b) of this section;

(c) Records documenting an action taken to correct deficiencies required pursuant to subsection (3)(c) of this section. Deficiencies not corrected within thirty (30) days shall be accompanied by an explanation of the factors preventing immediate correction;

(d) Records of mortalities management and practices used by the AFO to meet the requirements of subsection (3)(d) of this section;

(e) Records documenting the current design of manure or litter storage structures, including volume for solids accumulation, design treatment volume, total design volume, and approximate number of days of storage capacity; and

(f) Records of the date, time, and estimated volume of any overflow.

(5) Recordkeeping requirement for the land application areas.

(a) Each AFO shall maintain on-site a copy of its site-specific nutrient management plan.

(b) Each AFO shall maintain on-site for a period of five (5) years from the date it was created a complete copy of the information required by the permit application Short Form B, the information required by subsection (2)(i) of this section, and the records specified in paragraphs (a) through (j) of this subsection.

(c) The AFO shall make these records available to the cabinet for review upon request.

1. Expected crop yields;

2. The date manure, litter, or process waste water is applied to each field;

3. Weather conditions at time of application and for twenty-four (24) hours prior to and following application;

4. Test methods used to sample and analyze manure, litter, process waste water, and soil;

5. Results from manure, litter, process waste water, and soil sampling;

6. Explanation of the basis for determining manure application rates, as provided in the NRCS Conservation Standard Practice Code 590 for Kentucky;

7. Calculations showing the total nitrogen and phosphorus to be applied to each field, including sources other than manure, litter, or process wastewater;

8. Total amount of nitrogen and phosphorus applied to each field, including documentation of calculations for the total amount applied;

9. The method used to apply the manure, litter, or process wastewater; and

10. Each date of manure application equipment inspection.

(6) If an animal feeding operation does not discharge, does not intend to discharge, and obtains a Kentucky No-Discharge Operational Permit pursuant to this section, the cabinet shall not consider the animal feeding operation a CAFO.

(7) Permit conditions.

(a) A permit may contain special conditions that in the best professional judgment of the cabinet are necessary to comply with KRS Chapter 224 and 401 KAR Chapters 4 through 11.

(b) The conditions shall be in writing and shall be treated as part of the permit.

(c) The following conditions shall apply to all KNDOPs.

1. There shall not be a point source discharge of wastewater from the facility.

2. The permit authorizes operation only of the WWTP described in the permit in the manner and under the conditions described in the permit application and supporting documents as approved by the cabinet in the permit.

3.a. The permit shall not be construed as authorizing an operation that is otherwise in contravention of a statute, administrative regulation, ordinance, or order of a governmental unit.

b. The permit shall not be construed to authorize the creation or maintenance of a nuisance.

4.a. The permit shall be subject to revocation or modification by the cabinet as established in KRS Subchapter 224.10-100.

b. Commencement of a routine point source discharge shall result in a permit revocation.

5. A permit shall be issued in accordance with the provisions of KRS Chapter 224 and 401 KAR Chapters 4 through 11. Issuance of the

permit shall not relieve the permittee from the responsibility of obtaining any other permits or licenses required by the cabinet and other state, federal, and local agencies.

6. If applicable, the waste materials removed from the settling basin shall be disposed of according to the requirements of the Division of Waste Management in 401 KAR Chapters 30 through 49.

7. Land application that results in runoff to a stream shall be prohibited.

Section 26. Kentucky Intersystem Operational Permits (KISOPs). A KISOP shall be issued to publicly or privately owned sewer systems that discharge to a WWTP or a sewer system that is owned by another person.

(1) A KISOP shall not apply to sewer systems with less than 5,000 linear feet of sewer line.

(2) A KISOP shall not apply to a sewer system that discharges to a POTW if the system is subject to a local permit pursuant to the pretreatment program established in 401 KAR 5:057.

(3) A KISOP shall be issued to the applicant and the permittee shall remain the responsible party until a change in ownership certification is submitted and the transfer of ownership is acknowledged by the cabinet.

(4) Permits may contain special conditions that in the best professional judgment of the cabinet are necessary to comply with KRS Chapter 224 and 401 KAR Chapters 4 through 11. The conditions shall be in writing and shall be treated as a part of the permit.

Section 27. Operational Permits. An operational permit required in Sections 25 and 26 of this administrative regulation shall be valid for five (5) years from the date of issuance and shall be renewed to maintain continuous operation.

(1) The operational permit shall specify the type of monitoring or analysis required for a facility, and the frequency that the monitoring or analysis shall be performed and reported to the cabinet.

(2) The facility, including backup or auxiliary components, shall be operated and maintained to ensure compliance with permit requirements and this administrative regulation.

Section 28. Transfer of Operating Permits. (1) An operating permit shall be issued to the applicant, and the permittee shall remain the responsible party for compliance with the permit until:

(a) A change in ownership certification is submitted by the new owner and the transfer of ownership is acknowledged by the cabinet; or

(b) The current permittee has submitted a change in ownership certification and the transfer has been acknowledged by the cabinet.

(2) A change in ownership certification submitted by the current permittee without the signature of the new owner shall include a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them.

(3) A change in ownership certification shall serve as an application for a minor modification of the operating permit.

Section 29. Alternative Requirements. (1) The cabinet may approve alternative requirements to the provisions of Sections 7 to 23 of this administrative regulation based on the cabinet's best professional judgment that the alternative measure provides sufficient treatment, or transport.

(2) The applicant shall demonstrate that an alternative requested by the applicant provides sufficient treatment or transport.

Section 30. Material Incorporated by Reference. (1) The following material is incorporated by reference:

(a) "Recommended Standards for Wastewater Facilities", 2004, Great Lakes-Upper Mississippi River Board of State Public Health and Environmental Managers. This document is also known as the "Ten States' Standards";

(b) "Water Policy Memorandum No. 84-02, Five Mile Limit Policy, signed by T. Michael Taimi, August 28, 1984", Facilities Construction Branch;

(c) "Construction Permit Application for Wastewater Treatment Plant, DEP 7071-W (2/2009)";

(d) "Construction Permit Application for Sewer Line Extension, DEP 7071-S (9/96)", Facilities Construction Branch;

(e) "Change in Ownership Certification for Sewer Line Extensions, DEP 7071-CO (9/96)", Facilities Construction Branch;

(f) "Change in Ownership Certification, DEP 7032-CO (2/2009)";

(g) "No Discharge Certification, DEP 7032-NDC (2/2009)";

(h) "Kentucky No Discharge Operational Permit Application, DEP 7033-ND (2/2009)";

(i) "Kentucky No Discharge Operational Permit Application for Agricultural Wastes Handling Systems, Short Form B, DEP 7033-B-ND

(2/2009)";

(j) "Site Survey Request, Kentucky No Discharge Operational Permit for Agricultural Wastes Handling System, DEP 7032-Ag-Site (9/96)";

(k) "Kentucky Intersystem Operational Permit Application, DEP 7103 (2/2009)"; and

(l) "NRCS Conservation Practice Standard Nutrient Management Code 590 for Kentucky, NRCS, Kentucky (5/24/01)".

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Division of Water, 200 Fair Oaks Lane, Frankfort, Kentucky, Monday through Friday, 8 a.m. to 4:30 p.m. (1 Ky.R. 760; Am. 1381; eff. 7-2-75; 12 Ky R. 504; eff. 12-10-85; 15 Ky.R. 282; 1005; 1257; eff. 10-26-88; 16 Ky.R. 599; 1191; eff. 1-9-90; 23 Ky.R. 1633; 2766; eff. 5-14-97; 30 Ky. R. 1333; 1781; 2135; eff. 4-12-2004; TAm eff. 8-9-2007; 35 Ky.R. 2507; 36 Ky.R. 351; eff. 9-25-2009.)

401 KAR 5:035. Treatment requirements; compliance.

RELATES TO: KRS 224.70-100, 224.70-110

STATUTORY AUTHORITY: KRS 224.10-100(17)

NECESSITY, FUNCTION, AND CONFORMITY: This administrative regulation defines minimum treatment requirements and mandates that all persons discharging pollutants through point sources shall apply these measures, or more stringent as required, to meet water quality standards by certain dates.

Section 1. Applicability. The provisions of this administrative regulation shall apply to all discharges to surface waters of the Commonwealth as defined in 401 KAR 5:029, Section 1(1)(bb).

Section 2. Treatment Requirements. (1) All persons who discharge through a point source shall, as a minimum, apply the secondary treatment, or equivalent, considering such factors as the total cost of the application of such technology in relation to the effluent reduction benefits to be achieved; the age of the equipment and facilities involved; the process employed; the engineering aspects of the application of various types of control techniques; nonwater quality environmental impact; and such other factors as the cabinet considers appropriate to treatment facilities not later than July 1, 1977.

(2) All persons who discharge through a point source shall apply the best available waste control technology, or equivalent, not later than July 1, 1984, or three (3) years following the promulgation of applicable categorical or water quality criteria effluent limitations in the Federal Register. In determining what is best available waste-control technology, the factors in subsection (1) of this section shall be considered. In addition, any operating and maintenance procedures, schedules of activities, prohibitions of activities, and other management practices to control site run-off, spillage, leaks, sludge or waste disposal, or drainage from raw material storage may be imposed in addition to or in the absence of other applicable standards and limitations.

Section 3. The cabinet may deny, revoke, or modify a permit to any applicant where the discharge in the judgment of the cabinet does not conform to the policy of the Commonwealth of Kentucky as set forth in KRS 224.70-100.

Section 4. The provisions of this administrative regulation shall be unseverable with the provisions of 401 KAR 5:026, 401 KAR 5:029, and 401 KAR 5:031. (WP-6-2; 1 Ky.R. 762; eff. 7-2-75; Am. 5 Ky.R. 812; 6 Ky.R. 348; eff. 12-5-79.)

401 KAR 5:006. Wastewater planning requirements for regional areas.

RELATES TO: KRS 224.10, 224.70, 224.73, 224A.040, 224A.050, 224A.055, 224A.070, 224A.080, 33 U.S.C. 1251 et seq.
STATUTORY AUTHORITY: KRS 224.10-100, 224.16-050, 224.70-100, 224.70-110, 224A.111, 224A.112, 224A.113, 40 C.F.R. 25.4, Parts 35, 130, 33 U.S.C. 1281, 1285, 1288, 1313
NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Environmental and Public Protection Cabinet to develop a comprehensive plan for the management of water resources and to provide for the prevention, abatement, and control of all water pollution. The Clean Water Act, 33 USC 1281 et seq. and more specifically, 33 USC 1313(e), requires the implementation of a continuing planning process by governmental bodies to provide for the control of water pollution. 33 USC 1288 requires the governor of the state to designate a boundary for areas within the state and single representative organizations within the areas to develop a wastewater treatment management plan applicable to all wastewaters generated within an area. 40 CFR Part 130 specifies further detail for compliance with Section 208 of the Clean Water Act, including the requirement that the state establish and maintain a continuing planning process that includes the process for incorporating elements of any applicable areawide wastewater treatment management plans under Section 208, applicable basin plans under Section 209 of the Clean Water Act, and a process for updating and maintaining water quality management plans, including schedules for revision. 40 CFR 130.6(e) also requires the state and areawide agencies to update the plans as needed to reflect changing water quality conditions, results of implementation actions, and new requirements, or to remove conditions in prior conditional or partial plan approvals. This administrative regulation implements the required planning process for point sources of pollution for the Commonwealth of Kentucky in order to conform with federal requirements and provides for the preparation of wastewater treatment management plans by governmental agencies for point sources of pollution.

Section 1. Applicability. This administrative regulation shall govern the regional planning process for the development of water quality management plans to control point sources of pollution in given areas throughout the Commonwealth. This administrative regulation establishes the process by which regional planning agencies and the Commonwealth shall comply with Sections 201, 205, 208, and 303(e) of the Clean Water Act to provide planning for wastewater control in particular areas for point sources of pollution.

Section 2. Requirements. (1) No new regional facility shall be constructed, no average daily design capacity of an existing regional facility shall be expanded by more than thirty (30) percent, or no existing regional sewage collection system shall expand its equivalent population served by more than thirty (30) percent of the existing population, without the regional planning agency submitting a regional facility plan and the cabinet approving the plan. All regional facility plans shall be prepared by a registered professional engineer.
(2) A regional planning agency shall submit a regional facility plan or regional facility plan update when the following occurs:
(a) A new regional facility is proposed to be constructed within the planning area;
(b) The average daily design capacity of an existing regional facility is proposed to be expanded by more than thirty (30) percent;
(c) The equivalent population served by an existing regional sewage collection system is proposed to be expanded by more than thirty (30) percent of the existing population served;
(d) A regional facility or other governmental agency applies for a grant from the U.S. EPA or applies for a loan from the federally assisted wastewater revolving fund pursuant to the requirements of 40 CFR Part 35 and 200 KAR Chapter 17. A plan of study shall be submitted to the cabinet for the project to be eligible to be placed on the project priority list and receive priority points;
(e) A regional planning agency considers the submission of the plan to be in the best interest of the public and the environment; or
(f) It has been twenty (20) years since the regional planning agency or its successor has submitted a regional facility plan.

Section 3. Regional Planning Agencies. (1) Governmental entities such as cities, counties, and other public bodies that are created by KRS Chapter 67, 67A, 74, 76, 96, 108, or 220 may apply to the cabinet to become a regional planning agency, if they have not already been designated as a regional planning agency, by submitting a regional facility plan. The cabinet may designate the entity as a regional planning agency if it finds that the proposed area is not served by another regional planning agency; the development of this agency would be in the best interest of the public and the environment; or the agency has the legal, institutional, managerial, and financial capability, and specific activities necessary to carry out its responsibilities in accordance with Section 208(c)(2)(A) through (I) of the CWA.
(2) Designation. Regional planning agencies may be designated by the cabinet in accordance with Section 208(a)(2) and (3) of the CWA and this administrative regulation. Designations and de-designations shall be subject to approval by the U.S. EPA in accordance with Section 208(a)(7) of the CWA.
(3) De-designation. The cabinet may modify or withdraw the planning designation of a regional planning agency if:
(a) The regional planning agency requests the cancellation;
(b) The regional planning agency fails to meet its planning requirements as specified in grant or loan agreements, contracts, or memoranda of understanding; or
(c) The regional planning agency no longer has the resources or the commitment to continue water quality planning activities within the designated boundaries.
(4) Impact of de-designation. When a regional planning agency's designation has been withdrawn, the cabinet shall assume direct responsibility for continued water quality planning and oversight of implementation of planning activities within the area.

Section 4. Contents of Plan. The regional facility plan shall include the necessary information to allow for an environmental assessment and to assure that the most cost-effective and environmentally sound means of achieving the established water quality goals can be implemented. These plans shall contain the following information:
(1) Maps showing the planning area. In the determination of a planning area, appropriate attention shall be given to include the entire area where cost savings, regionalization, other management advantages, or environmental gains may result from interconnection of individual sewage facilities or collective management of the systems. At least one (1) original seven and one-half (7 1/2) minute USGS topographic map shall be submitted showing the planning area. Computer generated USGS data compatible with the cabinet's computer system may be substituted for the USGS map.
(2) A description of the existing regional facilities, including physical condition, hydraulic and organic design capacities, characteristics of wastewater, ability to meet permit limits, method of sludge handling and disposal, existing flows including average and peak flows, a waste load allocation for the proposed project, inflow and infiltration problems including location and frequency of bypasses or overflows, combined sewers if any, the collection system including location of pump stations and their capacities, and operation and maintenance problems. The location and identification of any other sewage treatment plants located in, or serving a part of, the planning area shall also be shown.
(3) A description of the planning area characteristics, including the location of wetlands, delineation of the 100 year floodplain area, topography, groundwater, surface streams, geology, soils with specific mention of suitability or unsuitability of soils, and topography for on-site sewage disposal systems.
(4) If there is a proposed project, a discussion of the need for the project including current compliance status, applicable permit limits, and if proposed sewers are involved, documentation as to why on-site systems are not acceptable. Discussions and documentation of any water

quality or public health problems in the area shall be included. The applicant shall also describe any type of state or federal enforcement actions that may exist against any wastewater treatment plant within the area.

(5) A discussion of the current and projected population in the planning area including existing population in the current service area, twenty (20) year projected population in the current service area, existing population in unsewered parts of the planning area, and twenty (20) year projected population in the unsewered parts of the planning area. Current and projected industrial and commercial users of the system shall be included. When appropriate, those areas of the planning area not currently sewered should be divided into three (3) time frames: present to two (2) years, three (3) to ten (10) years, and eleven (11) to twenty (20) years. The current and projected populations shall be shown for each area on the planning area map. If available, a local planning and zoning land use map shall be included. The basis for the projected population change shall be identified.

(6) A detailed evaluation of alternatives, along with a twenty (20) year present worth cost analysis for each alternative. All wastewater management alternatives considered, including no action, and the basis for the engineering judgement for selection of the alternatives chosen for detailed evaluation, shall be included. Sufficient detail shall be provided to allow for a thorough cost analysis to be conducted. Nonmonetary effectiveness criteria shall be limited to implementability, environmental impact, engineering evaluation, public support, and regionalization. The alternatives shall reflect a comprehensive regional plan for the planning area and shall minimize the number of point source discharges. Intended sources of funding shall be listed along with estimated user fees.

(7) In addition to the cost for the current project being proposed, cost estimates shall be given for the entire twenty (20) year planning period. Cost estimates shall be provided for each time frame identified in subsection (5) of this section and shall be broken down by the following categories: secondary wastewater treatment, advanced wastewater treatment, inflow and infiltration correction, major sewer rehabilitation, new collector sewers, interceptor sewers, combined sewer overflow corrections, and storm water pollution corrections.

(8) Documentation of public participation. A copy of the advertisement for the public hearing required by Section 5 of this administrative regulation and a copy of the minutes of the public hearing and any written comments and responses shall be submitted as part of the regional facility plan. If more than one (1) public hearing was held or if there were public meetings or public notices of the project, copies of all documentation of these events shall be submitted as part of the plan. At the required public hearing, the scope of the project, cost of the project, alternatives considered, and estimated user charges and hook-up fees shall be discussed.

Section 5. Public Notice, Public Comment, and Public Hearing Requirements. (1) Prior to the approval of the regional facility plan or updates to the plan, the regional facility planning agency shall give public notice of its draft plan and shall hold a public hearing on the draft plan. Public notice of the draft plan and the public hearing on the draft plan shall be given pursuant to KRS Chapter 424.

(2) All public notices issued under this administrative regulation shall contain the following information:

(a) The name and address of the regional planning agency which drafted the plan;

(b) A brief description of the contents of the draft plan and the area to be served;

(c) The name, address, and telephone number of persons from whom interested persons may obtain further information including copies of the draft regional facility plan;

(d) A brief description of the procedures for the public's right to comment required by this administrative regulation;

(e) A reference to the date of any previous public notices relating to the draft regional facility plan;

(f) The date, time, and place of the hearing on the draft plan; and

(g) A brief description of the nature and purpose of the hearing.

(3) The public shall be given an opportunity to comment on the draft plan and the period for comment shall remain open for thirty (30) days from the date of the first publication of the notice of the public hearing or until the termination of the hearing, whichever is later. Commentors may request longer comment periods, which may be granted by the regional planning agency, if appropriate.

(4) Any person may submit written or oral statements and data to the regional planning agency concerning the draft regional facility plan. Reasonable limits may be set up on the time limit for oral statements and the submission of statements in writing may be required.

(5) All persons who believe any condition of the draft plan is inappropriate, inaccurate, incomplete, or otherwise not in the best interest of the public and the environment, shall raise all reasonably ascertainable issues and submit all reasonably available arguments and factual background supporting their position, including all supporting materials, by the close of the public comment period.

Section 6. Action on the Plan. (1) An environmental assessment report will be written by the cabinet which summarizes the regional facility plan. The cabinet will submit the assessment report to the State Clearinghouse for review and comments. Mitigative measures may be required to address any negative comments as a result of this review.

(2) If the cabinet finds that the regional facility plan has been properly submitted and is in the best interest of the environment and the public, the cabinet will approve the plan.

Section 7. Consistency with Plans. Construction grant, loan, and permit decisions shall be made in accordance with certified and approved water quality management plans, including regional facility plans, as described in 40 CFR 130.12(a) and (b) and this administrative regulation.

Section 8. Nonpoint Source Controls. Regional planning agencies may implement plans for nonpoint source controls, other than plans for agricultural nonpoint source controls, in their designated areas. Regional planning agencies may develop plans for agricultural nonpoint source controls in their areas, if the plans are developed in coordination with the Agriculture Water Quality Authority, established pursuant to KRS 224.71. These plans may be included in the comprehensive water quality management plan that may include the regional facility plan. (23 Ky.R. 1814; Am. 2780; eff. 5-14-1997; TAm eff. 8-9-2007.)

401 KAR 5:010. Operation of wastewater systems by certified operators.

RELATES TO: KRS 224.10-100, 224.10-110, 224.70-100, 224.70-110, EO 2008-507, 2008-531

STATUTORY AUTHORITY: KRS 224.10-100, 224.10-110, 224.73-110

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Cabinet to develop and conduct a comprehensive program for the management of water resources and to provide for the prevention, abatement, and control of water pollution. KRS 224.73-110 requires that a person shall not have primary responsibility for the operation of a sewage system or a portion of a system, whether publicly or privately owned, unless the operator has passed an examination prescribed by the cabinet. EO 2008-507 and 2008-531, effective June 16, 2008, abolish the Environmental and Public Protection Cabinet and establish the new Energy and Environment Cabinet. This administrative regulation requires wastewater treatment plants and collection systems that accept domestic sewage to be under the primary responsibility of an appropriately certified operator.

Section 1. Certified Operators for Wastewater Treatment Plants. A wastewater treatment plant that accepts wastewater containing domestic sewage shall be under the primary responsibility of a certified operator as follows:

(1) A treatment plant with a design capacity of less than or equal to 50,000 gallons per day shall be under the primary responsibility of a certified operator holding an active Class I, II, III, or IV treatment certificate;

(2) A treatment plant with a design capacity of more than 50,000 gallons per day, but less than or equal to two (2) million gallons per day shall be under the primary responsibility of a certified operator holding an active Class II, III, or IV treatment certificate;

(3) A treatment plant with a design capacity of more than two (2) million gallons per day, but less than or equal to seven and one-half (71/2) million gallons per day shall be under the primary responsibility of a certified operator holding an active Class III or IV treatment certificate;

(4) A treatment plant with a design capacity in excess of seven and one-half (71/2) million gallons per day shall be under the primary responsibility of a certified operator holding an active Class IV treatment certificate; or

(5) A wastewater treatment plant at a school shall be under the primary responsibility of a certified operator holding an active limited certificate or a Class I, II, III, or IV treatment certificate.

Section 2. Certified Operators for Collection Systems. Effective January 1, 2010, each collection system transporting wastewater containing domestic sewage shall be under the primary responsibility of a certified operator as follows:

(1) Collection systems with greater than 5,000 linear feet of sewer line that transport wastewater to a treatment plant with a design capacity of less than or equal to 50,000 gallons per day shall be under the primary responsibility of a certified operator holding an active Class I, II, III, or IV collection certificate;

(2) Collection systems that transport wastewater to a treatment plant with a design capacity of more than 50,000 gallons per day, but less than or equal to two (2) million gallons per day shall be under the primary responsibility of a certified operator holding an active Class II, III, or IV collection certificate;

(3) Collection systems that transport wastewater to a treatment plant with a design capacity of more than two (2) million gallons per day, but less than or equal to seven and one-half (7 ½) million gallons per day shall be under the primary responsibility of a certified operator holding an active Class III or IV collection certificate;

(4) Collection systems that transport wastewater to a treatment plant with a design capacity in excess of seven and one-half (7 ½) million gallons per day shall be under the primary responsibility of a certified operator holding an active IV collection certificate;

(5) A wastewater collection system at a school shall be under the primary responsibility of an operator holding an active:

(a) Class I, II, III, or IV collection certificate;

(b) Class I, II, III, or IV treatment certificate; or

(c) Limited certificate;

(6) Collection systems with not more than 5,000 linear feet of sewer line that transport wastewater to a treatment plant with a design capacity of less than or equal to 50,000 gallons per day, shall be operated under the primary responsibility of a certified operator with an active:

(a) Class I, II, III, or IV collection certificate; or

(b) Class I, II, III, or IV treatment certificate; or

(7) Collection systems that transport wastewater containing domestic sewage to a treatment plant owned by another person shall use population-served for determination of the appropriate collection system certificate.

(a) Collection systems with greater than 5,000 linear feet of sewer line and with a population served of 1,500 individuals or less shall be operated by a certified operator holding an active Class I, II, III, or IV collection certificate.

(b) Collection systems with a population served of 1,501 to 15,000 individuals shall be operated by a certified operator holding an active Class II, III, or IV collection certificate.

(c) Collection systems with a population served of 15,001 to 50,000 individuals shall be operated by a certified operator holding an active Class III or IV collection certificate.

(d) Collection systems with a population served of 50,001 individuals or greater shall be operated by a certified operator holding an active Class IV collection certificate.

(e) Collection systems with not more than 5,000 linear feet of sewer line that serve a population of not more than 1,500, shall be operated under the primary responsibility of a certified operator with an active:

1. Class I, II, III, or IV collection certificate; or
2. Class I, II, III, or IV treatment certificate.

Section 3. Certified Operator Availability. (1) The facility shall ensure that a certified operator with primary responsibility shall be able to be contacted by phone within thirty (30) minutes.

(2) The facility shall ensure that a certified operator with primary responsibility shall be capable of being onsite:

(a) Within two (2) hours if the certified operator with primary responsibility is required to have a Class I or Limited certificate; or

(b) Within one (1) hour if the certified operator with primary responsibility is required to have a Class II, III, or IV certificate.

Section 4. Certificate Display. If a system office is available at the wastewater treatment plant or within the sewer service area, the operator's certificate shall be prominently displayed on the wall. (6 Ky.R. 329; Am. 560; eff. 5-7-80; 11 Ky.R. 1128; eff. 4-9-85; 14 Ky.R. 1289; eff. 2-8-88; 15 Ky.R. 285; 1007; eff. 10-26-88; 16 Ky.R. 603; 1193; eff. 1-9-90; 19 Ky.R. 415; 717; eff. 8-27-92; 35 Ky.R. 354; 1205; eff. 3-6-09.)

401 KAR 5:015. Spills and bypasses to be reported to division.

RELATES TO: KRS Chapter 224

STATUTORY AUTHORITY: KRS 224.10-100(17)

NECESSITY, FUNCTION, AND CONFORMITY: This administrative regulation requires that spills and bypasses from sewage systems as defined in KRS 224.01-010(25) be reported to the division. Such reports enable the division to determine what action it need initiate to protect public safety and mitigate or reduce the effect of such spill or bypass.

Section 1. Any person having knowledge in advance of the necessity to bypass a sewage system shall notify the Division of Water before such bypass is commenced. Notification shall be given as far in advance as possible.

Section 2. Whenever by reason of emergency or accident a spill or discharge occurs from a sewage system or from a container or pipeline used to transport or store substances which would result in or contribute to the pollution of the waters, the person in charge of such activity shall immediately notify the Division of Water by the most rapid means available.

Section 3. Any person notifying the division pursuant to Sections 1 and 2 of this administrative regulation shall report the point of discharge, the nature of the material discharged, the quantity of the material discharged and an assessment of probable environmental impact.

Section 4. Notification required under Section 1 of this administrative regulation may be made by any mode of communication. Notification required by Section 2 of this administrative regulation shall be made by the most rapid means of communication available. If notification is not initially made in writing, it shall be confirmed by written notification within ten (10) days if requested by the division director or his appointed representative.

Section 5. Persons failing to report as required in Sections 1, 2, 3 and 4 of this administrative regulation are subject to the penalties provided by KRS 224.99-010. (WP-3; 1 Ky.R. 761; Am. 1382; eff. 7-2-75; TAm eff. 6-6-2008.)