

# **Comment Response Document for the December 2010 Beta Release of the Discharge Monitoring Report** (DMR) Pollutant Loading Tool

10 January 2012

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### **1.** OVERVIEW

On EPA's 40<sup>th</sup> anniversary (2 December 2010) EPA released for public comment a draft version ("beta") of a new tool for analyses of wastewater pollutant discharge data. This tool, the Discharge Monitoring Report Pollutant Loading Tool (abbreviated "Loading Tool") provides users with pollutant loadings that can be used to answer questions about the amount and toxicity of pollutant discharges to U.S. waters. The tool calculates pollutant loadings from monitoring and permit data from EPA's Permit Compliance System (PCS) and Integrated Compliance Information System for the National Pollutant Discharge Elimination System (ICIS-NPDES). EPA released the beta version of the Loading Tool with data from 2007 so that each NPDES permittee had an opportunity to flag possible data errors. Using one year of DMR data enabled users to more easily review the tool and provide comment. EPA also chose 2007 as part of its beta release as this was the first full year after deployment of ICIS-NPDES.

The December 2010 request for public comments on the beta version of the Loading Tool came after a lengthy development process within EPA and with states. Starting in August 2008, EPA's Office of Water (OW) worked with EPA's Office of Enforcement and Compliance Assurance (OECA) and EPA's Office of Environmental Information (OEI) to design a pollutant load calculation tool using both PCS and ICIS-NPDES data. OW completed the development of the load calculations in September 2009, in support of the preliminary 2010 Effluent Guidelines Program Plan (see 29 December 2009; 74 FR 68599).

After successful development of the load calculations, OW and its partners developed a web-based version of the tool and its components. The web-based version of the tool was created to provide greater transparency and utility of DMR data in PCS and ICIS-NPDES. A password-protected beta version of the Loading Tool was deployed in EPA's Online Tracking Information System (OTIS) Labs in November 2009. OW solicited technical reviews from stakeholders at states and EPA regions on the beta version of the web-based tool, documented reviewer comments, and incorporated changes to the Loading Tool.

As part of the public comment period on the beta version of the Loading Tool EPA also solicited suggestions on what to name the tool. EPA noted that the name for the Loading Tool should be memorable and incorporate an aspect of point source pollutant discharges (*e.g.*, Pollutant Inspector for People and the Environment (PIPE)).

This document details the comments EPA received during the public comment period. Table 1-1 provides a list of public commenters. Section 2 of this document provides the comments and EPA's response.

No.	Commenter	Organization	Commenter Type	<b>Comment Date</b>
1	Curt McCormick	CWA Consulting Services	Industry	12/7/2010
2	Leigh Brooks	Northwest Florida Water Management District	State Agency	12/7/2010
3	Sue Green	Louisville and Jefferson County Metropolitan Sewer District	Local Govt. & POTW	12/8/2010
4	Deanna Rush	Mississippi Department of Environmental Quality	State Agency	12/15/2010
5	Laurel Eppstein	National Council for Air and Stream Improvement (Pulp and Paper Industry)	Industry	12/15/2010
6	Carol Cain	Maryland Coastal Bays Program	Environmental NGO	12/16/2010
7	Chet Thompson	Buckeye Florida	Industry	12/17/2010
8	Dorris Bender	Independence Missouri POTW	Local Govt. & POTW	12/21/2010
9	Jamie Paige	City of Wentzville, Missouri	Local Govt. & POTW	12/22/2010
10	Barry Elmore	Kentucky Dept. of Environmental Protection	State Agency	12/28/2010
11	Steve Glazer	High Country Citizens' Alliance	Environmental NGO	1/26/2010
12	Sharon Nicklas	Hampton Roads Sanitation District	Local Govt. & POTW	2/1/2011
13	Roy McAuley	Alabama Pulp & Paper Council	Industry	2/3/2011
14	Joyce Fankulewski	Koppers, Inc.	Industry	2/3/2011
15	Shelley Zmija	City of Corona Department of Water and Power	Local Govt. & POTW	2/3/2011
16	Shannon Grund	Sanitation Districts of LA County	Local Govt. & POTW	2/3/2011
17	Steve Anderson	Clean Water Services: Hillsboro, OR	Local Govt. & POTW	2/4/2011
18	Tracie Sales	Merrimack River Watershed Council, Inc.	Environmental NGO	2/4/2011
19	Daphne Smart	Alabama Department of Environmental Management	State Agency	2/4/2011
20	Mary Lou Esparza	Central Contra Costa Sanitary District	Local Govt. & POTW	2/4/2011
21	Ben Horenstein	East Bay MUD	Local Govt. & POTW	2/4/2011
22	Liz Teague	Alliance for the Great Lakes	Environmental NGO	2/4/2011
23	Marla Jurosek	San Francisco Public Utilities Commission	Local Govt. & POTW	2/4/2011

# Table 1-1. Public Commenter on the Beta Release of the Loading Tool

No.	Commenter	Organization	Commenter Type	<b>Comment Date</b>
24	Jessica Dexter	Environmental Law & Policy Center	Environmental NGO	2/9/2011
25	Tom Liston	Metropolitan Water Reclamation District Of Greater Chicago	Local Govt. & POTW	2/15/2011
26	William Wheaton	RTI International	Industry	3/3/2011
27	Nancy Evans	PPL Corporation	Industry	3/24/2011
28	Matthew Armistead	hew istead West Virginia Rural Health Research Center		3/28/2011
29	Charles Bohac	Tennessee Valley Authority	Federal Agency	3/29/2011
30	Kelly Petersen	Louisiana Department of Environmental Quality	State Agency	3/31/2011
31	Alan Loncar	Parkson	Industry	4/6/2011
32	Paul Spofford	Infilco Degremont Inc.	Industry	4/7/2011
33	Patrick Schnaidt	SolarBee	Industry	4/7/2011
34	Scott Perry	Misco Water	Industry	4/7/2011
35	Kent Troup	Troup Environmental Alternatives LLC	Industry	4/8/2011
36	Nadia Abboud	Severn Trent Services	Industry	4/25/2011
37	Aaron Kreider	Energy Justice	Environmental NGO	5/10/2011
38	Robbie Orvis	Environmental Integrity Project	Environmental NGO	5/26/2011

# Table 1-1. Public Commenter on the Beta Release of the Loading Tool

# 2. COMMENTS ON THE BETA RELEASE OF THE LOADING TOOL

This section provides the excerpts from the public comments that EPA received on the beta version of the Loading Tool. Appendix A provides the original comment e-mails and letters.

# 2.1 <u>Curt McCormick (CWA Consulting Services)</u>

### **Comment Excerpt Text:**

I was searching Mercury and POTWs in Region 6. Two pollutants came up: Mercury and Methylmercury that had records. When I clicked on Methylmercury, it said there no records whereas the previous screen indicated 2. See attachments. The same thing happened when I did Region 6, Mercury, All facilities.

### Response:

EPA investigated these conflicting messages and made corrections in Version 1.0 of the Loading Tool.

# 2.2 Leigh Brooks (Northwest Florida Water Management District)

# **Comment Excerpt Text:**

This tool looks promising for work I do writing watershed plans. The HUC 12 search did not seem to work. It came up with no data. When I searched on a county within the HUC 12 there was data there. Also the HUC 12 map might work quicker if it did not search for the code until the user directs it to. I was trying to zoom into and pan the map to get my area and it kept calculating where I didn't want it to.

HUC 12: 031200030801; 031200020503 County: Gadsden, FL; Grady, GA

# Response:

EPA thanks the commenter for their general support of the Loading Tool. The commenter used the right approach in locating discharge data. In particular, if a search yields no discharge monitoring data then widening areal extend of the search parameters will yield some discharge monitoring data. EPA will investigate ways to improve the HUC12 lookup map.

### 2.3 <u>Sue Green (Louisville and Jefferson County Metropolitan Sewer District)</u>

# **Comment Excerpt Text:**

I found several errors in the first facility I reviewed on the beta test. Once the bugs are worked out, this will be a very cool website!

--The receiving waterbody is wrong. This is the most serious concern. Mis-identifying the watershed makes this database worse than useless to those who wish to address pollutant loading to a stream.

--The facility type is incorrect, subsequently the industrial category and discharge limits are not identified. The SIC code appears to be correct and should be used to identify facility type.

--The link to the "CWNS Factsheet" is broken.

--Onsite Treatment is not accurate.

### Response:

EPA thanks the commenter for their general support of the Loading Tool and provides responses below to the commenters reported errors on NPDES ID KY0092185.

# **Comment Excerpt Text:**

Use of the GNIS to identify the receiving water is not accurate and results in an incorrect answer on "Listed for Impairment?" in the Receiving Water Information.

The correct lat/long data from any NPDES permit is already available the PCS database for each outfall and could be coupled to a watershed GIS to determine the correct watershed of the receiving stream. Alternatively, the receiving stream text as specified in the NPDES permit itself could be used.

The following facility in Jefferson County, KY is the Louisville International Airport at Standiford Field. This site is several square miles in area. The airport is not connected to and does not discharge anything to the South Fork Beargrass Creek watershed. The site has several permitted outfalls that discharge stormwater into drainage ditches tributary to Northern Ditch of Pond Creek. Those are named Strawberry Yards Ditch and Blue Spring Ditch but are identified as "UT to Northern Ditch of Pond Creek" in the Permit.

Northern Ditch is listed by Kentucky as Impaired for Ammonia, a TMDL will be needed to address the impairment and this airport is the primary source. Please correct this error.

### Response:

Below is how the Loading Tool displays the facility location (Google map) and "Receiving Water Information" for the facility identified by the commenter (LOUISVILLE INTL STANDIFORD FLD, KY0092185).



Waterbody Name (from GNIS): South Fork Beargrass Creek Waterbody Number (REACH Code): 05140101000472 Watershed Number (12-Digit HUC): Listed for Impairment? No CWNS Treatment Information The following information comes from EPA's 2008 CWNS. The CWNS Factsheet provides additional information on this POTW. Current Treatment in Place: None Current Advanced Treatment in Place (unchecked boxes means treatment not reported as present by POTW): BOD Removal Nutrient Removal 📃 Ammonia Organic Removal 📃 Nitrogen Removal Metal Removal Phosphorus Removal Residents Served: Not available Non-Residents Served: Not available

EPA's documentation for the Loading Tool identifies the limitations of the matching a discharger to a waterbody.<sup>1</sup> EPA's Watershed Assessment Tracking and Environmental ResultS (WATERS) database, which is separate from the Loading Tool, uses SOURCE\_FEATURE\_IDs to uniquely identify point source discharges. The SOURCE\_FEATURE\_ID is unique for each facility outfall in the WATERS database (a single facility may have multiple outfalls). The ID contains nine to twelve characters. The first nine characters are the facility's NPDES permit number (e.g., DC0000094). If the facility has only one outfall, then the NPDES permit number is the SOURCE\_FEATURE\_ID. If the facility has multiple outfalls, then the SOURCE\_FEATURE\_ID is the NPDES permit number plus the three character code for the outfall (e.g., DC0000094001). EPA matched the list of SOURCE\_FEATURE\_IDs from the WATERS database to the list of facilities in the Loading Tool database. To simplify its searches, the Loading Tool only identifies one HUC-12 for each facility. If a facility has multiple SOURCE\_FEATURE\_ID that matches to that facility.

EPA recognizes that this approach may in some limited cases incorrectly identify a watershed and waterbody as receiving a particular discharge. EPA will investigate options for how to display receiving waterbody information at the pipe level using outfall location data when available in PCS or ICIS-NPDES. EPA may include this suggestion on its list of potential future enhancements.

However, EPA also notes that the reported error in the name of the receiving waterbody can also be caused by problems with WATERS and the underlying data source (e.g., Watershed Boundary Dataset, and location data in PCS and ICIS-NPDES). This appears to be the case for the facility identify by the commenter (KY0092185).

The following table shows outfall latitude and longitude data from ECHO, which is refreshed monthly from PCS.

<sup>&</sup>lt;sup>1</sup> See http://cfpub.epa.gov/dmr/docs/Watershed\_Data\_in\_Loading\_Tool.pdf

#### Outfall/Pipe Characteristics

Source ID	Pipe Number	Outfall Type	Facility Lat/Long	Outfall Lat/Long (if available)
KY0092185	002	EFFLUENT	Lat: 38.1769 Lon: -85.7364	Lat: 38.1617 Lon: -85.7422
KY0092185	003	EFFLUENT	Lat: 38.1769 Lon: -85.7364	Lat: 38.1564 Lon: -85.7397
KY0092185	004	EFFLUENT	Lat: 38.1769 Lon: -85.7364	Lat: 38.1689 Lon: -85.7261

This section displays only active outfalls/ pipes for the current permit.

Source: http://www.epa-echo.gov/cgi-bin/srfecho/cso\_wqr.cgi?npdesdfr=KY0092185

The following figure details the locations for the facility and its three outfalls.



The following figure shows the relative distance from these four points and the South Fork Beargrass Creek. The indexed location (South Fork Beargrass Creek) is the top pink triangle and the entrance to the facility (KY0092185) is the bottom. This connection between the facility (KY0092185) and the misreported receiving waterbody (South Fork Beargrass Creek) from GNIS might be caused by: (1) Urban drainage and/or; (2) Medium resolution NHD.



EPA will investigate options for how to bring user generated data like the information provided by the commenter into WATERS and the WBD. Once the appropriate connections are made with these databases and data layers, the Loading Tool will identify the correct receiving waterbody and watershed.

Finally, EPA notes the commenter's suggestion to use the name of the receiving stream from the NPDES permit. While this name is correctly identified in PCS (NORTHERN DITCH / FERN CRK)<sup>2</sup>, EPA considered but ultimately rejected this data field as this data field is not part of the mandatory data that states must share with EPA through data entry into PCS or ICIS-NPDES.<sup>3</sup> EPA's review of this data field (RWAT) found inconsistent coverage across the Nation. Moreover, this data field is simply the name of the receiving waterbody and doesn't allow users to connect one waterbody or watershed to another, which is important in the understanding of water pollution.

<sup>&</sup>lt;sup>2</sup> See http://www.epa-echo.gov/cgi-bin/get1cReport.cgi?tool=echo&IDNumber=110009698675.

<sup>&</sup>lt;sup>3</sup> See <u>http://www.epa.gov/enviro/html/pcs/receiving\_waters.html</u> (WENDB = No).

#### **Comment Excerpt Text:**

Facility Information has the incorrect facility type. This is a large airport, not a POTW. It will be subject to the categorical point source standards for airports when they become final. There is also a broken link to the CWNS factsheet.

### Response:

Below is how the Loading Tool displays information for the facility identified by the commenter (LOUISVILLE INTL STANDIFORD FLD, KY0092185).

# Facility Information

NPDES ID: KY0092185	Latitude: 38.176944
ERS ID: 110009698675	Longitude: -85.736389
	Facility Design Flow (MGD):
CWNS ID:	Actual Average Facility Flow (MGD):
Facility Type: POTW	4-Digit SIC Code: 4581 - AIRPORTS, FLYING FIELDS & SER
Permit Type: NPDES Individual Permit	NAICS Code:
Major / Minor Indicator: Minor	Likely Point Source Category:
County: IEFFERSON	C View Enforcement Compliance Report
Congressional District: Kentucky's 3rd District	View Effluent Discharge Charts

As shown above the beta version of the Loading Tool does identify this facility as a POTW. EPA investigated and identified the source of the error. The beta version of the Loading Tool used the following PCS data field, "Type of Ownership" (TYPO), to identify NPDES facilities that are POTWs. In response to this comment EPA confirmed that using this PCS data field to identify POTWs can lead to errors as this data field only indicates the type of ownership. This facility is identified in PCS as a publicly owned facility (i.e., TYPO = PUB); however, the facility is not also a POTW. EPA has corrected the Loading Tool to use "Facility Type Code" (FTYP), which is a one-character PCS field that combines information stored in the "Industry Classification" (INCL) and the "Type of Ownership" fields. Facility Type Code values include: (1) F = FEDERAL; (2) I = INDUSTRIAL; (3) M = MUNICIPAL; and (4) O = OTHER. The Loading Tool will now identify facilities as POTWs if the following conditions are met: FTYP = "M" AND TYPO = "PUB". EPA has updated its technical documentation and Quality Assurance Project Plan (QAPP) to document how EPA made this change and tested the change after implementation. In particular, EPA will review the Loading Tool database to see if there are any facilities that meet the following conditions: FTYP = "M" AND TYPO = "PUB" AND SIC2 NOT EQUAL TO "4952" (which is the most likely SIC code for POTWs).

After this error correction there will not be a link to a CWNS factsheet and no treatment in place information, which are only available when the facility is a POTW.

# 2.4 Deanna Rush, Mississippi Department of Environmental Quality

### **Comment Excerpt Text:**

I am a permit writer with MDEQ. I tried the EZ search and put in a County (Lamar) and a pollutant (temperature) to see what facilities would pop up. The search gave me zero but, there is a power plant in this county that has temperature limits so I wondered why it is

not showing up. I just want to make sure the data is getting into the system correctly on our end. As a permit writer, I want to make sure that I filled everything out properly.

#### Response:

EPA updated the queries supporting EZ Search to address problems with searches on the parameters 'Temperature' and 'Wastewater Flow.' As shown below, EPA fixed the problem identified by the commenter.

EZ Search Result	S									
					View Map of Matching Facilities					
Search criteria: State = 'MS' AND County Like	'Lamar' AND Pollutar	nt category =	Temperatur	e AND All industrie	s					
Search statistics:										
	Total Count	Majors	Minors	With Facilit	y Info Only		With DMR Da	ta		
Counts of facilities:	1	1	0		0		1			
Top SIC Discharges (200	)7)									
4-Digit SIC Code	SIC Descript	ion		Average (°F)	Maximum Avg Fl (° F) (MC		Flow (MGD)			
4911	ELECTRICAL SI	ERVICES		70.4		89		1.51		
Download All Data										
Top Facility Discharges (	(2007)									
NPDES ID Facility Name	& Location				SIC Co	de H	UC-12 Code	Average (°F)	Maximum (° F)	Avg Flow (MGD)
MS0028258 SOUTH MISSISSIPPI ELECTRIC POWER ASSOCIATION, R D MORROW PLANT, PURVIS					4911			70.4	89	1.51
💾 Download All Data 🔍	Browse All Facilities									

### 2.5 Laurel Eppstein, NCASI (Pulp and Paper Research Organization)

#### **Comment Excerpt Text:**

First of all, Bravo! Data are returned in a normalized format!

#### Response:

EPA thanks the commenter for their support of data being displayed in a normalized format.

#### **Comment Excerpt Text:**

Secondly, the depth of these comments varies from picky to profound. They are uncensored and unordered as to importance.

#### 1) Advanced Search:

- a) Industry Classification:
  - i) a drop box for choosing NAICS code would be preferable to typing it in
  - ii) allowing selection of more than one SIC or NAICS code would also be better.

#### Response:

EPA provides a dropdown list for SIC codes at the two digit level. EPA can provide a similar dropdown list for NAICS codes at the two digit level (see

http://www.census.gov/cgi-bin/sssd/naics/naicsrch?chart=2007). A dropdown list for all NAICS codes would be too long and unworkable for a dropdown list. EPA can also create links from the Advanced Search to OSHA and Census websites for look-up tools for SIC and NAICS codes. EPA agrees that allowing selection of more than one SIC or NAICS code would provide the user with more flexibility and utility. EPA will include these suggestions on its list of potential future enhancements.

### **Comment Excerpt Text:**

b) It would be great if, after specifying the industry and facility info, a drop box of parameter groups would appear applicable to only those facilities in the search (i.e., a 'drill-down' process). Then if one chose a parameter group, it would show another dependent drop box of parameters actually within the group for those facilities! (as in EZ search)

### Response:

EPA agrees that the commenter's suggestions would enhance the Advanced Search and would provide the user with more flexibility and utility. EPA will include these suggestions on its list of potential future enhancements.

### **Comment Excerpt Text:**

c) Look up pollutant and Look up parameter code links don't work: they take one to the Overview tab of the tool (at least, here in our Kalamazoo offices).

### Response:

EPA was unable to replicate the reported error with Internet Explorer 7. EPA will update the Loading Tool FAQs to indicate the recommend internet browser for the Loading Tool.

### **Comment Excerpt Text:**

- d) Advanced Search Output
  - i) File is output as Excel, not as CSV.
  - ii) Downloaded File presents pipe numbers as numeric, and therefore strips off leading zeroes. All must be converted back to 3-digit format to compare with other mill data and correctly display textual data. If possible, can these be downloaded as text data?
  - iii) Parameter codes all have a leading space, which must be stripped out for comparison purposes. If this is necessary to preserve its format (as text rather than numeric), then it's manageable.

### Response:

EPA will investigate the best file download format for the Advanced Search. EPA will investigate options for addressing the pipe numbers (PERM\_FEATURE\_NMBR) and parameter codes (PARAMETER). EPA may include these suggestions on its list of potential future enhancements.

### **Comment Excerpt Text:**

 iv) It's difficult to compare these results with my own calculations from previously downloaded DMR data, due to lack of the report designator field and the period field, both of which can have several values for the same parameter, same pipe, same monitoring period, resulting in different reported results. Please make these a part of the search output, AND provide details as to what they designate! (wishful thinking)

#### Response:

EPA will investigate the best way to better show the connection between calculated pollutant loads with the underlying DMR data. EPA will include this suggestion on its list of potential future enhancements.

#### **Comment Excerpt Text:**

v) Provide Search buttons in each section.

#### Response:

EPA prefers to simply the user interface and has chosen to only have one search button for each form.

### **Comment Excerpt Text:**

### 2) EZ Search

a) Pollutant search is useful in that it shows the number of results for all parameters matching the query. Putting a check box next to each parameter in the result to allow viewing results for SEVERAL of the parameters would be even better.

### Response:

EPA specifically limited the searching capabilities of EZ Search to make it easier for the intended audience (e.g., general public). Allowing users to search on more than one parameter in EZ Search would add complexity and new tables to the search results. Users wishing to search on more than one parameter can use the Advanced Search.

### **Comment Excerpt Text:**

### 3) Lookups

- a) Look ups for Pollutant and Parameter code don't work for tests such as 'solids,' 'BOD', 'TSS'. If one doesn't know the exact term (there often are several for the same parameter), it's not useful. Combining the Advanced Search with the capabilities of the EZ search would be ideal.
- b) Results for 'Solids, total suspended' only works if there are no trailing spaces. Search for 'trim(parameter)' would be an improvement. Again, a box to CHOOSE would be best.

### Response:

EPA will investigate the best way to allow users to look up pollutants through the 'Pollutant Lookup' feature on the "EPA Lookup Tables" tab. EPA will include this suggestion on its list of potential future enhancements.

### **Comment Excerpt Text:**

- c) Industry Code Lookup
  - i) "Enter a 4-digit SIC code or NAICS code" should say 6-digit NAICS code. 4digit doesn't work (although it would be nice if anywhere from 3 to 6 digits could be entered).
  - ii) It would be nice if entering an SIC code would bring up the NAICS codes, and *vice-versa*.
  - iii) Search results box should expand to show all codes, without having to scroll to show those that are hidden.

### Response:

EPA will include '6-digit' before the acronym NAICS. EPA cannot perform the crosswalk from SIC and NAICS to the matching Point Source Category (PSC) because these links are made at the 4-digit (SIC) and 6-digit level (NAICS). For example, allowing users to search on 3-digit NAICS codes might inappropriately link the 3-digit NAICS code to the wrong PSC.

### **Comment Excerpt Text:**

d) After performing a lookup, the screen display moves to the top. This becomes annoying when the lookup returns nothing and must be repeatedly done in different ways. Have it return to where the lookup was performed, if possible.

### Response:

EPA will investigate the best way to return the user when their search yields "No matches were found." EPA will include this suggestion on its list of potential future enhancements.

### **Comment Excerpt Text:**

Lookup User Guide has incorrect description of the 6th digit of the NAICS code: "and the sixth digit specifies the country (i.e. U.S., Canada, or Mexico)." [This should be revised to read as] "the sixth digit designates the national industry...The six-digit level allows for the United States, Canada, and Mexico each to have country-specific detail."

### Response:

EPA will update its user guide to more accurately reflect the use of the sixth digit for a NAICS code using the following text.

"...and the sixth digit designates the national industry. A complete and valid NAICS code contains six digits. In developing NAICS, the United States, Canada, and Mexico agreed that the 5-digit codes would represent the level at which the system is comparable among the three countries. The sixth digit allows for each of the countries to have additional detail (i.e., subdivisions of a 5-digit category). In cases where the U.S. did not choose to create additional detail, the 5- and 6-digit categories within U.S. NAICS are the same, and the 6-digit US NAICS code ends in zero."

### 2.6 <u>Carol Cain (Maryland Coastal Bays Program)</u>

#### **Comment Excerpt Text:**

I have been trying for years to figure out an inventory of local point sources, with discharge levels and volumes to estimate an overall loading rate for our watershed. I just wanted to encourage to continue with this effort. The old NPDES – water discharge permits site is so difficult to navigate that I've all but given up on it.

#### Response:

EPA thanks the commenter for their general support of the Loading Tool.

#### **Comment Excerpt Text:**

The only suggestions I can recommend (and forgive me if you have already addressed these) is to scale down to smaller than a 12 digit HUC.

#### Response:

EPA cannot scale down to watersheds smaller than the HUC-12 resolution as this is the smallest watershed that is cataloged by the Watershed Boundary Dataset, which is at the scale of 1:24,000.<sup>4</sup>

#### **Comment Excerpt Text:**

Insert a red flag for facilities not in compliance

#### Response:

EPA has provided a link on every facility level page to EPA's Enforcement & Compliance History Online (ECHO), which provides detailed information on compliance inspections and enforcement actions by EPA and states.

#### **Comment Excerpt Text:**

Insert a modeling calculator to estimate the overall loading of all sources per watershed – perhaps as a dash board or pie chart type of estimation for summary N, P, and inorganics. In a perfect world the pie chart would show the percentage of nitrogen species or inorganics. One can argue that individual watershed managers can do this, but to have a standardized, EPA approved method would save a huge amount of money, time and countless meetings.

#### Response:

EPA will investigate the best way to graphically display point source data at the watershed level. EPA will include this suggestion on its list of potential future enhancements.

#### **Comment Excerpt Text:**

Under US Watersheds you have a number of (EPA sponsored) National Estuary Programs. There are a total of 28 NEPs and I would encourage you to expand your list to include other NEPs. We along the Maryland Coast always suffer in the shadow of the

<sup>&</sup>lt;sup>4</sup> See http://www.ncgc.nrcs.usda.gov/products/datasets/watershed/history.html

larger Chesapeake Bay's shadow. http://water.epa.gov/type/oceb/nep/index.cfm and http://nationalestuaries.org/

#### Response:

EPÅ will add the list of National Estuary Program areas<sup>5</sup> to the list of watersheds on the "Major U.S. Watersheds" drop down box on EZ Search.

#### **Comment Excerpt Text:**

My goal would be to easily determine the change in loadings over time for my watershed: HUC 02060010 Chincoteague (DE, MD, & VA). We have had numerous upgrades to our larger point sources, at least 2 industrial plants have stopped discharging, and other plants are now moving towards spray irrigation. I haven't found an appropriate way to account for these changes in loading.

#### Response:

The commenter can use EZ Search or the Advanced Search to track point source pollutant discharges in the watershed of interest (HUC 02060010). It is important to note that for the Loading Tool to calculate pollutant discharges EPA must first receive DMR data from the states. As noted in the Loading Tool's Frequently Asked Questions and Answers<sup>6</sup> EPA expects authorized states to enter compliance and enforcement information into the national databases for at least 95% of their "major" permitted facilities. For "minor" facilities, EPA does not require authorized states to enter compliance and enforcement information into PCS or ICIS-NPDES; however, many authorized states are providing the information voluntarily. Therefore, the commenter may need to work with Deleware, Virginia, and Maryland if these states are not submitting all of their DMR data to EPA to see a complete picture of point source discharges in the watershed of interest.

#### **Comment Excerpt Text:**

Kudos on your fine work and thank you for the opportunity to provide input.

#### Response:

EPA thanks the commenter for their general support of the Loading Tool.

#### 2.7 <u>Chet Thompson (Buckeye Florida)</u>

#### **Comment Excerpt Text:**

I represent Buckeye Florida, L.P., a pulp mill in Perry Florida and was able to participate in the Webinar you presented on Wednesday of this week to the AF&PA group. Thank you for your presentation. It was helpful and the tool seems to have great potential.

#### Response:

EPA thanks the commenter for their general support of the Loading Tool.

<sup>&</sup>lt;sup>5</sup> See: http://www.epa.gov/owow\_keep/estuaries/pivot/habitat/hab\_fr.htm

<sup>&</sup>lt;sup>6</sup> See http://cfpub.epa.gov/dmr/faq.cfm

#### **Comment Excerpt Text:**

In running the tool on my facility I found a number of issues I could not resolve, and the issues did not appear to be errors in PCS data. I am attaching two files with comments embedded: A .pdf of my EZ search results and an Excel spreadsheet of the Advanced Search results for my facility. I have not been able to reconcile the following on each:

EZ Search – My BOD5 and TSS are reported as a load and match what is in the report, while ammonia, phosphorus, and O&G are reported as concentrations in pcs, but the load reported does not match what I calculate for the year.

#### Response:

After the initial beta release EPA enhanced the transparency of EZ Search and Advanced Search. The user will easily be able to replicate the results of EZ Search and Advanced Search from the initial PCS and ICIS-NPDES DMR data to the final results in the Loading Tool.

#### **Comment Excerpt Text:**

Advance Search: (The results do not match what I can get from my own data or the EZ Search data). I'd appreciate any help on how the Advance Search is intended to derive the results.

#### Column

AA - kg/yr - while they are close they do not match the lbs in the EZ search

#### Response:

EPA has revised its documentation to detail how the results from EZ Search and Advanced Search may differ. The transparency of EZ Search and Advanced Search will also show users the different calculation methods for calculating pollutant loadings.

#### **Comment Excerpt Text:**

Column AB - kg/day – do not match the kg/yr divided by 365. How are they derived?

#### Response:

EPA has revised its documentation to explain how this value is calculated.

#### **Comment Excerpt Text:**

Column

AC (Avg conc), AD (Avg daily flow) – do not come close to anything accurate, nor can I derive them from the kg/yr results.

#### Response:

EPA has revised its documentation to explain how this value is calculated.

#### **Comment Excerpt Text:**

Column

AE (temp) – does not match my pcs data. How is it derived?

### Response:

EPA has revised its documentation to explain how this value is calculated.

# **Comment Excerpt Text:**

Column AF (pH) – how is an avg derived from a single high and single low for the month?

### Response:

EPA has revised its documentation to explain how this value is calculated.

### **Comment Excerpt Text:**

Column AG & AH – I cannot tell what these are trying to derive.

### Response:

These are described in EPA's supporting documentation as Load over Limits (Option 1) and (Option 2), "LOL1" and "LOL2" respectively.

# **Comment Excerpt Text:**

AI (Includes NDs) – This is wrong. Only Total Phenolics and O&G include NDs.

### Response:

EPÅ reviewed its tool and corrected the listing of non-detect flags.

### 2.8 Dorris Bender (City of Independence Water Pollution Control Department)

### **Comment Excerpt Text:**

I am writing to correct misleading data on the City of Independence Rock Creek Waste Treatment Facility (RCWTF), Independence, MO, NPDES permit No. MO0089681, which appear in EPA'S new web-based tool for accessing wastewater pollutant discharge information.

Except for isolated instances, RCWTF Discharge Monitoring Reports for January through December 2007 reported metals as not detected; i.e., less than the Quantitation Limit (QL). However, EPA's web-based tool indicates "No" for "Nondetect indicator". For January and February 2007, the web-based tool used one-half of the QL to calculate loadings. For March through December 2007, the web-based tool used values slightly less than the QL to calculate loadings. For example, in March 2007, RCWTF reported total recoverable chromium as <5.00 micrograms/liter. EPA calculated loading using a concentration of 0.0049 mg/L (i.e., 4.9 micrograms/liter). The following parameters are affected: Silver, Arsenic, Cadmium, Chromium, Copper, Mercury, Nickel, Lead and Zinc, for the entire period shown (January - December 2007). The web-based tool overestimates RCWTF loadings and is misleading to users of the website.

Copies of 2007 RCWTF effluent metals reports are attached FYI. Please feel free to contact me if additional information is needed.

#### Response:

EPA reviewed data extracts from PCS and the Loading Tool as well as the PDF attachment to the commenter's e-mail. EPA noted that the PDF attachment contains wastewater sampling data from a contract laboratory for selected metal analytes in RCWTF's "Outfall 001." In particular, the PDF attachment is not a copy of the signed DMRs sent by the RCWTF to the permit writer (Missouri DNR). This is important consideration as Missouri DNR inputs into PCS the values on the DMR. Without knowing what is on the DMR EPA reviewed RCWTF's data in PCS and the Loading Tool. The two databases matched exactly and there was no indication in PCS that the metals identified by the commenter where below detection. PCS and ICIS-NPDES allow EPA and state permit programs to identify pollutant concentrations that are below a certain value. Consequently, the source of the error is not with the Loading Tool but is likely due to PCS data entry error or with data entry error with how contract laboratory are reported on the paper-based DMR.

EPA recommends that the commenter submit an error request as outlined in the Loading Tool. This will route the error request through an audited and tracked process that will allow the Missouri state water data steward take appropriate action and the appropriate incorporation of any resolution of the error correction request into the Loading Tool at its next data refresh.

EPA also notes that the "Frequently Asked Questions" section on the Loading Tool provides detailed information on how the EZ Search calculates annual pollutant loads using pollutant concentration data that are below the laboratory analytical method detection limits or quantitation limit.

#### 2.9 Jamie Paige (City of Wentzville, Missouri)

#### **Comment Excerpt Text:**

I like the PIPE reference, but it may be more user friendly as: Pollutant Information for People (PIPE)

#### Response:

EPA thanks the commenter for their name suggestion for the tool.

#### **Comment Excerpt Text:**

For the beta tool, here are some comments: • This is very cool. Great work.

#### Response:

EPA thanks the commenter for their general support.

#### **Comment Excerpt Text:**

• What defines a major vs. minor? If it's the top discharges in pounds, it might be nice to segregate that table into major and minor, and have the search statistics at the top link/jump to that section of the table.

#### Response:

EPA identifies the distinction between major and non-major (or "minor") facilities in the Loading Tool's Frequently Asked Questions and Answers.<sup>7</sup> EPA does allow users to separately look at the difference of major and non-major facilities though the Advanced Search. This is the appropriate venue for these types of searches as the EZ Search is for more basic searches.

#### **Comment Excerpt Text:**

• View map of matching facilities...can this automatically zoom to the area that shows all spots?

#### Response:

EPA may include this suggestion on its list of potential future enhancements.

<sup>&</sup>lt;sup>7</sup> See http://cfpub.epa.gov/dmr/faq.cfm

#### 2.10 <u>Barry Elmore (Kentucky Department of Environmental Protection)</u>

#### **Comment Excerpt Text:**

No.	BETA Page	Subject or Variable	Suggested Improvement	Comment	NPDES Example
1	EZ	Facility Design Flow	Link to PCS variable "	Missing return of a known PCS field	KY0057193
2	EZ	Avg. Actual Flow	Link to PCS Calculations	Does not appear to run the calculation	KY0057193 etc
3	Advanced Search	Avg. Annual Flow	Annual Flow Changes with Parameter Calculate Flow from All Reports		ky0021491 etc
4	Advanced Search	Avg. Annual Flow	Mathematics	Annual Flow Calc inconsistent, NE 365X	ky0021491 etc
5	Advanced Search	Outfall	Monitoring Location	Known code missing from output	ky0021491 etc
6	Advanced Search	Flow Calculations	Annual Vs Daily	Not 365:1, Multiplier Varies	ky0021491 etc

1. A facility's design flow is in PCS under the facility file with the PCS variable name "FLOW." This flow represents the total design flow for all outfalls at the facility. The tool does not appear to be returning this (or any) flow value for the EZ or Advanced Search tool.

#### Response:

EPA updated the tool to provide appropriate linkages for the "Facility Design Flow (MGD)" field. For Version 1.0 of the Loading Tool this field is populated for KY0057193 (Year 2007).

#### **Comment Excerpt Text:**

Under Advanced Search, the average daily flow appears to vary with pollutant parameter. It seems more reasonable that the average daily flow should be calculated from all reported flows (multiple possible flow parameters). If the average is for an outfall, consider

naming the column "outfall" average daily flow. If the average daily flow represents the facility, the average number should not be changing as it did on an inquiry for KY0021491. The output should clearly delineate the outfall if the flow is by outfall number.

### Response:

The Advanced Search output is not sorted by date for monitoring level records. Once a sort on date is done the commenter will see that the flow ("WASTEWATER FLOW (MMGal/PERIOD)") does not vary by pollutant parameter for the same facility at the same pipe for the same monitoring period. EPA will update its documentation on how to interpret data from Advanced Search output (annual results and monitoring level records). The monitoring location is included in the Advanced Search output at the detail of monitoring level records.

### **Comment Excerpt Text:**

Under Advanced Search, I could find no logical mathematical relationship between the average daily flow and the average annual flow. I anticipated a 365 multiplication factor. The factor varied. I presume that MM gal/yr = Million Million Gal/yr, i.e.  $10^6 \times 10^6 = 10^{12}$  gal/yr. I hope that this tool does not replace other PCS (ICIS) inquiry tools, including Envirofacts.

### Response:

EPA reviewed this comment and identified that there was an error in how the Loading Tool aggregated wastewater flows for this field. This error did not affect the pollutant loading calculations. EPA updated the database to fix this error for the current release of the Loading Tool (Version 1.0). EPA also updated the Loading Tool and its supporting documentation to more clearly identify the conversion factors and abbreviations for units.

#### **Comment Excerpt Text:**

Most of the graphs have "View Detail" overtyping the Sampling Period. In the screen shot above "View Detail" overtypes "Monthly."

For this facility KY0027421, only the graph for PH (monthly) did not overtype.

			Datab	<b>1035.</b> PU	<i>,</i> 0					
		В	OD, carb	onaceou	ıs, 05 day	, 20 <b>C</b>				
BOD, c	Paramete arbonaceous, (	e <b>r</b> 05 day, 20 C	Dischar 00	<b>ge Poin</b>	t Monito Ef	ring Lo	catior s	n Sam	pling F Maetal	Period
ty (LBS/DAY) Violns	350 300 - 250 - 200 - 150 -		Click to v	iew detail						

Further when clicking the link or the graph to view detail, the header and the violations part of the graph disappear.



#### HARRODSBURG STP



#### Response:

These comments refer to ECHO's Effluent Charts, which are linked to the Loading Tool but are managed separately. These comments have been referred to OECA for their review.

#### **Comment Excerpt Text:**

In Kentucky, the DMR Pollutant Loadings Tool (BETA) identifies at least three airports with a Facility Type of POTW. These are:

- 1. KY0092177 (Bowman Field, Louisville, KY)
- 2. KY0101851 (Bluegrass Airport, Lexington, KY)
- 3. KY0092185 (Regional Airport Authority, Louisville, KY)

The last permit number was separately identified by Sue Green of Louisville Metropolitan Sewer District in an email to waterloading@epa.gov on 12/8/2010.

Though publicly owned, none of these are POTWs. The PCS system shows these with a facility type indicator of "I" for industrial, not "M" for municipal. The field in PCS is "FTYP." In a search of other facility data fields in PCS, I found none that would return "POTW." If this PCS field generates the Facility Type in the Pollutant Loading tool, it is unclear how the literal "POTW" could have appeared.

None of these permits has a CWNS Id number, evidence that these are not being identified as POTWs through a Clean Water Needs Survey.

Several other airport permits are correctly identified as non-potw, although it is unclear where the literal "non-potw" field is coming from. PCS also identifies the facility type for KY0054739, KY0055654, KY0063339, and KY0082678 as "I" for industrial. The pollutant-loading tool identifies these (correctly) as non-potw, but not as "industrial," the actual PCS facility type.

As airiports, I believe all of these are publicly owned. None of them constitutues a POTW. I presume that the pollutant loading tool intends the facility type to indicate the type of wastewater, not the type of ownership.

Please identify the precise source of the data that provides the Facility Type in the pollutant loadings tool. Based on the technical guidance, I have concluded that the most likely field is the PCS field "FTYP."

### Response:

EPA agrees with the commenter on the need to update the programming logic in the Loading Tool for identifying POTWs. As outlined in the response to Ms. Green (Louisville and Jefferson County Metropolitan Sewer District), The Loading Tool will now identify facilities as POTWs if the following conditions are met: FTYP = "M" AND TYPO = "PUB". EPA has updated its technical documentation and Quality Assurance Project Plan (QAPP) to document how EPA made this change and tested the change after implementation. In particular, EPA will review the Loading Tool database to see if there are any facilities that meet the following conditions: FTYP = "M" AND TYPO = "PUB" AND SIC2 NOT EQUAL TO "4952" (which is the most likely SIC code for POTWs).

### 2.11 <u>Steve Glazer (High Country Citizens' Alliance)</u>

#### **Comment Excerpt Text:**

After reviewing the Beta Version of the tool, I have 2 comments.

- In Colorado, not all stormwater discharge permits for industrial sites have a monitoring and reporting requirement. To make this tool more effective, EPA should press the state to require monitoring and reporting for all discharges that are permitted. There is no way to determine the effectiveness of the BMPs if there is no data to evaluate.
- This tool should have instructions of how to use this information once reviewed and evaluated. Whom does one contact within EPA to ask for follow through if irregularities are revealed? It would be helpful to have some direction on who to contact, EPA or the state? Maybe an index of contacts within each region would be helpful.

Having this tool available is extremely helpful. Thank you for taking the initiative to make it easier to find important information about specific discharges.

#### Response:

First, EPA thanks the commenter for his support. One of EPA's goals for the Loading Tool is to make it easier to find important information about specific discharges.

EPA notes that the first comment (i.e., EPA should require monitoring and reporting for all stormwater permitted discharges) is out scope for the Loading Tool. This web application is for providing better access to data and information on wastewater discharge information in EPA's databases (PCS and ICIS-NPDES). If there are no wastewater monitoring results taken the permittee or if these results are not shared with EPA's databases, then the Loading Tool cannot track or display information about these discharges.

The comment can turn to the appropriate authorized NPDES program, which for Colorado is the Colorado Department of Public Health and Environment or EPA Region 8 (Denver, CO), for information on how stormwater discharge permits are monitored by the permittee and how these results are reported to the authorized NPDES program.

Regarding the ongoing operation and maintenance of the Loading Tool, users can direct their comments, questions, and irregularities (bug fixes) to the e-mail address provided with the 'Contact Us' link at the bottom of each page. This contact information will also be made clear in the user instructions found on the 'Users Guide/Technical Documents' tab.

### 2.12 <u>Sharon Nicklas (Hampton Roads Sanitation District)</u>

#### **Comment Excerpt Text:**

HRSD commends EPA for the development of this tool to provide data to the public. However, a database is only as good as the data populating it. It is discouraging to observe that less than 10% of the DMR data for the Virginia facilities is in the database. HRSD owns and operates fourteen facilities and submits DMR data on a monthly basis for each of these facilities. However, a review of the DMR Loading Tool shows data for only three of our facilities. Using the "Advanced Search" tool, it is revealed that the database contains only one month's worth of data for one facility, two months for a second facility and eleven months for the third facility. It is obvious that much thought and development has gone into the development of the database. This effort is ill-served by managing such a diminutive amount of data. HRSD offers that perhaps some of the resources being used to develop EPA's database could be directed to establishing more robust links with the states' data management systems populating that database.

Major facilities have always been a priority for both the federal and state agencies. HRSD agrees that this policy is a practical method of monitoring water quality with limited resources. However, the number of small facilities has grown significantly and their impact on water quality cannot be overstated. The discharge of these facilities often constitutes the majority of the flow in a stream. Consequently, the water-quality of the receiving water is heavily influenced by the facility effluent. Virginia lists 971 minor facilities and 151 major facilities. The VA-Department of Environmental Quality (VA-DEQ) only provides data for 0.2% of the minor facilities. HRSD recommends that EPA modify their policy to require delegated states to introduce both major and minor facility data into the database. This will provide the public and advanced search users with a more complete picture.

#### Response:

First, EPA thanks the commenter for his support. One of EPA's goals for the Loading Tool is to make it easier to find important information about specific discharges.

EPA notes that the comment is out scope for the Loading Tool. This web application is for providing better access to data and information on wastewater discharge information in EPA's databases (PCS and ICIS-NPDES). If there are no wastewater monitoring results taken the permittee or if these results are not shared with EPA's databases, then the Loading Tool cannot track or display information about these discharges.

EPA directs Ms. Nicklas to the forthcoming NPDES Electronic Reporting Rule. This rulemaking is scheduled to be proposed for public comment in December 2011. This proposed rule will dramatically increase the amount of DMR data collected (data from major and non-major facilities) and the efficiency (data will no longer be reported on paper but will be reported electronically from the permittee). After full implementation of this rulemaking the public will have a more complete set of discharge data, which will be made available through the Loading Tool.

### **Comment Excerpt Text:**

HRSD submits DMRs which contain the effluent characteristics in terms of both concentration (mg/l) and loading (kg/day) averages. It is not explained why EPA chose to have the Loading Tool calculate loading in pounds/day or to report all parameters as an annual total load. HRSD recommends that the Loading Tool only provide the averages as noted on the DMRs. If a user then chooses to take this data and extrapolate an annual total from it, then HRSD believes that is the discretion of the user. However, HRSD does not believe it is appropriate to assign an annual load to a facility from a calculation that was derived from a few months' data along with estimates used for any missing data. Although the Loading Tool's technical documents provide an excellent description of the latitude used in these calculations, it is our experience that a user will simply transfer the number to their spreadsheet without any disclaimer to its accuracy.

### Response:

EPA will update the user documentation to explain why the Loading Tool defaults to an estimate of annual loads for the EZ Search. The EZ Search is intended for the general public and quick answers to common questions. Based on interviews with potential users EPA learned that most general users would like to know who is discharging, what pollutants they are discharging and how much, and where they are discharging. Because most general users are not focused on detailed information about discharges the Loading Tool sums up all pollutant discharge amounts over one year and estimates the discharges for months with missing discharge data. This approximation of annual pollutant discharges also allows users to quickly view changes in discharges from one year to the next. EPA is exploring ways to convey information on accuracy of these annual pollutant discharge estimates and will likely enhance the tool with information on the number of reported values used for annual estimates.

### **Comment Excerpt Text:**

Furthermore, the Loading Tool's annual load calculation uses one-half of the detection limit for a parameter's concentration. This can lead to erroneous reporting for multiple reasons. First, there is no explanation of how the Loading Tool determines the detection limit from the DMR data. Virginia requires that the term "<QL" be placed on the DMR. Second, Virginia permits currently use a zero in loading calculations for a less than detection limit concentration. EPA reviews the Virginia NPDES permits and approves of the method of using a zero for non-detect data in loading calculations. This is consistent with the recommendations of the Federal Advisory Committee (FAC) instituted by EPA to review detection limits and the use of non-detect data in calculating compliance data.

### Response:

The "Technical Users Background Document for the Discharge Monitoring Report (DMR) Pollutant Loading Tool," which is available from the "Users Guide/Technical Documents" tab on the Loading Tool, provides detailed information on how the Loading Tool processes values reported as zero, below detection, and below quantitation. This tab also provides "Frequently Asked Questions and Answers," which includes the answer to this comment. If pollutant concentrations for all monitoring periods in a given year are reported below the laboratory analytical method quantitation limit then the annual load calculated by EZ Search for that parameter is equal to zero. This means that all pollutant concentrations in a given year are either "0" or qualified with "<" (ICIS-NPDES) or qualified with "<" (PCS). In practical terms this means that pollutants may have been detected as present through wastewater sampling but never reliably quantified during the year.

EZ Search uses a hybrid approach to calculating pollutant loads with at least one monitoring period has a pollutant concentration that is above the laboratory analytical method quantitation limit. This means that pollutants were reliably quantified at least once during the year, which confirms the presence of the pollutant in the wastewater discharge. In this case the EZ Search annual pollutant load is the sum of:

- The product of the pollutant concentration data that are above the laboratory analytical method quantitation limit and the related wastewater flow, monitoring time period, and the appropriate conversion factors; and
- The product of one-half the laboratory analytical method quantitation limit and the related wastewater flow, monitoring time period, and the appropriate conversion factors.

It is important to note this method requires the reporting of the laboratory analytical method quantitation limit. In cases where there is no reported laboratory analytical method quantitation limit in PCS or ICIS-NPDES, the EZ Search does not make an estimate of the laboratory analytical method quantitation limit and uses "0" (zero) for the pollutant load for that monitoring period. It is also important to note that the hybrid approach is the method EPA uses to calculate annual pollutant loadings for its review of industrial sources of wastewater and develop is Biennial Effluent Guidelines Program Plan (see Section 304(m) of the CWA).

The hybrid approach for handling pollutant concentrations that are below the laboratory analytical method quantitation limit aims to approximate pollutant discharges using reasonable assumptions (i.e., when pollutants are present and quantified it is likely that they are also present during other periods of discharge) without conservative assumptions (i.e., the Loading Tool does not assume that pollutant concentrations that are below the laboratory analytical method quantitation limit are at the laboratory analytical method quantitation limit). EPA will continue to use this hybrid approach for the Loading Tool. Finally, the Loading Tool used the FACA report cited by the commenter, "Report of the Federal Advisory Committee on Detection and Quantitation Approaches and Uses in Clean Water Act Programs," in developing the logic for the Loading Tool.

### **Comment Excerpt Text:**

To have the Loading Tool use a different rule in applying the use of non-detect data invites confusion. More importantly, it opens the door for accusations that facilities are not reporting their discharge loads properly when a user cannot reconcile the data between a facility's DMR and the data in the Loading Tool. It is also unclear why the Loading Tool allows the advanced search user to manipulate the data by offering three methods of calculating the loading with non-detect data. Therefore, HRSD restates its recommendation that the Loading Tool only provide the data as reported on the DMRs.

### Response:

EPA has upgraded the Loading Tool for both general and technical users to provide access to the 'raw' or untransformed DMR data from PCS and ICIS-NPDES. This will allow all users to see specifically how the Loading Tool uses these data to calculate pollutant loading estimates. The Advanced Search is targeted for technical users that should readily be able to identify the difference between loading values reported by the permittee and the loading values estimated from the Loading Tool based on data from the permittee. EPA will update its documentation to make this clearer for the user.

### **Comment Excerpt Text:**

HRSD requests that a more positive name be chosen for the Discharge Monitoring Report (DMR) Pollutant Loading Tool. Wastewater treatment facilities provide a critical service to communities. The term "pollutant loading" infers that wastewater treatment operators are pollutant generators rather than stewards of the environment. The alternative to wastewater treatment plants is untreated sewage being discharged into the environment. Every month, HRSD's facilities remove over 14,000,000 pounds of BOD, TSS, Total Phosphorus, and Total Nitrogen that would have been discharged to the watershed. HRSD believes that a more accurate name for the Loading Tool would be "Effluent Quality Monitoring Tool". If a facility is meeting the standards, which were set by EPA and its state counterpart, then it should not be perceived as a pollutant loader.

### Response:

EPA agrees with the commenter that POTWs provide a valuable service and help preserve and protect human health and the environment. EPA thanks the commenter for the suggested name and will add it to the list of potential names for the tool. EPA has not determined as yet what to permanently call the application.

# 2.13 <u>Roy McAuley (Alabama Pulp & Paper Council)</u>

### **Comment Excerpt Text:**

Representing the 14, Alabama pulp & paper facilities, I am very concerned about the release of the DMR Pollutant Loading Tool. The ICIS/PCS data for our facilities is so fraught with errors as to be worthless and even worse, misleading. For example, for Alabama's 14 pulp and paper mills, ECHO (Enforcement and Compliance History Online) shows 75 quarters of non-compliance in 3 years. Based on reports from these facilities and from the Alabama Department of Environmental Management, 60 - 70 (about 90%) are incorrect. Apparently these errors are from problems with EPA's data management system.

While we support the idea of making information available to the public, given the obviously severe issues with EPA's data system, this tool will only provide erroneous and

misleading data to the public, and should not be issued until it can provide accurate information.

Thank you for the opportunity to comment.

#### Response:

EPA thanks the Alabama Pulp & Paper Council for their comments. EPA notes that the Loading Tool does not track these compliance determinations, which means the comments are outside the scope of the tool. Moreover, at the time of the beta release (December 2010) EPA only released one year of data, which means that the user could not have used to the Loading Tool to produce results across three years. EPA forwarded the comments about compliance determination data to the EPA ECHO Team, which is a separate Internet application. EPA will work with Alabama Department of Environmental Management to reconcile any errors.

#### 2.14 Joyce Fankulewski (Koppers, Inc.)

#### **Comment Excerpt Text:**

We have evaluated the facility data for Koppers Inc and have the following comments regarding the listed WW loading values:

- 1. Somerville/Salem/Susquehanna all values listed at zero.
- 2. North Little Rock the listed permit is a Beazer permit with Beazer's Pittsburgh address that is no longer valid.
- 3. Galesburg/Green Spring/Florence
  - a. The annual loading values listed in the tool range from 3 to 6 times the annual values I calculated.
  - b. It appears the total of all the sample results were used by EPA for average values versus mathematical averages. For example, the average concentration for TSS is listed on the WW loading tool is 1374.5 mg/l that is the sum of all grab sample results for TSS in 2007 and the same was true for phenol and Zinc. While the listed average concentration values for BOD-5d and Oil & Grease were below their respective sample results sum, the individual values of the sample results do not support the corresponding average concentration values listed in the WW Loading tool.

It is our understanding from reading the information provided that the EPA is aware that the data contains errors. However, we wanted to bring the plant-level information to your attention.

#### Response:

Regarding Comment No. 1, EPA confirmed that there are no DMR data for the following Koppers facilities:

• KOPPERS INC, SALEM, VA, 24153 (VA0001333)

- KOPPERS INC, SOMERVILLE, TX, 77879 (TX0125962)
- KOPPERS SUSQUEHANNA PLT, MONTGOMERY, PA (PA0113476)

Regarding Comment No. 2, EPA could not replicate the error with the KOPPERS, INC., NORTH LITTLE ROCK, AR, 72231 (AR0046591) facility. EPA notes that the facility appears to match the Koppers facility on the Koppers website – (North Little Rock, Arkansas), <u>http://www.koppers.com/htm/OurCo\_Loca\_US\_NorthLittle.html</u>.

Regarding Comment No. 3, EPA has upgraded the Loading Tool for both general and technical users to provide access to the 'raw' or untransformed DMR data from PCS and ICIS-NPDES. This will allow all users to see specifically how the Loading Tool uses these data to calculate pollutant loading estimates. EPA could not replicate the observed errors identified by Koppers. For example, Koppers identified that the beta version of the Loading Tool showed an average TSS concentration for IL0035688 as 1374.5 mg/L in the CSV download, which Koppers stated was too high. The new version of the Loading Tool shows how the monitoring data in each month are used to calculate pollutant loads and shows the correct values for average TSS concentrations for IL0035688. EPA confirmed the values in the Loading Tool with the values in ECHO's Effluent Charts, which derives its data from PCS and ICIS-NPDES.

### 2.15 <u>Shelley Zmija (City of Corona Department of Water and Power)</u>

#### **Comment Excerpt Text:**

The first item I would like to address is the facility name. I noticed that for the City of Corona sites, the names are not consistent. For example, CA8000383 is titled Corona City, Dept. of Water & Power, Corona, CA, whereas CA8000395 is titled Corona WWTP No. 3, Corona, CA. I think the facility names should correlate with the permits' "Name of Facility". At a minimum, I think our facility name should include Water Reclamation Facility NO. 1 or Water Reclamation Facility NO.3.

#### Response:

The Loading Tool uses the name listed in FRS for the facility name listed in the Loading Tool results. In a future release of the Loading Tool EPA will include the alternate name of the facility from PCS or ICIS-NPDES in the results shown on the 'Facility Information' page (e.g., "CORONA STP NO. 1" for CA8000383).

#### **Comment Excerpt Text:**

Under the Advanced Search Tab - Timeframe section, the site requires that a year be selected, and then a specific time frame can be selected. However, these fields don't allow a specific date to be entered, just a month and year. I think it's redundant to have the year twice, the other year fields should either be a specific date or deleted altogether.

#### Response:

The year designations are different for the Advanced Search dependent on whether the user would like pollutant loads on an annual basis or on a monitoring period basis. If it is the annual basis the user would select "Annual" from the "Select Level of Detail for Loadings Output" check box and then select the year of interest. If it is the monitoring period basis the user would select "Monitoring" from the "Select Level of Detail for Loadings Output" check box and then select the months and years of interest. The Loading Tool uses form validation to ensure that users don't make pick the wrong year check box.

### **Comment Excerpt Text:**

The other issue with the Advanced Search Tab is the amount of information that can be entered. The site should denote which fields are actually required to perform a search. It might be helpful to have a link to a master list with all facilities and permit numbers to use for the search.

#### Response:

The user is not required to enter any value to perform an Advanced Search. If no value is entered the default search is: "Advanced Search Results Where Year: [Latest Year Available]; Non-Detects equal to zero; Estimation Function: On; Parameter Grouping: Off; Nutrient Aggregation: Off" and a CSV file is downloaded. EPA will update the user guide to show which fields are most useful to narrow the results of an Advanced Search.

#### **Comment Excerpt Text:**

The CWA/NPDES compliance status displays a violation for each quarter, (NRpt Viol ), but there is no further explanation as to the specifics of the exceedance. There is a link to the general meaning of this violation. I think it would be better if there were an exact explanation for the error, this would give agencies a chance to correct or explain the violation. It would also be beneficial if the link gave the specific date of the violation. Since a quarter covers three months, it's hard to know which day, month, etc. the violation occu rred. There might be one violation during the 90 day period but the site displays the violation the entire quarter. This could lead to public confusion and concems with their water supply.

When a violation occurs, I think displaying the violation as highest percentage is misleading. A few of our violations show 4900%, I don't think that gives the user a good view of the actual violation. I feel a better display would be listing the limit and the value that was exceeded side by side. This can also help facilities determine errors in data, the percentages fail display the formula or data that was used to calculate it.

#### Response:

The user is providing comments on the results of an ECHO search. These comments are not related to the Loading Tool. These comments were forwarded to the EPA ECHO Team for resolution.

### **Comment Excerpt Text:**

The pollutant name should specify if "Carbon" is supposed to be Total Organic Carbon, or if Chlorine is supposed to be Total Chlorine Residual.

### Response:

EPA will change the listing of these pollutants to 'Total Organic Carbon (TOC)' and 'Chlorine (Total Residual)' in the HTML and CSV results.

### **Comment Excerpt Text:**

At the site you can download all data for the pollutants by pound, the list contains Chromium, but does not specify total or trivalent.

# Response:

EPA was unable to replicate this result as the CSV file from an EZ Search shows separate listings for "Chromium" and "Chromium, Hexavalent. EPA updated the user's guide to explain that when a metal is reported on the Loading Tool it represents the total value unless otherwise specified (e.g., a listing of 'Chromium' represents 'Chromium (Total)' unless otherwise specified).

# **Comment Excerpt Text:**

The list also has Di (2-ethylhexyl) phthalate, however the rest of the site refers to it as Sis (2-ethylhexyl) phthalate, there should be consistency among the pollutants.

# Response:

EPA was unable to replicate this result as the CSV file from an EZ Search shows Di (2ethylhexyl) phthalate and not Sis (2-ethylhexyl) phthalate.

# Comment Excerpt Text:

I think there needs to be an explanation behind the formulas used to calculate the Total Pounds and Total TWPE. I re-calculated our values based on the 2007 data displayed and came up with some drastically different results (see attachment). Without the formula used by the EPA I cannot determine where the mistakes are. The total TWPE should include the formula used to calculate it as well as a link to the toxic equivalency factors. This can help eliminate errors and ensure that all users have the most up to date/current toxic equivalency factors.

# Response:

EPA upgraded the Loading Tool for both general and technical users to provide access to the 'raw' or untransformed DMR data from PCS and ICIS-NPDES. This will allow all users to see specifically how the Loading Tool uses these data to calculate pollutant loading estimates. EPA has also included a spreadsheet on the user guide tab that provides the factors used by the tool to translate Total Pounds to Total Toxic-Weighted Pounds (TWPE). EPA was unable to replicate the results shown by the commenter for the revised version of the Loading Tool. EPA has hand checked the results for this facility and confirmed their accuracy.

#### **Comment Excerpt Text:**

I feel that while this site has some great information, the data is represented in too many different units, formats, time frames, etc. I think the site should focus on one representation and allow the user to convert units with a conversion tool or create charts and graphs on their own. The data is represented on the site in mg/l, total pounds, total TWPE, percentages, etc. I think this amount of information will cause confusion and can lead to misrepresentation of numbers.

If the site becomes available to the general public, there needs to be more user friendly features accompanied with specific formulas. I assume this will replace the current ECHO site, otherwise the sites should be linked with the exact same data.

### Response:

EPA has designed EZ Search for the general user and has reported pollutant discharges in pounds and toxic-pounds. When pollutants are not able to be reported in units of mass (or the related toxic-mass), the values are reported in concentration (mg/L) or counts (for bacterial pollution). EPA has tested this format with users and has found that these limited sets of units used for EZ Search are appropriate for general users.

As previously noted, EPA has enhanced the Loading Tool to show the exact data and formulas used to calculate pollutant loadings. The Loading Tool will not replace the current ECHO site. EPA is increasing the linkages between these two tools for the benefits of the public.

# 2.16 <u>Shannon Grund (Sanitation Districts of LA County)</u>

### **Comment Excerpt Text:**

The Sanitation Districts of Los Angeles County (Sanitation Districts) are pleased to submit input to the U.S. Environmental Protection Agency (USEPA) on the beta-version of the Discharge Monitoring Report Pollutant Loading Tool (Loading Tool) released November 2010. As background, the Sanitation Districts are a confederation of 23 individual special districts serving the wastewater and solid waste management needs of over five million people in 78 cities and unincorporated areas of Los Angeles County. The Sanitation Districts own and operate eleven wastewater treatment facilities with a combined capacity of approximately 625 million gallons per day (MGD). Of our eleven wastewater treatment facilities, eight operate under the National Pollutant Discharge Elimination System (NDPES) Permit Program.

The Loading Tool release notice indicates USEPA is seeking comments on how to improve the tool and the accuracy of the discharge monitoring data supporting it. The USEPA specifies that the Loading Tool only includes data for point source discharges regulated under the NDPES Permit Program. Furthermore, the monitoring data utilized by the Loading Tool is from Discharge Monitoring Reports (DMRs) submitted by each facility. The USEPA notes that the new web tool for assessing point source pollution data is part of the agency's Clean Water Act Action Plan, which seeks to improve transparency of information and public knowledge about pollutant releases that may cause water impairment.

The Sanitation Districts are in agreement with USEPA's goal to improve transparency and public knowledge, and emphasizes that in order to achieve this goal USEPA must elucidate that impairments are diverse and include various sources. Specifically, these include non-point sources such as agriculture, forestry and residential onsite sewage disposal systems, in addition to point sources such as industrial and municipal discharges. It is important that USEPA explain the vast sources of impairment on the Loading Tool website so users understand that the program does not provide a complete assessment of pollutant loadings. The ultimate goal is to improve transparency of information and public knowledge, and this cannot be achieved when the message is misleading, since only source loadings that can be easily quantified are available for public review.

# Response:

EPA agrees with the commenter that the public should have access to point source wastewater discharge data and that these data should be put in context with all sources of water pollution. To help provide context on the differences between point source and non-point source pollution EPA has a question and answer noting that the Loading Tool does not estimate non-point source pollution discharges. EPA has also updated the "Overview" tab to emphasize the impact that non-point source pollution has on water quality.

# **Comment Excerpt Text:**

Additionally, USEPA's goal of transparency cannot be met unless the publicly available information is based upon accurate and correct data. Therefore, USEPA needs to make data quality a top priority and should not release data that is incorrect or has known flaws.

# Response:

EPA agrees with the comment that data quality is a top priority but disagrees on the method for correcting these errors. Not providing access to data allows data quality errors to remain hidden and unchecked. EPA does have a systematic way for identifying values above permit limits. EPA's regulations at 40 CFR 123.45 requires authorized programs to submit information to EPA on non-compliance for majors and non-majors. EPA's databases (PCS/ICIS-NPDES) help implement these regulations for major facilities through an automated Quarterly Non-Compliance Report (QNCR). This system generated report automatically flags for additional review any discharge concentrations or loads that are above the permit effluent limits. This process helps improve data quality by flagging for correction inaccurate data that results in instances of false non-compliance. EPA and state NPDES program focus on correcting errors that result in instances of false non-compliance as non-compliance in majors is prioritized for enforcement. EPA's databases (PCS/ICIS-NPDES) can also be used to automatically flag instances of noncompliance at non-major facilities; however, this is a manual process and must be enabled by the authorized state NPDES program. There are no systematic checks for monitoring only parameters. Historically the limited access to DMR data has resulted in
many data errors, in particular those errors that are not identified by the QNCR process, left as uncorrected.

EPA notes that facility, permit, and DMR data are currently made available to the public through ECHO's Effluent Charts feature as the data are entered into PCS or ICIS-NPDES by the state authorized program. Data errors can be identified and reported for correction by permittees, states, and EPA about a month after they are entered into PCS or ICIS-NPDES. ECHO is updated monthly with data from PCS and ICIS-NPDES. ECHO is updated monthly with data from PCS and ICIS-NPDES.

# **Comment Excerpt Text:**

USEPA solicits comment on whether the agency should allow for a public review of each release of annual data to allow for error correction. The Sanitation Districts believe that a formal public comment period is warranted and necessary for dischargers to review their data prior to the formal release of the information. Moreover, USEPA should not release the annual loadings until errors identified are removed or corrected. Similarly, USEPA should correct errors identified in the 2007 beta-testing period before releasing 2008-2010 data. The Sanitation Districts note, however, that the burden of quality analysis and control should not solely be the responsibility of the discharger. USEPA should thoroughly review each data set beyond the Loading Tool beta-testing period for possible errors before the initial release for public comment.

# Response:

EPA will update the Loading Tool with new data each year and share the results of the Loading Tool with the state authorized NPDES programs prior to public release. States are primarily responsible for data quality in EPA's databases (PCS/ICIS-NPDES). Permittes can also review their data in PCS and ICIS-NPDES prior to the update of the Loading Tool. As previously noted, facility, permit, and DMR data are currently made available to the public through ECHO's Effluent Charts feature as the data are entered into PCS or ICIS-NPDES by the state authorized program. Data errors can be identified and reported for correction by permittees, states, and EPA about a month after they are entered into PCS or ICIS-NPDES. ECHO is updated monthly with data from PCS and ICIS-NPDES. Instructions on how to identify and report data errors for correction by the state authorized program are provided on the Loading Tool. Finally, EPA has implemented a monthly error correction to ensure that error corrections made in PCS and ICIS-NPDES are also incorporated into the Loading Tool.

# **Comment Excerpt Text:**

USEPA's Permit Compliance System (PCS), Integrated Compliance Information System (ICISNDPES), and Enforcement and Compliance History Online (ECHO) databases are comprised of monitoring data for dischargers nationwide. The Loading Tool takes flow and concentration data from these databases and converts the reported results into annual loadings. Given that PCS, ICIS-NPDES, and EHCO manage a significant amount of information, and periodically contain errors, it is imperative that dischargers have the means necessary to correct inaccurate information. The PCS, ICIS-NPDES, and ECHO systems have correction tools available on the websites, however, data changes can takes

months after the correction request is submitted. The process to fix incorrect discharger monitoring data must be simplified and streamlined, especially given that these results will now be used to calculate annual pollutant loadings with the Loading Tool. The USEPA should develop and implement a streamlined correction procedure prior to releasing any further data. Also, as noted above, the Sanitation Districts recommend USEPA allow a public review period of annual pollutant loadings so dischargers that are not periodically verifying their data throughout the monitoring year have the opportunity to make corrections prior to public release.

#### Response:

EPA agrees with the commenter that dischargers have the means necessary to correct inaccurate information. Data errors can be identified and reported for correction by permittees, states, and EPA about a month after they are entered into PCS or ICIS-NPDES. ECHO is updated monthly with data from PCS and ICIS-NPDES. Instructions on how to identify and report data errors for correction by the state authorized program are provided on the Loading Tool. Data errors and corrections are updated on a monthly frequency. With the Version 1.0 release EPA incorporated automatic data quality flags and corrections within the Loading Tool. These system generated flags will identify instances where pollutant concentrations vary by more than 1,000 times over the course of a year. Many data errors are related to inaccurate units. For example, sometimes authorized state NPDES programs key in "mg/L" in PCS or ICIS-NPDES instead of the correct unit "ug/L", which represents a difference of 1,000 times. With the Version 1.0 release EPA incorporated automatic concentrations that are above certain thresholds.

Finally, EPA directs the commenter to the forthcoming NPDES Electronic Reporting Rule. This proposed rule will dramatically increase the amount of DMR data collected (data from major and non-major facilities) and the efficiency (data will no longer be reported on paper but will be reported electronically from the permittee). The electronic processing of these DMR data will dramatically improve data quality. For example, Ohio, which has a state eDMR system, has a 99% adoption rate for DMR submissions. This has led to a 90% reduction in DMR data errors.

#### **Comment Excerpt Text:**

The Loading Tool has three search functions: EZ Search, Facility Search, and Advanced Search. Each of these search pages yield annual loading results by parameter for a particular discharger. Although this information is the basis of the USEPA's Loading Tool, more information should be displayed on the initial results page. A description to accompany the 4-digit SIC Code should be included, since many users will not have any knowledge of the specific category the code represents.

## Response:

The Loading Tool does provide a description for each SIC code. For example, the table of pollutant discharges by SIC code has the following columns:

• 4-Digit SIC Code

- SIC Description
- Top Pollutant
- Top Pollutant Pounds (lbs/yr)

Users can click on the 'Facility Name' in the Top Facility Discharges table to yield the SIC code description.

## **Comment Excerpt Text:**

In addition, the results table should include total annual flow, which will help differentiate between high loadings due to large volume discharges or high loadings due to discharges with high concentrations of a particular constituent.

## Response:

Some Top Facility Discharges tables do show average facility flow (MGD) data as requested by the commenter (e.g., when the user specifies a pollutant in the EZ Search). EPA considered and rejected this comment for every Top Facility Discharges table as some of these tables do not have enough width to accommodate a new data column. EPA notes that average facility flow (MGD) data are reported on Top Facility Discharges table when the user specifies a pollutant.

# **Comment Excerpt Text:**

Lastly, when using the search option for POTWs, the population served should be included in the initial results table. Understandably, the population served for a POTW will factor into the annual loadings, so it is important to display this information on the initial results page. Displaying these items will provide the user with helpful and complete information for each discharger.

## Response:

EPA considered and rejected this comment for every Top Facility Discharges table as some of these tables do not have enough width to accommodate a new data column. EPA notes that the data related to residents and non-residents served by POTWs is displayed on each POTW's 'Facility Information' page.

## **Comment Excerpt Text:**

Additionally, evaluation of the program also indicates that improper parameters are included in loading calculations. Specifically, the webpage notes that the Loading Tool data only includes pollutants that a facility is required by permit to monitor and that are measured in units of concentration or mass; therefore, parameters such as toxicity are excluded. However, although results for toxicity were excluded, results for total coliform, fecal coliform, and E.coli were included. Mathematically, it does not make sense to convert these parameters into annual loadings. The Loading Tool should be modified such that pollutants reported in units other then grams per liter are excluded in annual loading calculations and results. Additionally, parameters that do not make sense to convert, such as dissolved oxygen, should also be omitted.

## Response:

EPA agrees with the commenter and has made the requested change to the Loading Tool.

## **Comment Excerpt Text:**

Review of the beta-version of the Loading Tool indicates there is a programming error, which occurs after a search is selected. Specifically, once search criteria are identified and the search button is clicked, results are displayed in two separate formats. First, some search results display a second screen that states "See Matching Facilities". Once this button is selected, a webpage displaying information regarding the discharger, top pollutants by pound, top pollutants by toxic-weighted pounds, a map, receiving water information, and CWNS treatment information is displayed (Figure 1). Furthermore, the website user has the option to download all data associated with the pollutants by pound and by toxic-weighted pounds.

However, in other instances, if different search criteria are selected the Loading Tool automatically generates an excel spreadsheet. This spreadsheet contains facility information including period, SIC code, name, type, parameter, pollutant load (kg/yr), wastewater flow (MMGal/Yr), average daily load (kg/day), and average concentration, among other information (Figure 2).

The Loading Tool should be modified so search results are only displayed in one format. The format shown in Figure 1 is preferred because the data is displayed in a fashion that is easy to read and understand. Furthermore, this webpage display is preferred because annual loadings are displayed in pounds per day as opposed to kilograms per year. The webpage shown in Figure 1 should be enhanced, nonetheless, to include flow and concentration data that was used to calculate the annual pollutant loadings. The flow and concentration data could easily be included with the "download all data" option associated with the pollutants by pound and by toxic-weighted pounds tables.

# Response:

EPA used a variety of people who came from a broad cross-section of potential users to develop the user interface for the Loading Tool. EPA identified that there are two main audiences for the Loading Tool:

- General users can use the EZ Search to quickly find discharge monitoring data based on simple searches. Results are displayed on the webpage (shown in Figure 1 of the commenter's letter).
- Technical user (e.g., NPDES permit writer, watershed modeler, or regulatory agency), can use the Advanced Search to access more detailed discharge monitoring data that you can download in a comma-separated value (CSV) file for further analysis in your own software application (shown in Figure 2 of the commenter's letter).

EPA does not agree with the commenter that there should be one format to display results as there are different audiences for the tool.

For Version 1.0 EPA has upgraded the Loading Tool for both general and technical users to provide access to the 'raw' or untransformed DMR data from PCS and ICIS-NPDES. This will allow all users to see specifically how the Loading Tool uses these data to calculate pollutant loading estimates.

## **Comment Excerpt Text:**

The Loading Tool calculates annual pollutant loadings by extracting DMR data from ICIS-NPDES and PCS and applying specified calculation methodologies. For the EZ Search option, one aspect of the calculation methodology that should be modified is handling of data with non-detected amounts of a constituent. The webpage notes that if pollutant concentrations for all monitoring periods in a given year are reported below the laboratory analytical method quantitation limit, then the annual load calculated by EZ Search for that parameter is equal to zero. However, if at least one monitoring period has a pollutant concentration that is above the laboratory analytical method quantitation limit, the annual pollutant loading is calculated by summing detected values multiplied by the monthly flow and one-half the detection limit for non-detected results multiplied by monthly flow. This method requires reporting of the laboratory analytical method quantitation limit and, in cases where there is no reported value, the program assumes zero.

Unfortunately, this calculation methodology is biased, since dischargers reporting the quantitation limit are shown as discharging higher pollutant loads then dischargers not reporting the quantitation limit. But more importantly, this assumption inappropriately over-estimates annual pollutant loadings to a waterbody and provides inaccurate information to the public. The EZ Search should set the default search results for non-detected and "detected but not quantifiable" values as zero. The calculation methodology should not rely on other results within the annual monitoring period since they are not related. This is consistent with the intent of NDPES monitoring requirements, which interpret monthly, quarterly, and semiannual monitoring results to be representative of discharge only within the defined monitoring period.

## Response:

The commenter provided a summary of the hybrid approach approach that EPA uses with the EZ Search to address pollutant concentrations that are below the analytic method quantitation limit. EPA encourages all state authorized programs to report the quantitation limit and the qualifier (e.g., "<") when reporting values below the quantitation limit. Providing these data to EPA allows for better and more complete information about these discharges.

The hybrid approach for handling pollutant concentrations that are below the laboratory analytical method quantitation limit aims to approximate pollutant discharges using reasonable assumptions (i.e., when pollutants are present and quantified it is likely that they are also present during other periods of discharge) without conservative assumptions (i.e., the Loading Tool does not assume that pollutant concentrations that are below the laboratory analytical method quantitation limit are at the laboratory analytical method quantitation limit are at the laboratory analytical method quantitation limit.

EPA disagrees with the commenter that this approach overestimates pollutant loads. EPA examined this relative difference with toxic pollutant discharges (in units of toxic-weighted pound equivalents). Toxic pollutant parameters are the most sensitive to these calculations as even very small discharges of some toxic pollutant discharges (in units of mass) equate to large amounts of toxic-weighted pound equivalents. EPA identified that only 0.12 percent of the toxic-weighted pound equivalents in 2007 are based on below detection level assumptions using the hybrid approach. The industrial categories showing the greatest sensitivity to below detection level assumptions include Superfund Sites, the Pulp, Paper and Paperboard Category, and the Petroleum Refining Category. Pollutant parameters showing the highest sensitivity to the below detection level assumptions include 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD), TCDD equivalents, and chlorine. EPA will continue to use this hybrid approach for the Loading Tool. Finally, the Loading Tool used the FACA report, "Report of the Federal Advisory Committee on Detection and Quantitation Approaches and Uses in Clean Water Act Programs," in developing the logic for the Loading Tool.

## **Comment Excerpt Text:**

The Advanced Search has more search options available than the EZ Search webpage. Additionally, the Advanced Search has loading calculation options the user can define for non-detects, estimation function, parameter grouping function, and nutrient aggregation function. The default search criteria are set as non-detects equal to zero, estimation function on, parameter grouping function off, and nutrient aggregation function off. The Sanitation Districts recommend that the Advanced Search default for the estimation function also be set to "off", as is done for these other functions. The estimation function estimates discharges for monitoring periods where no pollutant quantities or concentrations were reported. It is inappropriate to set the default to calculate a loading when pollutant quantities and concentrations were not reported, since this would assume discharge monitoring information. This assumption will likely overestimate loadings since facilities often do not submit DMRs when no discharge occurred. The estimation function is a valuable tool, but due to the uncertainty of the calculation, the default should be set to "off" with the choice of activating the option.

## Response:

EPA disagrees with the commenter that it is always inappropriate to set the default to calculate a loading when pollutant quantities and concentrations were not reported. EPA notes that many facilities submit DMR data on a quarterly frequency. If EPA were to adopt the commenters recommendation then these facilities would show two-thirds less pollution that facilities with a monthly monitoring reporting frequency (and with all other factors being equal). EPA's databases, PCS and ICIS-NPDES, both provide state authorized NPDES programs the means of flagging those periods when no discharges occurred (e.g., through use of No Discharge Indicator (NODI) codes). The Loading Tool makes use of these NODI codes to ensure that no pollutant loads are calculated when the NODI code indicates that no discharge took place during the monitoring period.

## **Comment Excerpt Text:**

Lastly, to help inform the user, the Advanced Search webpage should include a short description at the bottom of the page that lists each of the loading calculation options and assumptions.

## Response:

EPA agrees with the commenter and has made the requested change.

## **Comment Excerpt Text:**

Another issue requiring further development before release of the Loading Tool is the calculation of annual loadings for dischargers with multiple outfalls. Even though a discharger may be permitted under one NPDES permit, it is possible for the discharger to have multiple outfalls. Under such circumstances, the permittee is required to submit DMRs with sampling results for every outfall. In addition, some facilities also have a summation DMR that adds the mass loadings at each individual discharge point in order to report the total mass loading.

After evaluation of the Loading Tool, it does not appear that the system can handle calculating annual loadings for such situations properly. The Loading Tool should operate such that annual pollutant loadings are calculated according to the reported constituent concentration, discharge days per month, and outfall number. The program cannot simply assume that each outfall discharges every day each month, as calculations with this assumption will inappropriately over estimate annual pollutant loadings. Moreover, the Loading Tool should use summation DMR data when available to calculate a facility's total annual loading.

## Response:

The Loading Tool does appropriate address instances of multiple outfalls and the multiple sets of data for each outfall at a single facility. The procedure for addressing multiple outfalls for a facility is described in the "Technical Users Background Document for the Discharge Monitoring Report (DMR) Pollutant Loading Tool," which is located on the "Users Guide/Technical Documents" tab on the Loading Tool. As previously noted, for Version 1.0 EPA has upgraded the Loading Tool for both general and technical users to provide access to the 'raw' or untransformed DMR data from PCS and ICIS-NPDES. This will allow all users to see specifically how the Loading Tool uses these data to calculate pollutant loading estimates.

EPA also notes for all DMR the Loading Tool prioritizes the data used for making loading calculations. See Table 3-8. Measurement Value Selection Priorities and Calculations in the Technical Users Background Document. This shows that quantity data (pounds/monitoring period) are used when available to estimate pollutant loads. Only when these quantity data are not available does the Loading Tool use concentration, flow, number of days, and conversion factors. EPA has incorporated site-specific changes in pollutant load estimates and industry specific requirements (e.g., Total Residual Chlorine discharges may not last more than two hours per day at Steam Electric Power Generating facilities. See 40 CFR 423.13) in cases where quantity data are not available and EPA is aware of intermittent discharges within a monitoring period.

# 2.17 <u>Steve Anderson (Clean Water Services: Hillsboro, OR)</u>

## **Comment Excerpt Text:**

I am writing to send along some comments resulting from my review of the new DMR Pollutant Loading Tool. At Clean Water Services (CWS), we own and operate four separate wastewater treatment facilities. I used the tool to generate output for each of these facilities, and compared the results to the concentration and flow values that we submitted on our DMRs. The comparisons were intended to verify the average concentrations and flow values used in the loading calculations; I did not attempt to verify the loading calculations themselves. Thus, my comments are restricted to the comparisons of the Loading Tool output of the AVG CONC and AVG DAILY FLOW with DMR data submitted by CWS.

When I noticed discrepancies between the Loading Tool's AVG CONC and the submitted DMR values, I checked the ECHO database to determine whether there had been data entry errors that might account for the differences. In each case, I confirmed that the ECHO database contained the correct values for concentration data. Therefore, I have concluded that the Pollutant Loading Tool must be performing calculations that result in values for AVG CONC that, in many cases, do not match the average concentration values submitted on our DMRs.

The attached Excel spreadsheet contains a summary of the discrepancies noted in my review. This spreadsheet is organized so that the rows are the different pollutant parameters that we report, and the columns are the four CWS treatment facilities (Durham, Rock Creek, Hillsboro, and Forest Grove). It is hoped that these comments will be helpful in EPA's improvement of the Tool. Please let me know if you would like any clarification of these comments or further information. Thank you for this opportunity to evaluate this Tool.

# Response:

EPA reviewed the commenter's attachment and confirmed that the latest edition of the tool, Version 1.0, contains DMR data that exactly matches the values in PCS. EPA appreciates the comments and the opportunity to check the tool.

# 2.18 <u>Tracie Sales (Merrimack River Watershed Council, Inc.)</u>

## **Comment Excerpt Text:**

The Merrimack River Watershed Council (MRWC) supports the development of the web-based Discharge Monitoring Report (DMR) Pollutant Loading Tool and believe it will be very beneficial in our efforts to track and comment on discharge permits within the Merrimack River Watershed. We applaud EPA's effort to make this information available to the public.

MRWC would like to offer a few comments. First, we suggest expanding the "Search by Watershed" beyond the HUC-12 option to also include a search based on waterbody

names. This type of search would be more user-friendly as most of the public does not know what a HUC-12 is.

## Response:

Thanks the Merrimack River Watershed Council for their support of the Loading Tool. EPA notes that the Loading Tool does have an easy way for general users to identify dischargers in their watershed. Users can key in a zip code, which will instruct the Loading Tool to find facilities that discharge in the one or more HUC-12 watersheds that overlap with the zip code boundaries.

Regarding waterbody names, the Loading Tool uses the official names from the Geographic Names Information System (GNIS), which is managed by the USGS. The GNIS is the official repository of domestic geographic names information, containing the Federally recognized name of each feature and the feature location by state, county, USGS topographic map, and geographic coordinates. The GNIS collects data from Federal, state, and local agencies, and provides data to the government and the public through numerous web applications and services. EPA notes that not all geographic features have a listing in GNIS. This means that a user search on a waterbody may not find a match in GNIS even if this waterbody is well known locally. The Loading Tool does not use waterbody data in PCS or ICIS-NPDES as these data are only stored as text data and are not geographically indexed. EPA will consider how to better integrate GNIS data in future revisions to the Loading Tool.

# **Comment Excerpt Text:**

In addition, MRWC would like the option to search by a group of waterbodies, or a single waterbody at a larger scale than the HUC-12 level. This could be achieved either through a watershed search option with listings for the larger watersheds (the Merrimack watershed, for example) or through the use of a lower HUC level search, such as a HUC-8. Second, and in conjunction with the comment above, the "Find 12-digit HUC on a map" link did not work for one of our reviewers, despite several attempts at accessing it.

# Response:

Users can already perform HUC-8 searches by leaving the last four digits off of HUC-12 searches. These kinds of searches will find all facilities that discharge into the identified HUC-8 scale watershed. Users can also use the Advanced Search to search on 400 HUC-12 values or less at a time. EPA will enhance the "Find 12-digit HUC on a map" in future revisions of the Loading Tool to improve performance.

# **Comment Excerpt Text:**

Finally, we appreciate having the links to the NPDES permit and fact sheet included when looking at information about an individual facility, but they are hard to find buried on the View Enforcement Compliance Report page. We feel they would be easier to find and more appropriate on the Facility Information page.

We appreciate the opportunity to comment on this new web-based tool and submit our comments.

## Response:

EPA uses the ECHO Detailed Facility Report to provide links to the NPDES permit and fact sheet. EPA does not have access to these files unless they are provided by the authorized state NPDES programs and not all programs have digitized and shared these documents with EPA. EPA is working with states to standardize the linkages to these documents and will update the Loading Tool when most of these documents are available online.

## 2.19 Daphne Smart (Alabama Department of Environmental Management)

## **Comment Excerpt Text:**

The Department appreciates the opportunity to review the new DMR pollutant loading tool prior to releasing the information to the public. Our agency has expended significant resources and efforts to update and provide accurate data in EPA's NPDES ICIS system. It is our understanding that information is extracted from ICIS to provide information for the SRF, ECHO, etc. It is concerning that the information presented on these websites/reports does not appear to coincide with the information in ICIS and that EPA has not provided a cursory review of the information to ensure consistency with ICIS. The states have limited resources and time which would be better utilized to ensure accuracy and completeness in the ICIS system. Additionally, more timely refresh dates for OTIS, ECHO, Envirofacts, IDEA, etc, would be beneficial for the states and the public so that the most accurate and timely data is available.

## Response:

EPA development of the Loading Tool has involved numerous data quality procedures to ensure there are no errors introduced in the extract, transform and load (ETL) process as the data for the Loading Tool is taken from both PCS and ICIS-NPDES. These data quality procedures are described in the "Technical Users Background Document for the Discharge Monitoring Report (DMR) Pollutant Loading Tool," which is located on the "Users Guide/Technical Documents" tab on the Loading Tool. EPA also maintains a Quality Assurance Project Plan (QAPP) for the Loading Tool to ensure quality.

With the Version 1.0 release of the Loading Tool EPA is updating the Loading Tool with error corrections on a monthly basis. This will help ensure synchronization between the data in the Loading Tool and PCS and ICIS-NPDES.

The comment on more timely data refreshes for OTIS, ECHO, Envirofacts, IDEA were passed on to the EPA ECHO Team.

## **Comment Excerpt Text:**

The data availability table in the new loading tool is derived from the State Review Framework – Multi-State Report. During the initial comment period for the SRF, the Department noted errors and inconsistencies in the SRF report.

## Response:

The commenter has not provided any specific comments on the four data elements used from the State Review Framework:

- W01A1C Active facility universe: NPDES major individual permits (Current)
- W01B3C Major individual permits: DMR entry rate based on DMRs expected (Permits/Permits) (1 Qtr)
- W01A3C Active facility universe: NPDES non-major individual permits (Current)
- W01C3C Non-major individual permits: DMR entry rate based on DMRs expected (Permits/Permits) (1 Qtr)

EPA will update the Loading Tool when it receives specific information about data errors.

# **Comment Excerpt Text:**

We understand and appreciate the importance of transparency in government. However, prior to release of such information, the Department believes the information should be accurate. Querying and utilizing EPA's ICIS system directly when preparing reports or tools may prevent some of the inconsistencies/errors caused by querying/utilizing multiple databases. The Department's preference would be that the inconsistent and incorrect data issues with the current websites and reports be corrected prior to establishing new tools with the same data issues. If you have any questions regarding this issue, please do not hesitate to contact the Department.

# Response:

EPA agrees with the comment that data quality is a top priority but disagrees on the method for correcting these errors. Not providing access to data allows data quality errors to remain hidden and unchecked. Historically the limited access to DMR data has resulted in many data errors, in particular those errors that are not identified by the QNCR process, left as uncorrected. See also the response above regarding data quality and EPA's ETL process and the response to Comment #16.

Finally, EPA notes that facility, permit, and DMR data are currently made available to the public through ECHO's Effluent Charts feature as the data are entered into PCS or ICIS-NPDES by the state authorized program. Data errors can be identified and reported for correction by permittees, states, and EPA about a month after they are entered into PCS or ICIS-NPDES. ECHO is updated monthly with data from PCS and ICIS-NPDES.

# 2.20 <u>Mary Lou Esparza (Central Contra Costa Sanitary District)</u>

# **Comment Excerpt Text:**

The beta tool has the same errors that are found in the ECHO program currently administered by the EPA.

Please do not put erroneous data on the EPA website for the public to scrutinize. Erroneous data helps the public believe that their public utilities are not doing the job they are being paid for and this is not the case.

Prior to releasing the tool for the general public to view, please add a second control whereby the data summitteer has a 10 to 15 day review period prior to the data being placed on the EPA website. If the reviewer does not respond within the 10 to 15 day period then it is on them, but to deny the opportunity to correct errors is inexcusable.

## Response:

EPA agrees with the comment that data quality is a top priority but disagrees on the method for correcting these errors. Not providing access to data allows data quality errors to remain hidden and unchecked. Historically the limited access to DMR data has resulted in many data errors, in particular those errors that are not identified by the QNCR process, left as uncorrected. See also the response to Comment #16.

Finally, EPA notes that facility, permit, and DMR data are currently made available to the public through ECHO's Effluent Charts feature as the data are entered into PCS or ICIS-NPDES by the state authorized program. Data errors can be identified and reported for correction by permittees, states, and EPA about a month after they are entered into PCS or ICIS-NPDES. ECHO is updated monthly with data from PCS and ICIS-NPDES. The Loading Tool is update annually with new data and monthly with resolved error corrections. The difference between when new data is available through ECHO's Effluent Charts feature and when this new data is incorporated into the Loading Tool will give permittees and states sufficient time to correct errors.

## 2.21 Ben Horenstein (East Bay MUD)

The letter from Mr. Horenstein (East Bay MUD) replicates the same comments identified by Ms. Shannon Grund (Sanitation Districts of LA County), which is Comment Number 16. The responses to Comment Number 16 addresses nearly all of the comments raied by Mr. Horenstein. Unique comments raised by Mr. Horenstein are address below.

## **Comment Excerpt Text:**

Additionally any streamlined data correction process needs to allow for multiple data points to be corrected as a set, at one time, instead of selecting an individual data point. Cyanide is an example of a pollutant that was found to be an artifact of the preservative from using an USEPA approved laboratory method. Most likely all of the 49 facilities shown with cyanide loads in California would need all the cyanide data removed, and it would be best if this could be done at one time, by each facility. There probably are other examples from across the United States where a complete data set is incorrect over an extended period of time and needs to be removed from the Loading Tool and the underlying databases that the Loading Tool accesses.

# Response:

The error correction request tool, which is available from ECHO's Effluent Charts, allows users to identify at the facility and pipe level. The error correction request tool also allows the user to provide information on any facility wide errors that might be occurring. This functionality appears to meets the needs identified by this commenter.

## **Comment Excerpt Text:**

Lastly, Tri-TAC would encourage USEPA to work with state NPDES Programs to use this Loading Tool instead of developing a separate state electronic tool for estimating pollutant loads from point sources.

## Response:

EPA will be working with authorized state NPDES programs and other interested stakeholders (e.g., USGS) to promote the use of this new web application.

# 2.22 <u>Liz Teague (Alliance for the Great Lakes)</u>

## **Comment Excerpt Text:**

Beyond providing countless recreational and employment opportunities, the Great Lakes also act as a source of drinking water for millions of individuals and as a habitat for a multitude of aquatic species. Given the impact of pollution on these uses, it is vital that we keep working to improve water quality. Public awareness of water quality issues and transparent access to information plays an essential role in these efforts. At a time of substantial federal, state and local investment in the restoration of the Great Lakes, it is critical to also maintain focus on driving down the risk that pollution continues to pose to the integrity of our waters.

We commend U.S. EPA on its efforts to improve transparency and knowledge concerning the extent and effects of pollutants on water quality in the Great Lakes and nationwide. The DMR Pollutant Loading Tool (DMR tool) is a constructive step towards involving individuals in efforts to enhance water quality. Our members and staff researching water quality issues frequently use similar tools on the EPA website, including ECHO.

The beta DMR tool appears to be an immense improvement over ECHO in terms of organization, ease of use, search capabilities and amount of information provided to the user. Allowing public access to such valuable information is the key to fostering the public involvement necessary to reducing pollution in our waters. While the DMR tool is undoubtedly valuable in its current form, we believe that there are a number of changes that can be made to further enhance its efficiency and user friendliness.

## Response:

EPA thanks the commenter for their support.

# **Comment Excerpt Text:**

Ensure That Data Is Accurate and Complete: The DMR tool provides a variety of essential Clean Water Act data which is not readily available through other EPA search tools, much of which is accurate and very useful. The ability to access information such as the pounds of discharge of a pollutant in a year will be valuable, especially when EPA adds additional annual data. The tool provides the public with information that could previously only be obtained through FOIA requests, which is a welcome advancement. Being able to obtain information through a simple search on the tool is considerably easier and faster than the FOIA request process, which can be time-consuming and may deter a citizen from obtaining such data.

We recognize that the DMR tool is in its beta phase and that EPA is making visible efforts to update information. We are also cognizant that creating data management tools and updating the information within them can be both time and money intensive, and that the EPA and the public would benefit from additional funding to improve these types of tools.

## Response:

EPA agrees with the commenter.

#### **Comment Excerpt Text:**

While the EPA has done an exceptional job with its available resources compiling and formatting the water data in the DMR tool, it is important that the data that is available and searchable is not only accurate, but also complete. We have encountered a number of specific issues with the DMR tool in this area.

## Gaps in Data

Data is currently incomplete for some facilities currently searchable in the DMR tool. For example, discharge pounds of chromium are not listed in top pollutants from US Steel Gary Works (IN0000281) in the DMR tool, even though it discharges a significant amount of the pollutant and the amounts are shown in the facility's effluent charts.

Although we have already discussed this issue with Carey Johnston, we were not able to come to a conclusion as to the source of the problem and it was flagged for EPA consideration. The issue with incomplete data is not limited to this facility, however.

## Response:

See the response to Commenter No. 12 for details on how EZ Search calculates pollutant loads when some or all of the reported pollutant concentrations are in a given year are reported below the laboratory analytical method quantitation limit. When all reported pollutant concentrations are in a given year are reported below the laboratory analytical method quantitation limit all then the annual load calculated by EZ Search for that parameter is equal to zero. This is the case for US Steel Gary Works (IN0000281) for the Chromium, total recoverable. See the screenshot from ECHO's Effluent Charts.



**Source:** EPA's ECHO Effluent Charts (http://www.epa-echo.gov/cgibin/effluent1.cgi?permit=IN0000281&pipe=034&paramtr=01118&monlocn=1&period=1&outt=effonly&d ate=20070101%7C20071231&charts=all&tool=echo)

It is important to note that the Loading Tool prioritizes the reported average quantity discharge, which for US Steel Gary Works (IN0000281) is qualified with the "<" sign. This means that the Loading Tool reported a zero value for the annual load for this parameter at this facility. A review of the concentration data also indicates that the wastewater sampling was unable to reliably quantify chromium concentrations above the laboratory analytical method quantitation limit.

EPA also notes that the Advanced Search allows users to assign different assumptions of the pollutant concentrations that are below the laboratory analytical method quantitation limit. Users can set these pollutant concentrations at zero, half the laboratory analytical method quantitation limit, or at the laboratory analytical method quantitation limit.

Finally, EPA revised the EZ Search results such that parameters with pollutant loads calculated as zero (e.g., cases where all the pollutant concentrations are below the laboratory analytical method quantitation limit for one year) will be displayed. The beta version of the Loading Tool (December 2010 release) only displayed results if the pollutant loads were above zero. This change will help deter the impression that the Loading Tool is missing data.

# **Comment Excerpt Text:**

Another instance of potentially incomplete data can be found on the 'Facility Information' page for Premcor Refining Group (OH0002623). Although this facility has chromium limits and discharge, it has no discharge data for the pollutant its DMR tool page. From our perspective, it is difficult to pinpoint the causes of incomplete data, as there could be any number of causes, some of which we recognize are not necessarily related to the DMR tool. We feel, however, that it is important to make EPA aware of these types of data gaps, in case they are related and can be rectified. If facility data is incomplete, it can create further inaccuracies in searches, including those searches intended to find the major dischargers of a pollutant or discharge levels of a particular pollutant into a water body. This problem detracts from the tool's utility.

# Response:

EPA reviewed the PCS data and confirmed that there were no pollutant concentrations that were above the laboratory analytical method quantitation limit. This means that the Loading Tool reported a zero value for the annual load for this parameter at this facility.

Discrepancies between DMR and TRI Data: Facilities that are major dischargers of pollutants, including those that discharge chromium, often show data on the DMR tool that varies significantly from the amounts reported in the 2007 TRI water discharge data. While we recognize that NPDES and TRI are separate programs with diverse requirements, such vast discrepancies lead to user problems identifying facilities that actually discharge the largest amount of a pollutant. For instance, when searching near the beginning of the beta phase of the tool, US Steel Gary Works (IN0061077) did not appear in the DMR Tool search results for top chromium dischargers in the Great Lakes, despite the fact that the facility discharges a considerable amount into the Great Lakes each year. In more recent searches, the facility appears in the search results, but with a discharge of 1.26 pounds per year, as compared to the TRI reported discharge amount of 800 pounds per year. For the same facility, lead discharge is listed as 0.405 pounds per year on the DMR tool, as opposed to nearly 900 pounds per year in TRI data. Many other facilities have similar inconsistencies. Dunkirk Steam Generating Facility (NY0002321) lists its lead discharge as 0.34 pound per year, while TRI data shows a lead discharge of 238 pounds per year.

These examples are only a few of the varying values we have come across. While we recognize that some differences will exist between the DMR data and TRI data and that such differences may be unrelated to the tool, large discrepancies will impact search results for many users. These discrepancies make the DMR tool less dependable and useful and should be considered by the EPA.

#### Response:

As previously noted, the Loading Tool uses available data in PCS and ICIS-NPDES to estimate pollutant discharges from point source discharges. EPA developed the Loading Tool to ensure that all pollutant discharge monitoring could be used to estimate annual pollutant discharges (with exceptions for some monitoring data such as whole effluent toxicity data that cannot be converted to pounds discharged). As an example, the following table provides details on how the Loading Tool calculates 2007 chromium discharges for the US Steel Gary Works (IN0061077).

2007 Monitoring Period-Level Loads for Chromium for Outfall 001										
Monitoring Period	Discharge Information	Below Detection Limit?	Measurement Type	Avg Daily Value	Wastewater Flow (MGD)	Number of Days	Monitoring Period Load (kg/period)	Equation		
01/31/2007	Occurred? Yes Reported? Yes Estimated? No	No	Quantity (kg/day)	0.00047	0.12	31	0.014	Daily Load (kg/day) × Number of Days		

02/28/2007	Occurred? Yes Reported? Yes Estimated? No	No	Quantity (kg/day)	0.0035	0.107	28	0.1003	Daily Load (kg/day) × Number of Days
03/31/2007	Occurred? Yes Reported? Yes Estimated? No	No	Quantity (kg/day)	0.00065	0.17	31	0.0203	Daily Load (kg/day) × Number of Days
04/30/2007	Occurred? Yes Reported? Yes Estimated? No	No	Quantity (kg/day)	0.0011	0.106	30	0.034	Daily Load (kg/day) × Number of Days
05/31/2007	Occurred? Yes Reported? Yes Estimated? No	No	Quantity (kg/day)	0.00031	0.088	31	0.0098	Daily Load (kg/day) × Number of Days
06/30/2007	Occurred? Yes Reported? Yes Estimated? No	No	Quantity (kg/day)	0.00063	0.12	30	0.019	Daily Load (kg/day) × Number of Days
07/31/2007	Occurred? Yes Reported? Yes Estimated? No	No	Quantity (kg/day)	0.00013	0.16	31	0.0042	Daily Load (kg/day) × Number of Days
08/31/2007	Occurred? Yes Reported? Yes Estimated? No	No	Quantity (kg/day)	0.00022	0.13	31	0.00702	Daily Load (kg/day) × Number of Days
09/30/2007	Occurred? Yes Reported?	No	Quantity (kg/day)	0.0021	1.066	30	0.065	Daily Load (kg/day) × Number of Days

	Yes Estimated? No							
10/31/2007	Occurred? Yes Reported? Yes Estimated? No	No	Quantity (kg/day)	0.0036	0.36	31	0.11	Daily Load (kg/day) × Number of Days
11/30/2007	Occurred? Yes Reported? Yes Estimated? No	No	Quantity (kg/day)	0.00077	0.52	30	0.023	Daily Load (kg/day) × Number of Days
12/31/2007	Occurred? Yes Reported? Yes Estimated? No	No	Quantity (kg/day)	0.0052	0.22	31	0.16	Daily Load (kg/day) × Number of Days
Annual Load fr	rom Monitoring	0.57	Sum of Monitoring Period Loads					
Number of Mo	nths Requiring I	Estimation					0	
Annual Load (k	kg/γr)	0.57	Annual Load from Monitoring Data (kg/yr) × 12 / (12 - Number of Months Requiring Estimation)					
Annual Load (I	b/yr)	1.26	Annual Load (kg/yr) $\times$ 2.205					

The TRI program may have different reporting requirements, which may explain the differences between the two values cited by the commenter (1.26 pounds versus 800 pounds). EPA has updated the documentation in the Loading Tool to alert users of the potential differences between DMR and TRI data and some of the related causes. EPA has also updated the Loading Tool to allow for direct access to TRI data and to compare these data to DMR data (and vice versa).

Incomplete Water Body Information & Inaccurate Water Body Groupings: Setting aside discrepancies between TRI and DMR discharge amounts, it is also necessary to have accurate and complete information available regarding receiving water bodies for all major facilities. While three to four pieces of information on the receiving water body are available on many 'Facility Information' pages, the data is partially or completely absent from others. We recognize that water body data in the DMR tool is automatically retrieved from other sources, but believe that it is imperative that such data is complete in order for the public to understand the destination of pollutants, for agency staff to develop TMDLs, and for the tool to produce accurate searches. It is also vital that each facility is correctly grouped by watershed for search purposes. This is of high value to watershed groups. We have found multiple instances where a facility was not included in the search results for top dischargers of a pollutant in the Great Lakes, even though the facility discharge amount for the pollutant was higher than other facilities listed in the search results.

An example of this issue can be found when searching for arsenic dischargers in the Great Lakes. According to the DMR data on its 'Facility Information' page, the Detroit Edison Belle River plant (MI0038172) discharges 1.46 pounds of arsenic per year, but it does not appear in search results for arsenic dischargers in the Great Lakes. It is missing most of its receiving water body data.

Similarly, the Detroit Edison St. Clair plant (MI0001686) discharges more than 11,000 pounds of copper per year, according to the 'Facility Information' page on the DMR tool, yet does not show up in a search for copper dischargers in the Great Lakes. This plant has partial receiving water body data, but is also not recognized as discharging into the Great Lakes by the DMR tool, despite the fact that it directly connects Lakes Huron and Erie.<sup>8</sup>

Although we cannot be certain that the lack or inaccuracy of water body information is the root of the search issue, it seems to be a likely culprit. Therefore, we would like to stress the importance of EPA's continuing efforts to include complete and accurate data in the DMR tool, including correctly grouping facilities by watershed.

#### Response:

EPA agrees that having complete and accurate receiving waterbody data is important for a better understanding on the potential impacts of point source pollutant discharges. As the commenter has noted EPA does rely on a separate EPA database (WATERS) to retrieve information on the receiving waterbody's name, REACH code, watershed name and number, and impairment status. EPA is exploring ways to improve this data, which is outside the scope of the development of the Loading Tool. EPA has passed this comment onto the EPA WATERS Team.

<sup>&</sup>lt;sup>8</sup> David Schweiger & Charles F. Southam, Great Lakes-St. Lawrence Water Flows (June 4,2004), http://www.great-lakes.net/envtjwater/ievels/flows.html.

Include Additional Information in DMR Tool: The new DMR tool and added data are a step towards improving transparency and public knowledge of water quality issues. As compared to ECHO, the website format is easier to navigate and allows for quicker location of pertinent data by the concerned public. The clean and attractive layout of the facility pages and search results make locating pertinent information faster than in ECHO, where facility pages are often cluttered with a mass of data. The added features in the DMR tool, such as the maps of discharging facilities surrounding a particular watershed and the use of excel spreadsheets, further enhance its usefulness. We are excited about the type and breadth of data that EPA included in the tool. There is additional data, however, that we feel should be incorporated in the final version of the DMR tool to maximize its value to the public.

Adding further data to the existing facility pages is also important to the value of the DMR tool. We have formulated a non-exhaustive list of examples of data to which access through the DMR tool would be of assistance to users. First, all pollutants discharged and the amount of discharge should be available on the facility pages and in search results, rather than merely top pollutants or top dischargers. We have found this to be the case for some search results, but not for others.

## Response:

EPA thanks the commenter for their support. EPA does list the top pollutant discharged when no pollutant is selected in the EZ Search results. It is not possible to display all the pollutant names in the summary results, as there are too many different pollutant names to display on one HTML webpage.

## **Comment Excerpt Text:**

Second, direct links to permit documents, such as the final permit itself, on the facility pages would eliminate the need for extra searching by the user. This is similar to the existing link to the facility's effluent charts, which is a time-saving feature. Although the permit documents can at times be found through links to other EPA websites on a facility's page, placing the documents on the facility page would be more efficient.

## Response:

EPA is currently working on a proposed rulemaking to update its NPDES regulations. As an example of an outdated regulation which could be changed to reduce burden, as well as improve transparency and public access to information, EPA is considering whether to revise the public notice requirements to allow a state to post notices and draft NPDES permits under the Clean Water Act on their state agency websites in lieu of traditional newspaper posting. See "Improving Our Regulations: Final Plan for Periodic Retrospective Reviews of Existing Regulations."<sup>9</sup> As NPDES permits and factsheets become available, EPA will make these documents available through its website. EPA may only be able to link to the most current set of NPDES permits and factsheets due to limitations on how these documents are stored and made available by the authorized state NPDES programs.

<sup>&</sup>lt;sup>9</sup> See: http://www.epa.gov/regdarrt/retrospective/documents/eparetroreviewplan-aug2011.pdf..

Finally, additional information relating to receiving water bodies could help the general public understand the final destination of pollutants. Currently, most of the information on receiving water bodies is in number form, such as HUC or REACH codes. While these are important for some users, they do not provide enough meaningful information to the general public.

## Response:

EPA agrees with the comment and has added the watershed name in the "Receiving Water Information" box on the "Facility Information" page. For example, EPA made the following change:

- Beta Version: Watershed Number (12-Digit HUC): 040400010603
- Version 1.0: Watershed Name and Number (12-Digit HUC): Willow Creek-Burns Ditch (040400010603)

This should provide sufficient information on the location of the watershed receiving the pollutant discharges for general and technical users.

## **Comment Excerpt Text:**

Additionally, it is not only essential for the public to be able to access meaningful and complete receiving water body data, but also for agency staff in developing TMDLs. These suggestions are merely some examples of the type of data that we would like added to the DMR tool.

Expand Search Options and Search Flexibility: EPA has very clearly gone to great lengths to ensure that searching with the DMR tool is simpler and more functional for the public user. From our viewpoint, expanded search options and user-friendly interface make locating desired information easier and less time consuming than with other online tools. We have found it more efficient for the user to be able to search PCS and ICIS-NPDES data in a single search in the DMR tool, rather than searching separate databases for different states. Furthermore, the ability to narrowly tailor a search by categories such as specific pollutant and major watershed, like the Great Lakes, as can be done in EZ Search, is exceedingly useful to our organization. It significantly reduces the time and effort it generally takes to locate necessary data.

# Response:

EPA thanks the commenter for their support.

## **Comment Excerpt Text:**

The search capabilities of the DMR tool are much better than those currently available through other tools, but we believe there is always room for improvement in this area.

## Expand Search Capabilities of DMR tool

We believe that further expanded search capabilities would improve the usefulness of the DMR tool. The ability to search by amount of CSO discharge is an example of a constructive search option that could be added to EZ search.

## Response:

EPA thanks the commenter for their support. EPA has included information about POTWs with combined sewer systems (CSSs) in the results of the Loading Tool on the POTW's "Facility Information" page. With current reporting requirements it is not possible to easily identify the volume amount or pollutant load of combined sewer overflow (CSOs) discharges in a given year for a selected CSS. EPA directs the commenter to the forthcoming NPDES Electronic Reporting Rule, which may include requirements for POTWs to report the dates and volumes of CSO discharges.

# **Comment Excerpt Text:**

Another suggestion to increase searching efficiency for general users is to expand the number of listed pollutants on the EZ search page. Although users have the ability to type in a particular pollutant in EZ search, having more listed pollutants would eliminate additional steps in searching. In the same vein, it would be useful to be able to search for an expanded number of pollutants. For instance, being able to search facilities by top dischargers of "dioxins," instead of having to search for each individual dioxin, would be more efficient.

## Response:

EPA created the 'Pollutant Categories' list on EZ Search based on the most common pollutants that are listed by states as causes of water quality impairments. EPA designed the list of 'Pollutant Categories' to be as short as possible to help users find the most pollutants that are of most interest and to reduce clutter on the screen. EPA is reluctant to expand the list to dioxins as there are comparatively fewer facilities that monitor and report dioxin discharges. EPA solicits comment on whether to expand the list of 'Pollutant Categories' to dioxin and/or other pollutants.

# **Comment Excerpt Text:**

Another enhancement would be to allow filtering of results once an EZ search is performed, since certain searches return a large number of results that the user cannot easily sort. For example, if a user conducts a search for top dischargers of lead, it may be useful to allow them to further filter those results for facilities who are also top dischargers of mercury. Allowing this type of filtering would save time for users.

# Response:

EPA agrees with the user that such functionality would be helpful for users to examine multiple top pollutant dischargers for two or more pollutants. The Advanced Search has the capability of searching on one, two, or more (up to 400) different pollutant parameters. Users can filter the CSV results from the Advanced Search to identify any facilities of interest.

# **Comment Excerpt Text:**

Finally, although it is not necessarily a search function, it would be helpful to allow users to email links to facility pages or search results, rather than just allow them to be shared via social media like Facebook. This feature would make sharing the data easier for public users.

# Response:

EPA may include this in future versions of the Loading Tool.

## **Comment Excerpt Text:**

Ensure Flexible Searching

While we believe that it would be helpful to the public to expand search options, it is equally important to make sure that the searches function correctly and are flexible enough for the general public to use. One part of this problem is discussed above in the section regarding incomplete and inaccurate information affecting search results, including inaccurate grouping of facilities by watershed. The other issue we have encountered occurs, for example, when searching by facility name using the facility search function. In facility search, if a facility name is spelled incorrectly, the tool returns no or incorrect results. To be most useful to the public, the tool should function similar to a search engine, recognizing misspellings and offering options that are similar.

## Response:

EPA has updated the error response when a Facility Search does not match any facilities. This should help users find the facilities they are interested in learning more about.

# **Comment Excerpt Text:**

Additionally, while a permit may be searched by one facility name in ECHO with correct results, it may not necessarily return any results when searching by the same name in the DMR tool. When this happens, it often appears to be caused by the fact that the permit is still listed under a former facility name in the tool. This is problematic for a public user who is not aware of former or alternate facility names, particularly if they do not have a permit number. For example, a search for the facility "Lima Refining" in ECHO returns multiple results, while in the DMR tool facility search, no results are found. In order to find the facility in the DMR tool, the name "Premcor" must be used instead, as that was the former name of the facility. A similar issue arises when searching for the Arcelor Mittal plant in Burns Harbor, Indiana. Search issues like one this may prove to be inefficient and frustrating for users. Therefore, we believe that it is essential that searches are not so sensitive as to exclude pertinent results on the basis of spelling errors or alternate facility names that can otherwise be found through ECHO. All names attached to a facility should be able to be successfully search and minor spelling errors should not preclude finding a facility on the DMR tool.

# Response:

In a future release of the Loading Tool EPA will enhance the Loading Tool to allow Facility Search to utilize facility names in PCS, ICIS-NPDES, and FRS. Also the CSV

downloads from the Loading Tool display both the FRS facility name and the ICIS-NPDES/PCS facility name.

## **Comment Excerpt Text:**

We would like to reiterate that we are extremely pleased with the work that EPA has done in creating and refining the DMRtool. Overall, the tool is very functional and allows users to locate pertinent information in a more efficient way. Data management tools like this one certainly work to advance EPA's commendable goal of improving transparency and access to information regarding water quality. We are mindful of the additional funding and time that would be necessary for the EPA to further improve and expand this tool, but it would certainly be a worthwhile endeavor for the EPA and the public in terms of improving access and transparency. We therefore respectfully urge the EPA to ensure accuracy of data, include additional data and further improve search capabilities within the DMR tool.

#### Response:

EPA thanks the commenter for their support.

#### 2.23 <u>Marla Jurosek (San Francisco Public Utilities Commission)</u>

#### **Comment Excerpt Text:**

San Francisco Public Utilities Commission (San Francisco) appreciates this opportunity to review and comment on the Discharge Monitoring Report Pollutant Loading Tool (Loading Tool).

San Francisco supports the goal of making accurate information about our nation's water quality available to the public. To achieve the dissemination of meaningful information, it is vital that the public not only have correct information but also appropriate context for the numbers they access. San Francisco submits these comments to correct inaccurate information contained in the Loading Tool and ECHO database and to correct misunderstandings likely to result from release of uncontextualized raw data. San Francisco has built and currently operates an extensive combined sewer system that treats both stormwater and wastewater. San Francisco has three NPDES permitted facilities: Southeast Water Pollution Control Plant, Oceanside Treatment Plant and North Point Wet Weather Facility. Their total combined capacities are 127.5 MGD for dry weather and 465 MGD for wet weather.<sup>10</sup>

San Francisco supports Tri-TAC's comments on this issue, especially those regarding quality control of the data presented to the public. In addition, San Francisco has the following specific comments.

<sup>&</sup>lt;sup>10</sup> For the Oceanside Plant the maximum dry weather design flow is 43 MGD for secondary treatment with an additional 22 MGD of primary treatment capacity during wet weather. The Southeast facility has a dry weather design flow of 84.5 MGD and can provide a maximum of 150 MGD of secondary treatment and 100 MGD of primary treatment during wet weather. North Point, which only operates in wet weather , provides an additional 150 MGD of primary treatment.

# Pollutant loads should not be presented as equivalent to pollutant impacts: effluent volume and population should accompany this data

Listing pollutants by mass load alone without also providing total effluent treated and population served with that data gives misleading information. Because many adverse impacts in receiving waters are caused by high concentration levels, most pollutants are regulated by concentration levels rather than loading calculations.

Listing pollutants by mass load alone creates the false impression that larger discharges are the worst polluters simply by virtue of the fact that they treat more wastewater than other facilities. Providing accompanying data regarding total effluent treated and population served would help correct this misimpression and provide the public with the appropriate context for the pollution loading information.

To give the public the right context to understand discharge impact data, we strongly recommend that the Loading Tool: (1) explain why the EPA regulates dischargers for concentration levels; and (2) give the discharger's total effluent volume for the time period as well as population served along with the pollutant loading data. This information should be apparent to the user while viewing the data. Therefore, we recommend that two additional columns, one listing effluent volume and the other listing population served, be added to the results page presenting discharger and loading information.

# Response:

EPA agrees with the commenter on the need for data to be provided with additional contextual information. EPA has added facility wastewater volumes (in units of millions of gallons per day) to the following EZ Search results tables:

- Top Facility Discharges in Pounds
- Top Facility Discharges in Toxic-Weighted Pounds (TWPE)
- Top SIC Discharges in Pounds
- Top SIC Discharges in Toxic-Weighted Pounds (TWPE)

EPA was unable to add population served in these tables as these tables report pollutant discharges for all facilities, which includes industrial (non-POTWs) facilities that don't typically process municipal wastewater. However, EPA notes that the following information is provided on the 'Facility Information' page: (1) Residents Served; and (2) Non-Residents Served. The source of these data is the Clean Watershed Needs Survey.

EPA has added a section on the FAQs to discuss why authorized state NPDES programs take different approaches (concentration and/or quantity effluents) to control point source pollution.

## **Comment Excerpt Text:**

The Loading Tool's search function creates "top ten" lists that are intended to allow the user to easily ascertain which dischargers and pollutants have the largest loading on a

specific watershed. Although not stated explicitly on the website, the implication is that these facilities are the poorest performers and deserve further scrutiny.

This rank ordering provides little insight into a discharger's actual impact and can be quite misleading. Wastewater treatment plants are likely to be included in tile top ten Facility Dischargers list based on the fact that they treat large volumes of wastewater, not their actual treatment performance. As discussed earlier, the more meaningful measure of a discharger's impact would be to normalize the pollutant loading calculation by total effluent or population served. Therefore, we recommend that Loading Tool offer users top ten lists of pollutant loading per volume treated and per capita instead of a top ten list of just pollutant loads. If the tool cannot modify top ten pollutant loading list functionality, at a minimum the EPA should provide an explanation of the limits of this kind of list and provide links to the more normalized top ten list calculations.

## Response:

As previously noted, EPA is also providing information about the wastewater discharge volume discharge in the EZ Search results. With the Version 1.0 release of the Loading Tool EPA is also providing contextual information about the relative magnitude of the discharge on the 'Facility Information' page. EPA has provided additional context on the 'Facility Information' page by stating the maximum allowable amount of pollution that is allowed by the NPDES permit next to the load that is calculated from DMR data. Having these two numbers together would work like a speed limit sign with a radar gun showing the actual speed of a passing car. The user of the loading tool would see the actual pollutant discharges (based off of DMR data - like the radar gun showing the actual speed of a passing car) and the Maximum Allowable Load (based off of the permit limit - like the posted speed limit). EPA was not able to normalize the pollutant loads on a per capita basis as not all NPDES permittees treat municipal wastewater. These changes appear to meet the needs of the commenter to put discharges from large POTWs in context.

## **Comment Excerpt Text:**

It is also important to provide a short explanation of each pollutant, including the reason a pollutant is regulated and the level at which it causes impacts (which the top ten lists do not yet do). The top pollutants (by pound) for the San Francisco Bay watershed are dominated by facilities that discharge large loads of solids (e.g. total suspended solids, total dissolved solids), which are measured at the mg/L level. Most toxic constituents, however, are measured at the ug/L or lower levels. Since solids at the levels discharged by wastewater facilities have minimal impact on the San Francisco Bay, it is meaningless to compare solids loading to the loading of toxic pollutants measured at many orders of magnitude lower loads and concentrations. Although this is partially addressed by including a list of top pollutants by toxic-weighted pounds, it is still likely to be confusing to the user when no context has been provided.

# Response:

EPA has added a section on the FAQs to discuss why authorized state NPDES programs select certain pollutants for effluent limits. EPA will also provide additional contextual information explaining that the total amount of pollutant discharges (pounds) is not an

exact metric to indicate the potential for water quality impairments. This additional contextual information will reference the toxic-weighted pounds (TWPE) tables. The TWPE unit provides a relative measure of how the potential toxic nature of one pollutant compares against another pollutant.

## **Comment Excerpt Text:**

Additionally, we recommend not calculating the loads of certain constituents where the calculations do not produce a meaningful result. Some constituents' loads can be calculated, but not meaningfully compared to other constituents' loads. COD, for example, is a bulk parameter that appears as one of the top ten pollutants in the San Francisco Bay watershed. COD measures the mass of oxygen that would need to be consumed to chemically oxidize wastewater effluent. COD docs not measure the actual weight of any constituent, therefore it is nonsensical to include COD load in a comparison to the load of other constituents. Similarly, BOD measures the oxygen consumed to biologically oxidize the effluent, so it does not make sense to compare BOD load to other constituents' loads. Other constituents which should not be compared as total loads include dissolved oxygen, coliform or other microbiological parameters that are measured in count per unit volume.

#### Response:

EPA agrees with the commenter that not all pollutants can or should be quantified as pounds or toxic-weighted pounds discharged. Accordingly, EPA does not report dissolved oxygen, coliform or other microbiological parameters in these units. However, EPA does not agree with the commenter about not quantifying BOD and COD pollutant discharges in the Loading Tool. These two bulk parameters provide a meaningful estimate of the potential impact a wastewater discharge has on the receiving waterbody's dissolved oxygen concentrations, which help support healthy aquatic ecosystems. One or both of these parameters are nearly always included in a NPDES permit, especially for POTWs. An important aspect of municipal wastewater is that it is amenable to biological treatment. Secondary treatment standards are established by EPA for POTWs and reflect the performance of secondary wastewater treatment plants. These technology-based regulations apply to all municipal wastewater treatment plants and represent the minimum level of effluent quality attainable by secondary treatment, as reflected in terms of 5-day biochemical oxygen demand (BOD<sub>5</sub>) and total suspended solids (TSS) removal. Consequently, EPA will retain BOD and COD discharges in the Loading Tool as these provide information about the potential for the discharged wastewater to affect the receiving waterbody's dissolved oxygen concentrations and the performance of POTWs employing secondary wastewater treatment.

## **Comment Excerpt Text:**

San Francisco operates a combined sewer system, which treats not only all sewer flows but virtually all stonnwater flows as well. San Francisco treats an average of over 9 billion gallons of stormwater each year, a substantial benefit for the watershed since this removes pollutants which would have otherwise been simply discharged to the San Francisco Bay or the Pacific Ocean if San Francisco operated as a completely separate system. Stormwater pollutant treatment affects the concentrations of effluent constituents. Although large wet weather flows are not reflected in the majority of our NPDES dry weather data, smaller wet weather events, urban runoff and other dry weather flows are included in the data. Additionally, there is evidence that large wet weather events affect San Francisco's influent data even after the end of the event.

As an example, dioxin, a well-known stormwater pollutant, enters San Francisco's system almost entirely from storm drains. San Francisco's system reduces dry weather loadings of dioxin by greater than 90%. With the additional removal of dioxin through the combined wet weather treatment, San Francisco's treatment exceeds other dischargers' capability of reducing the overall dioxin loadings to the Bay by orders of magnitude.

However, comparing our combined system effluent data to separate system effluent data - which does not include treated stormwater - places San Francisco at a disadvantage and gives the misleading impression to the public that a combined system is more polluting when just the opposite is true.

We urge the EPA to identify dischargers in their top ten lists as either separate or combined systems. We recommend that an additional column be added to the information presented in the top ten lists that identifies whether the discharge is a combined or separate system.

#### Response:

EPA agrees with the commenter that combined sewer systems can provide treatment of storm events below a certain size. However, it is important to note that these combined sewer systems were designed to overflow (i.e., discharge raw untreated sewage, which may also contain industrial wastewater discharges) to surface waters. CSO are of special concern with respect to public health because they can expose citizens to bacteria, viruses, intestinal parasites, and other microorganisms that can cause serious illness such as cholera, dysentery, hepatitis, cryptosporidiosis, and giardiasis. Precipitation and snowmelt entering combined sewer systems may result in sewer overflow events, which in turn may be responsible for beach closings, swimming and fishing advisories, and habitat degradation. Sewer overflows contribute to 15 percent of impaired rivers and streams, 6 percent of impaired lakes, and 33 percent of impaired bays and estuaries.<sup>11</sup> The Office of Water's (OW) 2004 Report to Congress on "Impacts and Control of CSOs and SSOs" estimated the annual CSO and SSO discharge volumes of untreated wastewater at 850 billion and three to ten billion gallons per year, respectively.<sup>12</sup> Therefore, EPA does not agree with the commenter that combined sewer systems are less polluting then separate sewer systems.

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http://www.epa.gov/planandbudget/FY2010finaloecanpmgdnce.pdf
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<sup>&</sup>lt;sup>11</sup> U.S.EPA, 2009. "FY 2010 Office of Enforcement and Compliance Assurance (OECA) National Program Manager (NPM) Guidance, April 23, 2009,

<sup>&</sup>lt;sup>12</sup> U.S. EPA, 2004. "Report to Congress: Impacts and Control of CSOs and SSO," EPA 833-R-04-001, August.

EPA does agree with the commenter that the Loading Tool should indicate whether a POTW has a combined sewer system. EPA included this data in the 'Facility Information' page with the release of Version 1.0.

#### **Comment Excerpt Text:**

Additionally, we also strongly recommend that the Loading Tool link the facility names to descriptions of their specific treatment systems. This would provide greater detailed information, which is important to San Francisco as it has completed its Long Term Control Plan and treats a majority of its stormwater runoff, an achievement that even many combined systems still have yet to accomplish. This would also be useful information for the public to have in understanding discharger impact to the environment.

#### Response:

EPA agrees with the commenter and such information is available the 'Facility Information' page. The source of this information is EPA's Clean Watersheds Needs Survey. Information related to CSO Long Term Control Plans in not reliably reported in PCS/ICIS-NPDES. This information will likely be required to be reported to ICIS-NPDES through new reporting requirements in the forthcoming NPDES Electronic Reporting Rule. EPA will modify the Loading Tool when these data are available in ICIS-NPDES.

## **Comment Excerpt Text:**

The Loading Tool is still under development, and not all of the search results are functioning correctly. For example, there are no results for San Francisco available through the Advanced Search, and users receive an error message when attempting to search for the San Francisco Bay using the 12-Digit Hydrologic Unit Code (HUC) field in the EZ Search tab. Additionally, there is no value listed for Actual Average Facility Flow or NAICS code in the Facility Description page for San Francisco's facilities and other facilities as well.

## Response:

EPA was not able to replicate these errors in the Version 1.0 release of the Loading Tool.

## **Comment Excerpt Text:**

Without being able to fully see the Loading Tool, including the search function, which is likely to be a heavily used feature by the public, San Francisco cannot review all of the meaningful aspects of the agency's proposed action. Given the possibility that the Loading Tool could publicize information involving San Francisco and characterize San Francisco 's operations and facility, it is important that we have the opportunity to review those aspects and provide comment before the site goes live. Therefore, we strongly recommend that the EPA not release the Loading Tool until it is fully functional. We also respectfully request that the public and stakeholders be given an opportunity to review and comment on a complete version of the Loading Tool.

## Response:

Prior to the Version 1.0 release of the Loading Tool, EPA provided EPA Regions and states an opportunity to provide comments on the new version. EPA provided states with advanced access to the loading tool prior to public review as authorized state NPDES programs have primary responsibility to ensure data quality.

EPA will solicit public input on the tool and correct errors and enhance the tool in response to these comments and suggestions.

#### **Comment Excerpt Text:**

To determine if Loading Tool calculations were consistent with data submitted by San Francisco in its monthly monitoring reports, San Francisco downloaded annual pollutant loads from the Loading Tool for both the Oceanside Plant and the Southeast Plant and compared the results with the DMR reports submitted to the EPA.

#### Loading Tool Errors

While several of the Loading Tool's calculations were within five percent of San Francisco's data, there were multiple results which were clearly erroneous. These errors are detailed in Table I below.

Pollutant Name	Loading Tool (lbs/yr)	SF PUC (Ibs/yr)	% Difference	NPDES Permit	
Chlorine	6,616	0.0	-	Southeast	
Copper	792	1834	57%	Southeast	
Mercury	2.0	3.0	12%	Southeast	
1,2,3,4,6,7,8,9- Octachlorodibenzo-p-dioxin	9.1× 10 <sup>-3</sup>	6.1×10 <sup>-2</sup>	85%	Southeast	
TCDD equivalents	1.8×10 <sup>-7</sup>	1.1×10 <sup>-6</sup>	84%	Southeast	
Solids, total suspended	1,578,403	599,492	-163%	Oceanside	
Oil and grease per production	76,262	219,680	65%	Oceanside	
Zinc	3,258	1,609	-102%	Oceanside	
Copper	1,338	805	-66%	Oceanside	
Lead	99.1	89	-12%	Oceanside	
Mercury	58.8	51	-16%	Oceanside	
Selenium	5.85	7.0	13%	Oceanside	
Methylene chloride	24.4	Not Reported in DMR		Oceanside	
Toluene	9.67	Not Reported in DMR	-	Oceanside	
Ethylbenzene	9.67	Not Reported in DMR	×	Oceanside	
Phenanthrene	0.24	Not Reported in DMR	- 1	Oceanside	
Anthracene	0.0024	Not Reported in DMR	-	Oceanside	
TCDD equivalents	0.000012	Not Reported in DMR	-	Oceanside	

## Table 1: Loading Tool Errors

The identified Loading Tool errors are significant and must be rectified before the Loading Tool goes live.

#### Response:

EPA has upgraded the Loading Tool for both general and technical users to provide access to the 'raw' or untransformed DMR data from PCS and ICIS-NPDES. This will allow all users to see specifically how the Loading Tool uses these data to calculate pollutant loading estimates. This added transparency will help the commenter and others understand how the Loading Tool calculates pollutant loads from DMR data.

EPA compared the DMR data in the Loading Tool Oracle database with the results from ECHO's Effluent Charts. Both of these data sources derive their data from PCS and ICIS-NPDES. The values in the Loading Tool Oracle database exactly match the results in ECHO's Effluent Charts. The commenter did not provide any other DMR data (e.g., scanned copies of DMR forms) or identify any errors with the DMR in ICIS-NPDES. Consequently, EPA is unable to respond to the calculations made by the commenter. However, EPA did note that for OCEANSIDE WWTP (CA0037681) the Loading Tool sums the pollutant discharges from two outfalls for the 2007 annual pollutant load for Total Suspended Solids.

Outfall	Pollutant Pounds (lbs/yr)
007	620,403
WPS	958,000

The 2007 annual pollutant load for Total Suspended Solids for Outfall 007 is within 5% of the value calculated by the commenter. Details on the Loading Tool calculation are provided below.

Period	Discharge Information	Below Detection Limit?	Measurement Type	Avg Daily Value	Wastewater Flow (MGD)	Number of Days	Monitoring Period Load (kg/period)	Equation
01/31/2007	Occurred? Yes Reported? Yes Estimated? No	No	Concentration (mg/L)	15	13.8	31	24,288	$\begin{array}{l} \mbox{Concentration (mg/L)}\times\\ \mbox{Flow (MGD)}\times 3.785\\ \mbox{(L/gal)}\times \mbox{Number of Days} \end{array}$
02/28/2007	Occurred? Yes Reported? Yes Estimated? No	No	Concentration (mg/L)	17	14	28	25,223	$\begin{array}{l} \mbox{Concentration (mg/L)}\times\\ \mbox{Flow (MGD)}\times 3.785\\ \mbox{(L/gal)}\times \mbox{Number of Days} \end{array}$
03/31/2007	Occurred? Yes Reported? Yes Estimated? No	No	Concentration (mg/L)	18	15.1	31	31,892	$\begin{array}{l} \mbox{Concentration (mg/L)}\times\\ \mbox{Flow (MGD)}\times 3.785\\ \mbox{(L/gal)}\times \mbox{Number of Days} \end{array}$
04/30/2007	Occurred? Yes Reported? Yes Estimated? No	No	Concentration (mg/L)	14	13.9	30	22,097	$\begin{array}{l} \mbox{Concentration (mg/L)}\times\\ \mbox{Flow (MGD)}\times 3.785\\ \mbox{(L/gal)}\times \mbox{Number of Days} \end{array}$
05/31/2007	Occurred? Yes Reported? Yes Estimated? No	No	Concentration (mg/L)	14	14.2	31	23,326	$\begin{array}{l} \mbox{Concentration (mg/L)}\times\\ \mbox{Flow (MGD)}\times 3.785\\ \mbox{(L/gal)}\times \mbox{Number of Days} \end{array}$
07/31/2007	Occurred? Yes Reported? Yes Estimated? No	No	Concentration (mg/L)	15	14.5	31	25,520	$\begin{array}{l} \mbox{Concentration (mg/L)}\times\\ \mbox{Flow (MGD)}\times 3.785\\ \mbox{(L/gal)}\times \mbox{Number of Days} \end{array}$

08/31/2007	Occurred? Yes Reported? Yes Estimated? No	No	Concentration (mg/L)	11	14.7	31	18,973	$\begin{array}{l} \mbox{Concentration (mg/L)}\times\\ \mbox{Flow (MGD)}\times 3.785\\ \mbox{(L/gal)}\times \mbox{Number of Days} \end{array}$
09/30/2007	Occurred? Yes Reported? Yes Estimated? No	No	Concentration (mg/L)	14	14.3	30	22,733	$\begin{array}{l} \mbox{Concentration (mg/L)}\times\\ \mbox{Flow (MGD)}\times 3.785\\ \mbox{(L/gal)}\times \mbox{Number of Days} \end{array}$
10/31/2007	Occurred? Yes Reported? Yes Estimated? No	No	Concentration (mg/L)	19	16.2	31	36,116	Concentration (mg/L) $\times$ Flow (MGD) $\times$ 3.785 (L/gal) $\times$ Number of Days
11/30/2007	Occurred? Yes Reported? Yes Estimated? No	No	Concentration (mg/L)	9	14.2	30	14,512	$\begin{array}{l} \mbox{Concentration (mg/L)}\times\\ \mbox{Flow (MGD)}\times 3.785\\ \mbox{(L/gal)}\times \mbox{Number of Days} \end{array}$
12/31/2007	Occurred? Yes Reported? Yes Estimated? No	No	Concentration (mg/L)	8	14.1	31	13,235	Concentration (mg/L) $\times$ Flow (MGD) $\times$ 3.785 (L/gal) $\times$ Number of Days
Calculated Annual Load from Monitoring Data (kg/yr)								Sum of Monitoring Period Loads
Number of M	onths Requiring E	1						
Annual Load	(kg/yr)	281,362	Annual Load × 12 / ( 12 - Number of months requiring estimation)					
Annual Load	(lb/yr)	620,403	Annual Load $\times$ 2.205					

EPA will use the Loading Tool to help improve data quality by making it easier for users to find and report errors. EPA also solicits comment on how to improve the calculation of annual pollutant loads from DMR data.

#### **Comment Excerpt Text:**

The Loading Tool includes links to EPA's Enforcement Compliance History Online (ECHO). San Francisco has reviewed effluent limit violations identified by the ECHO Compliance Report for the Southeast Plant and the Ocean side Plant from 2005 through 2010, and discovered numerous serious errors. Many of these errors stem from mistakes in the permit limits ECHO applies, resulting in hundreds of misidentified violations. Other mistakes result from ECHO using incorrect data.

Table 2 lists these ECHO errors. In Table 2, the ECHO errors have been classified into the following four general categories:

- Misinterpreted discharge requirements,
- Inaccurate permit limit requirements,
- DMR data value mistakes, and
- Errors in DMR submittal requirements.

Attachments A and B provide a detailed list of the mistakenly identified violations. San Francisco respectfully requests that EPA immediately correct these identified errors. We also strongly urge the EPA not go live with its Loading Tool until the ECHO corrections arc complete.

#### Response:

These comments relate to EPA ECHO website and are not related to the Loading Tool. These comments were forwarded to the EPA ECHO Team for resolution.

## **Comment Excerpt Text:**

In summary, we support the comments submitted by Tri-TAC. In addition we make the following recommendations, to be completed prior to the release of the Loading Tool:

- Add three columns of information to provide context when presenting pollutant loading information, including: 1) whether the system is combined or separate, 2) effluent volume over the time period represented by the data, and 3) the population served.
- Correct the errors in both the ECHO database and the Loading Tool identified in this letter.
- Normalize the pollutant loading calculations by total effluent volume.
- Omit listing loadings of parameters that do not compare to other pollutant loadings (e.g. BOD and COD) or that make no sense presented as a load (e.g. microbiological parameters).
- Provide a short explanation of each pollutant, which would include a brief description of the associated impacts and regulated levels. The EPA should also explain why dischargers for many pollutants are regulated for concentrations, not absolute loading amounts.
- Provide greater detailed facility description information in the Loading Tool. For example, for San Francisco's facilities this information would include at a minimum the fact that San Francisco operates a combined system that treats virtually all stormwater.
- Postpone release of the Loading Tool until is fully functional and all errors have been corrected.
- Provide the public and stakeholders with another comment period to assess the Loading Tool once it is fully functional.

#### Response:

EPA has responded to these comments in detail above.

## 2.24 Jessica Dexter (Environmental Law & Policy Center)

## **Comment Excerpt Text:**

The Environmental Law and Policy Center ("ELPC") is pleased to offer the following comments on the USEPA's New DMR Pollutant Loading Tool. ELPC is a public interest

environmental legal advocacy and eco-business innovation organization with its headquarters in Chicago, IL.

In addition to the comments below, ELPC fully supports and has signed on to the comments submitted by the Alliance for the Great Lakes on February 4, 2011. First, we would like to thank EPA for creating a new tool which provides enhanced information about individual dischargers and pollutant discharge trends. This type of information will help inform and guide our efforts to improve water quality throughout the Midwest. Furthermore, we believe the user-friendly format of this web-based tool will allow watershed groups and concerned citizens to better access and understand information about water pollution in their area.

# Response:

EPA thanks the commenter for their support.

# **Comment Excerpt Text:**

To further enhance the usefulness of this tool, ELPC would like to make the following suggestions regarding available information for receiving waters and facilities, as well as the system's mapping capabilities and available guidance documents.

# Information about Receiving Waters

In the "receiving waters information" section, we encourage USEPA to provide more information about why a particular waterbody is listed as impaired. To achieve this, EPA could simply list the pollutants for which the waterbody is impaired or provide a link to the state's 303d list or USEPA's Surf Your Watershed site. In addition to including information about impairment listings, it would be helpful to know whether the facility discharges into an Outstanding Natural Resource Waterway or other specially designated state waterbody.

# Response:

EPA has enhanced the "Receiving Water Information" to include more information about the cause of impairment and whether there is a potential connection between the impairment and the facility's discharge. EPA may include information about the 'Outstanding Natural Resource Waterway' status in future releases of the Loading Tool.

# **Comment Excerpt Text:**

While we are pleased to see that some of the detailed facility reports provide a link to a facility's current permit, access to this resource is still few and far between. To reduce FOIA hassles for both EPA and concerned citizens and groups, it would be helpful to provide increased and more visible access to active or administratively continued permits.

# Response:

EPA is working with states to help facilitate online access to NPDES permits and factsheets. EPA may include this information as it becomes available in future releases of the Loading Tool.

We commend USEPA for including information about the current treatment and advanced treatment in place at facilities included in the Clean Water Needs Survey (CWNS). Of course, we would like to see this information expanded for all facilities available in the database.

## Response:

The United States Environmental Protection Agency's Office of Wastewater Management, in partnership with states, territories and the District of Columbia, conducts the Clean Watersheds Needs Survey (CWNS) every four years. The CWNS is conducted in response to Sections 205(a) and 516 of the Clean Water Act. There is no similar survey for non-POTW (industrial) facilities.

## **Comment Excerpt Text:**

To make the map display more useful and interactive, it would be helpful to embed layers in the map that highlight receiving waters, 303d listed waters, special natural resources, other NPDES permitted facilities and industries in the area. EPA could also link the map display to their Enviromapper website which already provides much of the aforementioned information.

#### Response:

EPA has enhanced the tool to include a graphical user interface to explore the data. EPA may include mapping enhancements in future releases of the Loading Tool.

## **Comment Excerpt Text:**

Before releasing the new DMR Pollutant Loading System, we suggest that EPA host a webinar (with a Q&A session) that shows potential users how to navigate the new tool. An interactive and visual training session, in conjunction with the user's guides and technical documents, will go a long way toward educating the public about this powerful new tool. Thank you for the opportunity to review EPA's New DMR Pollutant Loading Tool. We look forward to using this resource to enhance our work once the final version is available.

## Response:

EPA will host a series of webinars and training sessions for a wide range of potential users after the release of Version 1.0 (December 2011).

## 2.25 <u>Tom Liston (Metropolitan Water Reclamation District Of Greater Chicago)</u>

# **Comment Excerpt Text:**

We have had significant turnover within our organization the past couple of months and as a result we did not submit our comments to you through waterloadings@epa.gov by the due date. I realize it is past the February 4th deadline but I would like to send you our comments anyway if you don't mind. Overall everyone who tested this new web-based tool was impressed. Please see the comments listed below.

## Response:

EPA appreciates the comments and reviewed them prior to the development of Version 1.0 of the Loading Tool.

## **Comment Excerpt Text:**

I asked all [of my] section heads to try it and let me know what they think. All comments were mostly positive regarding ease of use however we do have the following concerns/comments.

1.) Not all the links work. You either get an error message or there is nothing displayed. This may be due to the fact it is a "beta" version and not all links are properly configured.

## Response:

EPA has reviewed all links to ensure that they work in the new version of the Loading Tool.

## **Comment Excerpt Text:**

2.) Under facility search, there are two Calumets.

# Response:

There are two NPDES permits for the Calumet POTW:

- MWRDGC CALUMET WRP, CHICAGO, IL, 60628 (NPDES ID: IL0028061)
- MWRDGC CALUMET WRP, CHICAGO, IL, 60628 (NPDES ID: ILR003177)

The first NPDES permit (IL0028061) represents the main effluent discharge from this facility and the second permit (ILR003177) represents stormwater discharges from this same facility.

# **Comment Excerpt Text:**

3.) There was one thing that looked strange. Under "Possible Facility Discharges Related to 303(d) Water Impairment", the last two columns (matched impairment cause/matched impairment name) don't seem to match at all. Are they supposed to? http://www.epa-echo.gov/cgi-bin/srfecho/cso\_wqr.cgi?npdesdfr=IL0028053

# Response:

These comments relate to ECHO and were forwarded to the EPA ECHO Team for resolution.

# **Comment Excerpt Text:**

4.) Overall, this database is way easier than trying to find anything on STORET. Is this intended to be a replacement; it would be great if it is.
5.) How/who will be checking this for accuracy? Are individual facilities going to be uploading their own data?

#### Response:

The Loading Tool will not be replacing STORET as STORET is focused on watershed monitoring data. The Loading Tool focuses on DMR data with integration with other data such as STORET data.

The FAQs for the Loading Tool provide an overview of how the DMR data is aggregated in PCS/ICIS-NPDES and into the Loading Tool database. In summary, NPDES permittees are required to submit their DMR data to their permit writer, which are nearly all authorized state NPDES programs. These state programs are required to key in DMR data for major facilities into EPA's databases (PCS/ICIS-NPDES). Some states also share DMR data for non-major facilities. The amount of sharing is provided in the Overiew tab of the Loading Tool.

#### 2.26 <u>William Wheaton (RTI International)</u>

#### Comment Excerpt Text:

I'm using the DMR tool and am seeing an error when trying to download data. Here are the steps I've been using:

- 1) http://cfpub.epa.gov/dmr/facility\_search.cfm
- 2) Enter 'ALABAMA' (or any other state)
- 3) Click 'Search'
- 4) On the next page, click 'Download Entire List'
- 5) Get error 'File not Found'...Firefox can't find the file at

http://cfpub.epa.gov/dmr/facilities\_detail\_output.cfm?1=3

Would appreciate knowing if this problem can be dealt with in the near future (or if it is a user error issue). Many thanks.

#### Response:

This error was correct in the latest release of the Loading Tool (Version 1.0).

#### 2.27 <u>Nancy Evans (PPL Corporation)</u>

#### **Comment Excerpt Text:**

[A]ttached [are] two DMRs from PPL Martins Creek and two from PPL Montour. I've reviewed the information in the DMR PLT for the PPL Brunner Island Power Station, PPL Montour Power Station and PPL Martins Creek Power Station. Virtually all the information is incorrect.

#### Response:

EPA reviewed the paper December 2010 DMRs from PPL Martins Creek (PA0012823) and PPL Montour (PA0008443) that were provided to EPA by PPL. EPA was not able to use the paper DMRs from February 2011 as EPA has not performed the extraction and processing procedures for 2011 DMR data from PCS and ICIS-NPDES.

With one exception EPA was able to exactly match the pollutant loads from the Loading Tool and pollutant loads using data from the calculations from the two paper DMRs. These results are provided in Attachment A. The one exception is that ICIS-NPDES does not contain the less than qualifier ("<") as reported on the paper DMR for PPL Martins Creek (PA0012823). For example, the following is the cadmium monitoring data for PPL Martins Creek (PA0012823) at Outfall 013.

			Cor	ncentra	ition (N	/IG/L)	
				#	<b>#2</b>		
Date	Туре	Limit	Value	Viol Level	Viol Type Code	RNC Detection Code	RNC Resolved
2010-01-31			0.0002				
2010-02-28			0.0002				
2010-03-31			0.0002				
2010-04-30			0.0002				
2010-05-31			0.0002				
2010-06-30	Av.0		0.0002				
2010-07-31	Avg		0.0002				
2010-08-31			0.0002				
2010-09-30			0.0002				
2010-10-31			0.0002				
2010-11-30			0.0002				
2010-12-31			0.0002				

Source: http://www.epa-echo.gov/cgi-

bin/effluent1.cgi?permit=PA0012823&pipe=013&paramtr=01027&monlocn=1&period= 1&outt=effonly&date=20100101%7C20101231&charts=all&tool=echo

As shown above, the less than qualifier ("<") is clearly missing in the value field for the December 2010 monitoring period [note: the value 0.0002 is presented with no qualifier]. As shown below, the less than qualifier is clearly visible on the paper DMR [note: the value is given as "ND (<0.0002)"]. The paper DMR is providing the following information: (1) the analyte (cadmium) was not detected (noted with "ND" and "<"); and (2) the 0.0002 mg/L is the laboratory analytical method quantitation limit.

Codmium total (or Orth					
Cadmium, total (as Cd)	SAMPLE MEASUREMENT			 	ND (<0.0002)
01027 1 0 Effluent Gross	PERMIT REQUIREMENT	******	******	 	Req. Mon. MO AVG

Consequently, the lack of the appropriate qualifier (i.e., "<") is an error in ICIS-NPDES and not with the Loading Tool. EPA reported these missing less than qualifiers ("<") for PPL Martins Creek (PA0012823) to the Pennsylvania DEQ water data steward. Once these missing qualifiers are corrected the Loading Tool will incorporate these fixes and provide the correct pollutant loads for this facility.

#### 2.28 <u>Matthew Armistead (West Virginia Rural Health Research Center)</u>

#### **Comment Excerpt Text:**

I'm with the West Virginia Rural Health Research Center at West Virginia University and I wanted to thank you for putting together the EPA Lookup Tables (http://cfpub.epa.gov/dmr/search\_tables.cfm). They have been a huge help in our research.

I have recently been using the Pollutant Lookup form on the page and I was wondering if there was any way that I could access the full database that the form is accessing instead of typing in the CAS numbers one at a time via the form on the page to get the Parameter Code output?

Thanks for any help you can provide!

#### Response:

EPA thanks the commenter for their support of the Loading Tool. EPA provided the Loading Tool Oracle database to the West Virginia Rural Health Research Center. EPA will provide similar database deliveries to anyone that provides a written request with exact details on how to deliver the database.

#### 2.29 <u>Charles Bohac (Tennessee Valley Authority)</u>

#### **Comment Excerpt Text:**

I did EZ searches using State=TN, County=Sullivan and Hamilton, with Wastewater Flow as the pollutant category. I also downloaded the results. I found that the downloaded results did not match the EZ Search summary table.

#### Response:

EPA was unable to replicate the error identified by the commenter. EPA confirmed that that the following EZ Search:

Search criteria: Year = 2010 AND State = TN AND County Like 'Sullivan' AND Pollutant category = Wastewater Flow AND All industries

...had the same number of facilities with DMR data in the "Search statistics" table as in the CSV download from the "Top Facility Discharges (2010)" table.

#### **Comment Excerpt Text:**

I also see that cooling water discharges from thermoelectric power plants are not reported. That seems odd because they are huge values.

#### Response:

EPA was unable to replicate the error identified by the commenter. EPA's databases do collect information on cooling water discharges from thermoelectric power plants. There

are a number of reasons why Mr. Bohac was unable to find the facility he was looking for. This includes missing data on the county data field or the state not sharing the DMR data with EPA.

#### **Comment Excerpt Text:**

I tried the advanced search with State=TN and County=Sullivan and Hamilton, and Monitoring Period as the level of detail. It appeared that my county selections were not recognized, and data from all over the state were reported.

#### Response:

EPA was able to replicate this error. It is fixed in the latest release of the Loading Tool (Version 1.0).

#### 2.30 Kelly Petersen (Louisiana Department of Environmental Quality)

#### **Comment Excerpt Text:**

When conducting an EZ search for facilities in the state of Louisiana, the search statistics display that there are 351 facilities with DMR data and 326 with permit limits. It is not possible for DMR data to exist without permit limits in the EPA National Database (both PCS and ICIS). The number of facilities with permit limits should be greater than or equal to the number with DMR data. There is something wrong with how these values are being calculated.

EZ Search Results Search criteria: State = 'LA' AND All Search statistics:	pollutants A	ND All	industrie	2S		
-+     Total Data  With Permit ]	Count  Maj Limits	jors  M	inors  W	/ith Facility Info	Only  V	With DMR
-+   Counts of facilities:	17,059	325	16,734	+	351	326
-+	Τ	Τ			+-	

#### Response:

EPA revised the 'Search statistic' table the returns at the top of each EZ Search results page. EPA also added a new feature that allows users to drill down and see how the Loading Tool counts individual facilities for these statistics. The new version of the Loading Tool does not have the situation described but the user (unless there are monitoring only facilities included in the search statistics results).

#### 2.31 <u>Alan Loncar (Parkson)</u>

#### **Comment Excerpt Text:**

I participated in EPA's webinar this afternoon, conducted on WWEMA's behalf, describing the agency's newest web-based tool for searching and identifying the amount, type, and location of wastewater pollution discharges. This is exciting technology that ultimately can help bring together problem solvers with the plants that are experiencing the problems. I want to commend Carey Johnson of EPA for his presentation and also EPA for funding the development of this useful tool.

#### Response:

EPA appreciates the support from the commenter.

#### 2.32 <u>Paul Spofford (Infilco Degremont Inc.)</u>

#### **Comment Excerpt Text:**

I hope that EPA will continue to expand the database of information available. Clearly, the DMR Tool's value will increase proportionately with the future addition of current (post-2007) data and data sets from an increasing number of discharging facilities. The 2007 data provided, however, shows the promise of the DMR Tool.

The ability to readily identify dischargers that are out of permit compliance would be an asset to the database. The addition of information on the discharging plant's physical Location and/or key contact information will make the data more useful. I believe that one of the webinar queries concerned the type of processor equipment in use, i.e. oxidation ditch / IFAS system, etc., and that would also be useful information.

#### Response:

EPA appreciates the support from the commenter. EPA made DMR data from 2008 through 2010 available to the public with the release of Version 1.0. Users can find the physical location (facility street address) from the 'Enforcement Compliance Report' link of the Loading Tool's 'Facility Information' page search results. This link will direct users to the ECHO Detailed Facility Report. Contact information can be obtained on the Detailed Facility Report by clicking on the FRS number link (under Source ID) on the 'Facility Permits and Identifiers' table, which will take users to the FRS Facility Detail Report.

#### **Comment Excerpt Text:**

Slides 2 and 6 note that the main audiences for the DMR tool are EPA and State NPDES program staff, the general public (researchers and concerned citizens), and technical users (permit writers, watershed modelers, regulatory agencies, researchers, and enforcement targeting). I would add "Solution Providers" to the key target audience list – the consulting engineering community and manufacturers of advanced treatment technologies will find the database useful in identifying applications for their expertise.

#### Response:

EPA agrees with the commenter that engineering firms and wastewater treatment vendors will likely find the Loading Tool a helpful resource.

#### **Comment Excerpt Text:**

I will share with you the internal assessment memo that I sent to others within Infilco Degremont as it provides a single example of how the DMR tool might be used in its simplest form. Could I identify South Carolina's major phosphorus dischargers without the DMR tool? Yes, probably, but the DMR tool puts some real data in my hands that might help me respond to a plant's future treatment requirements. Thank you again for your efforts with the DMR tool program!

#### Response:

EPA appreciates the support from the commenter.

#### 2.33 <u>Patrick Schnaidt (SolarBee)</u>

#### **Comment Excerpt Text:**

First, thanks for inviting us to the review - we are excited to see the development of this tool with its web access capability and easy-to-navigate user interface. The ability to quickly and easily identify and research effluent limit violations by pollutant type, geography, or industry is wonderful.

Additionally, we were excited to hear about the requirements for monitored site's increased electronic data submission, and more timely data submission, going forward as we feel this will make the tool even more useful.

#### Response:

EPA appreciates the support from the commenter.

#### 2.34 <u>Scott Perry (Misco Water)</u>

#### **Comment Excerpt Text:**

I thought the tool was very useful and very user friendly. It will give the public and people like me (Equipment sales guy) an avenue to find municipalities that can use our help in meeting their discharge requirements. There were two areas that I thought could be improved.

The first is something that may or may not be in EPA's control. The presentation mentioned that of the 100,000 or so POTW's they only had roughly 7,000 or so who had reported their data to EPA. I may have those numbers wrong but that is what I wrote in my notes from the presentation yesterday. There were several graphs which showed that most of the states had 0-50% of the plants in that state who had reported their data to EPA. I am concerned that POTW's won't want to give their data to EPA. Does EPA have a method to force the POTW's to give them their discharge data? I am assuming that each region of EPA has a local presence that enforces the discharge requirements so maybe they would be the best avenue to get this data.

#### Response:

EPA appreciates the support from the commenter. EPA identifies the distinction between major and non-major (or "minor") facilities in the Loading Tool's Frequently Asked Questions and Answers (FAQs). There are roughly 15,000 POTWs across the country and approximately 3,500 of these POTWs are majors. The FAQs for the Loading Tool provide an overview of how the DMR data is aggregated in PCS/ICIS-NPDES and into the Loading Tool database. In summary, NPDES permittees are required to submit their DMR data to their permit writer, which are nearly all authorized state NPDES programs. These state programs are required to key in DMR data for major facilities into EPA's databases (PCS/ICIS-NPDES). Some states also share DMR data for non-major facilities. The amount of sharing is provided in the Overiew tab of the Loading Tool.

EPA directs Ms. Perry to the forthcoming NPDES Electronic Reporting Rule. This rulemaking is scheduled to be proposed for public comment in December 2011. This proposed rule will dramatically increase the amount of DMR data collected (data from major and non-major facilities) and the efficiency (data will no longer be reported on paper but will be reported electronically from the permittee). After full implementation of this rulemaking the public will have a more complete set of discharge data, which will be made available through the Loading Tool

#### **Comment Excerpt Text:**

Secondly, It was difficult to determine from what I saw if a POTW was in compliance or not. Just having the raw data available won't mean anything to the public if they don't know what the NPDS permit for that plant requires for their discharge requirements. It would be useful if the numbers could be reported so you would know right away if a POTW is discharging something above their requirement and if EPA has issued some sort of violation. Maybe EPA could report the data points that are above the requirement in red or something. It would be great if I could contact POTW's in California that are struggling to meet certain requirements to see if I have equipment that could help them. It may be as simple as selling them an instrument that more accurately measures the constituent that is giving them trouble.

#### Response:

EPÅ has provided additional context on the 'Facility Information' page by stating the maximum allowable amount of pollution that is allowed by the NPDES permit next to the load that is calculated from DMR data. This change appears to meet the needs of the commenter.

#### 2.35 <u>Kent Troup (Troup Environmental Alternatives LLC)</u>

#### **Comment Excerpt Text:**

The April 6 webinar by Carey Johnston in which he talked about the new DMR Pollutant Loading Tool was extremely helpful and informative. Judging by what was presented, the new tool appears to be an excellent resource that will be of great value to a variety of users. Whereas the two main audiences Carey identified on page 6 of his presentation were, 1) the general public, and, 2) technical users, my company and other WWEMA members represent yet another audience, i.e. wastewater treatment equipment suppliers and technology providers. The Pollutant Loading Tool will enable us to more readily identify potential customers for the technologies we supply to treat the various pollutants being monitored.

#### Response:

EPA agrees with the commenter that wastewater treatment vendors are another audience for the Loading Tool.

#### **Comment Excerpt Text:**

I did an EZ Search for the pollutant "dioxane" in EPA Regions 1, 2 and 3 (and the Great Lakes watershed) and was somewhat surprised that the results of the search showed only one discharger in the entire northeast region. That's probably because 1,4-dioxane is considered an emerging contaminant for which few discharge limits are currently established. Consequently, it only shows up in a Pollutant Loading Tool search when I "Download All Data" to see the list of Top Pollutants by Toxic Weighted Pounds.

#### Response:

EPA agrees with the commenter that 1,4-dioxane is not widely limited in NPDES permits. Using EZ Search EPA identified 39 facilities in the Nation that have monitoring requirements and/or effluent limits for this parameter (2010 data).

#### **Comment Excerpt Text:**

I also entered the pollutant MTBE and came up with no hits. But when I put in the CAS number for MTBE, 1634044, it returned a total of 40 facilities in EPA Region 2. Similarly with TBA (tert-butyl alcohol), there were no hits when I entered the pollutant name, but 21 facilities showed up when I searched under its CAS number 75650.

#### Response:

The users was unable find matches with EZ Search using "MTBE" and "TBA" in the "Pollutant Name (or partial name)" field as the Loading Tool uses the pollutant names in PCS/ICIS-NPDES, which are usually not abbreviated with initialisms. EPA updated the Loading Tool to include a short file with common pollutant abbreviations and the related CAS numbers or PCS/ICIS-NPDES parameter names. This will assist users with their searches.

#### **Comment Excerpt Text:**

One enhancement that would be especially helpful would be to have the capability to query those facilities that are discharging in excess of their effluent permit limits. For suppliers of wastewater treatment equipment, the market for our products is regulatory driven and much of our success is a function of our ability to identify end users in need of solutions. In the case of dischargers exceeding their permitted limits, their need for solutions is immediate!

#### Response:

EPA was able to include this feature in the Version 1.0 release of the Loading Tool. Please see the Advanced Search.

#### **Comment Excerpt Text:**

Our company firmly believes the Pollutant Loading Tool is a valuable resource that EPA should continue to develop and support, and we thank you for having solicited our feedback on the beta version.

#### Response:

EPA thanks the commenter for their support.

#### 2.36 <u>Nadia Abboud (Severn Trent Services)</u>

#### **Comment Excerpt Text:**

It was mentioned on the call that it would be beneficial to undertake a search by treatment method (systems) in place. I want to offer support of that change as we would find it very beneficial as an equipment manufacturer.

#### Response:

EPA was able to include this feature in the Version 1.0 release of the Loading Tool. Please see the Advanced Search.

#### **Comment Excerpt Text:**

When undertaking some sample searches I noticed that the program does not allow for me to select multiple parameters when I search on pollutants, currently you can only search by one pollutant group. Can the program be enhanced to allow for the multiple parameter pollutant search?

#### Response:

EPA was able to include this feature in the Version 1.0 release of the Loading Tool. Please see the Advanced Search.

#### **Comment Excerpt Text:**

The information contained in the detailed plant information once a search is conducted is excellent. However, to obtain/view that detail, it appears that each record must be selected and exported. It appears that when search results are yielded (and you export) only top level information is exported. But--- perhaps that can be addressed with an Advanced Search.

#### Response:

EPA has updated the CSV download feature for Advanced Search and allows users to select the fields they wish to download.

#### 2.37 <u>Aaron Kreider (Energy Justice)</u>

#### **Comment Excerpt Text:**

I don't know much about the underlying data sets or water pollution, but here are some ideas based on general design principles and my work on

<u>http://www.energyjustice.net/map/</u>. We are especially interested in water pollution from power plants, though we haven't worked on including it in our maps (due to a lack of money).

EZ Search

You could add a radius to the zip code search.

#### Response:

EPA was unable to include this feature in the Version 1.0 release of the Loading Tool. EPA will likely include this feature in a future release of the Loading Tool.

#### **Comment Excerpt Text:**

I did search by location, my nearest two zip codes (19143 and 19104) and got no results. (Turns out I need to do a search by watershed with my zip code - not obvious!)

#### Response:

Searches involving a small area (e.g., zip code) can return zero facilities in the results. Not every small area has a discharger. EPA has updated the documentation on the Loading Tool to help users with ideas on how to modify their searches when their results yield no facilies.

#### **Comment Excerpt Text:**

KML output/export is a great idea, especially kml that will work in Google Maps (which only supports a subset of the KML standard).

#### Response:

EPA was unable to include this feature in the Version 1.0 release of the Loading Tool. However, EPA notes that latitude and longitude data (where available) are included in CSV downloads. EPA will likely include some type of mapping feature in a future release of the Loading Tool.

#### **Comment Excerpt Text:**

All tables should have A-Z sorting on all possible columns (ex. Using DataTables or another javascript tool).

#### Response:

EPA was unable to include this feature in the Version 1.0 release of the Loading Tool. EPA may include this feature in a future release of the Loading Tool.

#### **Comment Excerpt Text:**

Add Share with Facebook and Twitter icons everywhere applicable (this might sound silly, but I'm serious). Let people save searches and create tinyurls for them, so they can share the search results with a friend.

#### Response:

EPA was able to include this feature in the Version 1.0 release of the Loading Tool. EPA may include this feature in a future release of the tool.

#### **Comment Excerpt Text:**

Facility Search (and other places too) - define what things are when you mouseover them (ex. NPDES ID).

#### Response:

EPA was unable to include this feature in the Version 1.0 release of the Loading Tool. EPA will likely include this feature in a future release of the Loading Tool.

#### **Comment Excerpt Text:**

Ideally map everything (eg. infographics that let you color a state or county by pounds of mercury or another chemical) - but that might be asking too much.

#### Response:

EPA was able to include this feature in the Version 1.0 release of the Loading Tool.

#### **Comment Excerpt Text:**

Is there any way to connect the data to the Energy Information Administration (EIA) facility data? I've got EIA plantcodes (Form 860 --

http://www.eia.doe.gov/cneaf/electricity/page/eia860.html) that I'd love to connect to the water discharge data.

#### Response:

EPÅ was able to include this feature in the Version 1.0 release of the Loading Tool. EPA may include this feature in a future release of the tool.

#### 2.38 <u>Robbie Orvis (Environmental Integrity Project)</u>

#### **Comment Excerpt Text:**

EPA currently released a beta version of its new Discharge Monitoring Report (DMR) Pollutant Loadings Tool. The goal of this new web-based resource is to allow citizens to quickly and easily access information on the release of toxic pollutants to waterways around the country. The tool allows users to search by a variety of options including pollutant, facility, waterway, county, etc... While EPA has done an excellent job in its initial beta model of the tool, we are submitting comments to have EPA add more data to the tool that will increase its utility, and to fix some errors currently in the tool and databases it pulls values from.

Many of the additions we are requesting to the DMR tool rely on data that is already available in EPA databases, such as the PCS and ICIS databases available through the Enforcement and Compliance History Online (ECHO) tool. Some of the additional information we are asking EPA to include is: facility layout and design information, outfall description, background data on pollutants and limits, TRI data, and NPDES permits and applications. Additionally, we are asking EPA to verify its framework for the system, and to proof both major and minor NPDES DMRs when they are reported to the agency. Lastly, we are providing comments on parts of the tool we want to continue to see in the final version.

#### Response:

EPA thanks the commenter for their support.

#### **Comment Excerpt Text:**

The Environmental Integrity Project (EIP), along with Residents Against the Power Plant, Citizen's Climate Lobby, EPP-LCA.org, National Environmental Law Center, Our Children's Earth Foundation, Environmental Advocates, and A Question of Climate would like to begin by acknowledging the tremendous amount of work and time that EPA has already invested in creating the beta version of the Discharge Monitoring Report (DMR) Pollutant Loading Tool. In particular, we would like to thank Carey Johnston for meeting with us, helping us understand the tool, and answering our questions. Despite its constrained resources, the EPA has produced a well-developed beta version of the tool. We believe the DMR tool is a valuable addition to the suite of resources already provided to citizens by EPA. By creating the DMR tool, EPA is encouraging increased public participation and is aiding in the growth of public understanding of water pollution. The commenters would like to thank the EPA for taking the time to develop this tool and we hope that our comments are useful and helpful to further streamline the DMR tool and increase its utility for citizens.

#### <u>Summary</u>

The DMR pollutant loading tool incorporates a relatively easy-to-use interface and will allow users to quickly access important data regarding the loading of toxic pollutants into waterways nationwide. Below we have addressed several issues with the current beta test design of the tool, as well as some improvements that we believe are critical to the continued success of the tool. The changes we are requesting EPA to make will help further inform citizens and allow the data results to be viewed in context. Additionally, much of the information we would like to see incorporated appears to be accessible on ECHO (via the ICIS and PCS databases) and would provide those interested with valuable information and aid in understanding and interpreting the data obtained with the tool. Additionally, we have provided comments on sections we believe are already well designed and should continue to be incorporated in the tool.

#### Response:

EPA thanks the commenter for their support.

#### **Comment Excerpt Text:**

Information that Needs to Be Included

In order for citizens and groups to better understand and interpret the data provided in the tool, it would be helpful to offer additional detailed facility information beyond what is already included in the tool. We understand that EPA has limited resources and we have tried to include additions to the tool that appear to already be incorporated into other online databases. A thorough overview of facility information would include the following:

#### Facility Layout and Design Information

A list of all the permitted outfalls and their receiving waters with designations as to whether an outfall is internal or external.

#### Response:

EPA has made clear in its documentation that the Loading Tool only calculates pollutant loads for monitoring locations that are associated with external outfalls (i.e., outfalls that discharge to surface waters). Internal outfalls may be required to show compliance with a permit but are not useful for estimating pollutant discharges to surface waters. EPA has added the outfall latitude and longitude location data for Advanced Searches when the user selects the 'Monitoring Period' level of detail.

#### **Comment Excerpt Text:**

A description of the monitoring requirements for each outfall. This would include data on how often monitoring occurs for a given pollutant, and whether or not there is a permitted limit.

#### Response:

EPA has agrees with the suggestion and has incorporated this feature into Version 1.0 of the Loading Tool.

#### **Comment Excerpt Text:**

Outfall description (e.g. cooling tower blowdown, settling pond discharge, etc/). An example of a facility already containing this information is Duke Energy Belews Creek generating station (NPDES: NC0024406).

#### Response:

EPA agrees with the commenter and will likely add 'PIPE DESCRIPTION' in future versions of the Loading Tool [e.g., 'FGD scrubber wastewater'' for Outfall 002 at Duke Enrg Carolinas LLC Belews (NC0024406)].

#### **Comment Excerpt Text:**

Background Data on Pollutants and Limits

A list of pollutants monitored by the facility and limits (or lack thereof) for each outfall. The pollutant information would list priority and non-priority pollutants (Safe Drinking Water Act Appendix I), the federal health criteria next to the facility monitoring requirements/limits, and indicate a lack of limits for certain pollutants. Even if health criteria for pollutants are repeated from facility to facility it allows the public to develop a frame of reference for the toxics as well as an awareness of federal health standards.

#### Response:

EPA is providing a list of applicable limits for each NPDES permittee as a new feature of the Loading Tool. EPA disagrees with comparing EPA's National Primary Drinking Water Regulations to these permit limits. EPA's drinking water standards are legally enforceable standards that apply to public water systems. EPA's primary standards protect public health by limiting the levels of contaminants in drinking water. NPDES permit limits provide for protection of public health and the environment, which does not include the same level of protections as drinking water.

#### **Comment Excerpt Text:**

#### Current NPDES Permit and Associated NPDES Permit Application

In order to allow citizens to understand where the DMR tool data is coming from, we urge EPA to include the NDPES permits and associated NPDES permit applications on the facility information page. We understand that including the NPDES permits and applications may be burdensome, but it is crucial in that it allows the public to see and interpret the data provided in the DMR tool in the context of the full NPDES permitting system. Including these documents is an instrumental step in that process. Scanning and making the latest NPDES permit available for download allows citizens to plot outfall locations, delineate receiving water data, and easily keep up with various permit modifications that occur at a given facility. Additionally, the permit application outlines a full facility schematic and wastewater flow diagram, giving citizens a map of a facility's effluent stream. Furthermore, with the most current NPDES permit and permit application, users of the DMR Loadings Tool will be able to designate which parameters are shielded by the permit application.

We believe EPA has copies of both the permits and the permit applications and that including these documents is simply a matter of scanning and uploading them to the site (some are included on the ECHO site). The following chart shows how allowing users to see the disclosed permit application values compared to the monitoring data can highlight facility reporting problems or changes in background concentrations and give the values context:



#### Response:

EPA is currently working on a proposed rulemaking to update its NPDES regulations. As an example of an outdated regulation which could be changed to reduce burden, as well as improve transparency and public access to information, EPA is considering whether to revise the public notice requirements to allow a state to post notices and draft NPDES permits under the Clean Water Act on their state agency websites in lieu of traditional newspaper posting. See EPA's response to Comment Number 22.

Additionally, EPA has update the Facility Information page to indicate the 'Max Allowable Load (lbs/yr)' and 'Max Allowable Load (lbs- eq/yr)' for each pollutant limited by the NPDES permit. This should help provide context for the uses.

#### **Comment Excerpt Text:**

Lastly, we would also like to see the permit issuance and expiration date included in the tool. This allows citizens and groups to more easily know when they can involve themselves in the permitting process and how long it takes permits to be renewed. In addition to the expanded facility information discussed above, we believe the following data should also be included in the final version of the DMR tool.

#### Comparison to TRI Data

Another useful set of data to include would be the releases to surface water reported in TRI. This is particularly important because of the differences in TRI reporting and NPDES monitoring and reporting. Including this data would help citizens understand these differences and would allow users to verify the accuracy of the two databases (ICIS/PCS

#### and TRI Explorer).

#### Response:

EPA prefers to keep this information on the ECHO Detailed Facility Report, which is link with the Loading Tool. This is because the NPDES permit of issuance will change over time and the Loading Tool provides users with a snapshot of pollutant discharges and permit limits (not necessary the most current set of permit limits or conditions).

#### **Comment Excerpt Text:**

#### EZ Search Maps

The EZ Search Maps feature is a great concept that can be further developed. Having a feature that displays a facility's NAICS code, NPDES Permit number, and facility designation is the first step in making loading data locally relevant. However to take this further the map should be available for download as an ESRI (.shp), a comma separated value (.csv), and a Google Earth file (.kml). By only having this map available for viewing on within the DMR tool webpage, sharing, publishing, and geo-referencing is very difficult.

#### Response:

EPA will likely add this feature in future versions of the Loading Tool.

#### **Comment Excerpt Text:**

#### Facility Limits

We would like to see an improved layout for displaying facility limits when using the EZ Search feature. In particular, the search function returns data on facilities that are top polluters for a given parameter, but the only notation of a permit limit is a small static "L" next to the links to effluent charts and compliance report (the very small icons). There needs to be a more transparent and visible description, in the EZ Search results and possibly in the facility information section, stating the actual limits for the particular pollutants and the given outfalls. If this data cannot be included in the facility information section, the "L" icon needs to link to a new tab that shows outfalls and their stated limits. For analytical purposes it would also be helpful to be able to download these limits and outfalls in comma separated value (.csv) and excel (.xls) formats.

#### Response:

EPA has incorporated this feature into the Version 1.0 release of the Loading Tool.

#### Comment Excerpt Text:

Compliance Status

The DMR tool should include data on whether or not a facility is in compliance with its permitted limits for concentration and/or mass. This data should be available both on the facility information webpage and as part of the data for download on the advanced search. The ability to see whether or not a facility is exceeding its permitted limits for a toxic pollutant is instrumental allowing the public to fully understand the impact of the quantity of releases to waterways. Currently, it is quite burdensome not only to find this data but also to interpret it on the ECHO website; the DMR tool should streamline

this knowledge.

#### Response:

EPA has incorporated this feature into the Version 1.0 release of the Loading Tool.

#### **Comment Excerpt Text:**

Data that Needs to Be Reconciled or Fixed

We have noticed discrepancies in detailed data available for download from the DMR tool. Using Alabama Barry Steam Plant (AL0002879) as a test model, we evaluated the accuracy of the DMR tool in providing the correct data for arsenic for this facility (we looked at annual as well as monitoring period data). While we reached the same loading value that the pollutant tool did, we had trouble confirming other data provided in the report. For example, the total pollutant load is confirmed to be about 911 kg/year; however it appears in the annual report that the average daily load numbers are incorrect. In this report, the DMR tool claims that the average daily load is 29.9356 kg/day. This is simply not possible given the annual total of 911 kg/year. Furthermore, the average daily flow is reported as 208.612 MGD for outfall 002, which appears to be incorrect when compared with the facility's NPDES application as well as DMR data available on ECHO.

#### Response:

Below is the output of a new feature for the Loading Tool (Version 1.0) that shows exactly how the tool takes DMR data to calculate annual estimates.

2007 Monito	ring Period-Lev	el Loads for	Arsenic for Outf	fall 002				
Monitoring Period	Discharge Information	Below Detection Limit?	Measurement Type	Avg Daily Value	Wastewater Flow (MGD)	Number of Days	Monitoring Period Load (kg/period)	Equation
01/31/2007	Occurred? Yes Reported? Yes Estimated? No	Νο	Quantity (kg/day)	0.74	16.5	31	23.07	Daily Load (kg/day) $ imes$ Number of Days
02/28/2007	Occurred? Yes Reported? Yes Estimated? No	No	Quantity (kg/day)	1.55	14.8	28	43.4	Daily Load (kg/day) $ imes$ Number of Days
03/31/2007	Occurred? Yes Reported? Yes Estimated? No	No	Quantity (kg/day)	0	11.46	31	0	Daily Load (kg/day) $ imes$ Number of Days
04/30/2007	Occurred? Yes Reported? Yes Estimated? No	No	Quantity (kg/day)	3.18	19.9	30	95.4	Daily Load (kg/day) $\times$ Number of Days
05/31/2007	Occurred? Yes Reported? Yes	No	Quantity (kg/day)	2.55	16.71	31	79.2	Daily Load (kg/day) $ imes$ Number of Days

	Estimated? No							
06/30/2007	Occurred? Yes Reported? Yes Estimated? No	No	Quantity (kg/day)	2.91	17.43	30	87.3	Daily Load (kg/day) $\times$ Number of Days
07/31/2007	Occurred? Yes Reported? Yes Estimated? No	No	Quantity (kg/day)	3.65	19.02	31	113	Daily Load (kg/day) $\times$ Number of Days
08/31/2007	Occurred? Yes Reported? Yes Estimated? No	No	Quantity (kg/day)	4.11	19.2	31	128	Daily Load (kg/day) $\times$ Number of Days
09/30/2007	Occurred? Yes Reported? Yes Estimated? No	No	Quantity (kg/day)	3.44	18.6	30	103	Daily Load (kg/day) $\times$ Number of Days
10/31/2007	Occurred? Yes Reported? Yes Estimated? No	No	Quantity (kg/day)	2.048	20.04	31	63.4	Daily Load (kg/day) $ imes$ Number of Days
11/30/2007	Occurred? Yes Reported? Yes Estimated? No	No	Quantity (kg/day)	2.42	15.6	30	72.7	Daily Load (kg/day) $ imes$ Number of Days
12/31/2007	Occurred? Yes Reported? Yes Estimated? No	No	Quantity (kg/day)	3.307	19.11	31	103	Daily Load (kg/day) $ imes$ Number of Days
Annual Load f	rom Monitoring l	Data (kg/yr)					911	Sum of Monitoring Period Loads
Number of Mo	onths Requiring E	stimation					0	
Annual Load (I	kg/yr)		911	Annual Load from Monitoring Data (kg/yr) × 12 / (12 - Number of Months Requiring Estimation)				
Annual Load (I	lb/yr)						2,010	Annual Load (kg/yr) × 2.205

This should provide users with greater transparency on how the Loading Tool calculates annual pollutant discharges. EPA has also crosschecked and corrected as necessary the annual pollutant discharges with the values provided in the CSV downloads.

#### **Comment Excerpt Text:**

A separate data discrepancy is the arsenic data reported for the Tuscaloosa WWTP, which is listed as the highest discharger of arsenic in the DMR loadings tool. The Tuscaloosa plant is estimated to discharge an average concentration of 10 mg/L and an annual mass of over 466,000 pounds. However, under the custom reports page in ECHO there is no data for

arsenic discharges and this facility is not listed in TRI Explorer. We are not sure if this data has been removed or if there is a more complex issue at hand.

#### Response:

EPA could not replicate this error.

#### **Comment Excerpt Text:**

We noticed the same data discrepancy for the Lemay Wastewater Treatment Plant (MO0025151) and Northside Generating Station (FL0001031). In general, the more we evaluated the top dischargers for each pollutant, the more we found that the data in ECHO was either nonexistent or did not match the data provided by the DMR tool. While we realize this may represent a problem in the ECHO system (i.e. ICIS/PCS database), given that the DMR tool is supposed to pull the same data we are concerned that there may be an issue with the underlying framework of the DMR tool itself.

In order to ensure accuracy and increase the utility of the DMR tool, it is critical that the ICIS/PCS data and subsequently the DMR tool framework be verified. Per our conversation with Carey Johnston, we understand that many of these errors may be due to the inclusion of facilities with NPDES minors whose DMRs have not been verified and encourage EPA to use this tool to verify these DMRs. However, for major facilities we are not sure why these discrepancies are occurring, and would like EPA to look more closely at these and other data problems.

#### Response:

EPA could not replicate this error. The data in the Loading Tool matched the data in ECHO's Effluent Charts exactly.

#### **Comment Excerpt Text:**

Additionally, we believe the following issues need to be addressed:

"Download all Data" Option

While the "download all data" option is useful, we would like to see this link actually reflect the ability to download all the data for a facility or a set of facilities and pollutants. Currently, the "download all data" link only gives an excel chart of the same table that is on the webpage. This table is the result of a calculation of total pounds of a given pollutant which was derived from DMR concentration and flow numbers and this more detailed data should be available via this link. The full data set should include all the data that the advanced search option allows users to search. This would allow users to more easily analyze all the DMR data and not just the final calculations and would include the data from the table.

#### Response:

EPA disagrees with commenter as the download feature under each table provides a ready means to download and sort data that is visible on the HTML page. The Advanced Search page is for users that would like more data that what is available through EZ Search.

#### **Comment Excerpt Text:**

Average Daily Load Values

The average daily load values appear to only be offered as kg/day values. We encourage EPA to either use both kg/day and lbs/day or just lbs/day so that the public can more easily interpret the results.

#### Response:

EPA has provided a unit conversion table and standardize the unit notations to provide greater clarity.

#### **Comment Excerpt Text:**

Maximum Concentration vs. Maximum Average Concentration

We have noticed that the DMR tool is reporting the maximum average concentration as the maximum concentration, and not the actual maximum concentration measurement. Though we recognize that not all facilities will have both these values, the DMR tool should include the maximum measured concentration as well as the maximum average concentration where applicable. One example is AEP Tanners Creek (IN0002160), which shows a max concentration of 1.75 mg/L of Arsenic for 2007. However, upon review of the effluent charts for this facility (available on the ECHO website), the 1.75 mg/L figure was taken from the average concentration values, with the actual maximum concentration measurement equaling 2.33 mg/L. Including the actual maximum concentration is important because it allows citizens to see that actual maximums, not just the maximum averages, of pollutants that are being released to waterways.

#### Response:

EPA has updated the Loading Tool to provide users with the entire set of untransformed or raw DMR data in the Loading Tool, which includes the data requested by the commenter.

#### **Comment Excerpt Text:**

Missing Monitoring Period Data

For facilities that are missing months of DMR data, we would like to see an option to calculate the annual mass using averages for the missing months of data, since in all likelihood these facilities continued to operate during these months. This would require calculating an average based on the available annual data and applying it to months that are missing data. Performing this adjustment would prevent facilities that have failed to report or incorrectly reported from understating their annual pollutant loads.

#### Response:

The commenter overlooked the fact that the Loading Tool does this linear extrapolation. See the table provided in EPA's response to Comment Number 23.

#### **Comment Excerpt Text:**

Useful Features that Should Remain in Tool

#### EZ Search Results

The EZ Search Results provide a very useful and informative set of results, especially

when searching by pollutant. The search statistics bar in particular provides users with an informational and succinct break down of the pollutant search results. Also helpful is the ability see the summary of available data as well as which facilities have limits and which do not. This would be an excellent location to put a download all data link that would allow the user to automatically fill out a customized query form that would return DMR data for all of the facilities in a given year/monitoring period. Additionally, the inclusion of top receiving watersheds and top facility discharges provides users with important information that helps pinpoint exceptionally polluting facilities as well watersheds that are receiving high pollutant loads.

#### Response:

EPA has updated the Loading Tool to provide users with the entire set of untransformed or raw DMR data in the Loading Tool, which includes the data requested by the commenter. EPA will provide instructions on how to use this new service.

#### **Comment Excerpt Text:**

Facility Information

The facility information pane within the tool provides quite a bit of useful data about each facility and should continue to be included in the final version of the tool. In particular, we think that the NPDES ID, congressional district, latitude and longitude, and receiving water information are useful for increasing the public's understanding of and ability to utilize the data. While we would also like to see the incorporation of additional data as we have described above, the current design of this section is quite informative.

#### Response:

EPA has update the CSV data download to provide the requested data.

#### **Comment Excerpt Text:**

Advanced Search and Excel Data for Download

Although we occasionally had problems finding facilities and data using the advanced search, when we were in fact able to locate the correct facility the data for download directly into excel was very helpful and could be easily manipulated. The detailed output from the advanced search provides more technical users with a dataset that provides ample facility data and can be easily analyzed. We encourage EPA to continue including this section as well as updating the "download all data" link mentioned earlier to include the same parameters that this output provides.

#### Response:

EPA has enhanced the CSV download feature for the Advanced Search tab of the Loading Tool.

#### **Comment Excerpt Text:**

Conclusion

The DMR tool contains many features that are already very useful and should continue to be incorporated in the final release. In today's political climate where resources are limited and access to state data is increasingly difficult and time-demanding, the DMR tool is an enormous asset to the public. As described above commenters urge EPA to add more data to the tool to help increase transparency and better inform the public about facilities discharging pollutants to surface water. For example, the DMR Loadings Tool can be used to show baseline discharges within the Chesapeake Bay Watershed and which segments are impaired for heavy metals.

Lastly, we urge EPA to continue to evaluate its model for the DMR tool in addition to reviewing ICIS and PCS data to ensure quality and accuracy of the data. The commenters would like to thank EPA for the opportunity to comment on the DMR tool as well as Carey Johnston for meeting with us to discuss some of our questions. We believe that this tool is incredibly useful and that it will help inform the public of what is going into the water across the country, as well as which facilities are the most polluting. This kind of public knowledge is critical to improving the environment and ensuring that polluters are held to strict standards that protect national waterways.

#### Response:

EPA thanks the commenter for their support. With respect to the Chesapeak Bay, EPA has included information from Final Chesapeake Bay TMDL (Appendix Q Detailed Annual Chesapeake Bay TMDL WLAs and LAs). EPA incorporated this data to improve the utility of the tool for tracking discharges in the Chesapeake Bay, which is an Agency priority.<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> See: http://www.epa.gov/reg3wapd/tmdl/ChesapeakeBay/tmdlexec.html.

## Appendix A to the Comment Response Document for the December 2010 Beta Release of the Discharge Monitoring Report (DMR) Pollutant Loading Tool 10 January 2012

This spreadsheet shows the pollutant loading calculations from the paper DMRs submitted by Nancy Evans, Penn. Power and Light (Comment # 27)

### Double Check on DMRs from PPL

The data in this table comes from the December 2010 paper DMR from PPL

														Monitoring Deviad	Monitoring Deried	
	Outfall		Limit Sot	Season	Monitoring	Monitoring	Discharg	Days in	Monthly		Parameter		Monthly			
NPDES ID	Number	Outfall Type	Designator	Number	Start	Fnd		Monitoring		Parameter Description	Code	Qualifier	Ave Conc $(mg/I)$	(kg/period)	(kg/period)	Difference
	Number		Designator	Number	Start	LIIG		Period			Coue		Ave. conc. (mg/L)	Paper DMRs	IT Adv. Search	
PA0008443	050	External	Δ	0	12/1/2010	12/31/2010	Yes	31	8 613	Aluminium Total (as Al)	01105	=	0.35	353 712224	353 7122243	0.00000
PA0008443	050	External	Δ	0	12/1/2010	12/31/2010	Ves	31	8 613	Chlorine Total Residual	50060	_	0.02	20 212127	20 2121271	0.000000
PA0008443	050	External	Δ	0	12/1/2010	12/31/2010	Yes	31	8 613	Iron Total (as Fe)	01045	=	0.94	949 969974	949 9699737	0.000000
PA0008443	050	External	Δ	0	12/1/2010	12/31/2010	Yes	31	8 613	Nitrite plus Nitrate Total 1 det (as N)	00630	=	1 04	1051 030609	1051 030609	0.000000
PA0008443	050	External	A	0	12/1/2010	12/31/2010	Yes	31	8,613	Nitrogen Kieldahl Total (as N)	00625	=	0.65	656.894131	656,8941308	0.000000
PA0008443	050	External	A	0	12/1/2010	12/31/2010	Yes	31	8.613	Nitrogen, Total (as N)	00600	=	1.49	1505.803469	1505.803469	0.000000
PA0008443	050	External	A	0	12/1/2010	12/31/2010	Yes	31	8.613	Oil & Grease	00556	<	1	505.303178	505.3031775	0.000000
PA0008443	050	External	A	0	12/1/2010	12/31/2010	Yes	31	8.613	Solids. Total Suspended	00530	=	- 7	7074.244485	7074.244485	0.000000
PA0008443	052	External	A	0	12/1/2010	12/31/2010	Yes	31	0.662	Aluminum, total (as Al)	01105	=	0.14	10.874608	10.8746078	0.000000
PA0008443	052	External	A	0	12/1/2010	12/31/2010	Yes	31	0.662	Arsenic, total (as As)	01002	<	0.002	0.077676	0.07767577	0.000000
PA0008443	052	External	А	0	12/1/2010	12/31/2010	Yes	31	0.662	Boron, total (as B)	01022	=	0.101	7.845253	7.84525277	0.000000
PA0008443	052	External	А	0	12/1/2010	12/31/2010	Yes	31	0.662	Iron, total (as Fe)	01045	=	0.983	76.355282	76.35528191	0.000000
PA0008443	052	External	А	0	12/1/2010	12/31/2010	Yes	31	0.662	Lithium, total (as Li)	01132	=	0.019	1.475840	1.47583963	0.000000
PA0008443	052	External	А	0	12/1/2010	12/31/2010	Yes	31	0.662	Magnesium, total (as Mg)	00927	=	16.5	1281.650205	1281.650205	0.000000
PA0008443	052	External	А	0	12/1/2010	12/31/2010	Yes	31	0.662	Oil & grease	00556	<	1	38.837885	38.837885	0.000000
PA0008443	052	External	А	0	12/1/2010	12/31/2010	Yes	31	0.662	Solids, total suspended	00530	<	6	233.027310	233.02731	0.000000
PA0008443	052	External	А	0	12/1/2010	12/31/2010	Yes	31	0.662	Strontium, total (as Sr)	01082	=	0.477	37.051342	37.05134229	0.000000
PA0008443	052	External	А	0	12/1/2010	12/31/2010	Yes	31	0.662	Sulfate, total (as SO4)	00945	=	298	23147.379460	23147.37946	0.000000
PA0008443	053	External	А	0	12/1/2010	12/31/2010	Yes	31	0.121	Antimony, total (as Sb)	01097	<	0.5	3.549384	3.54938375	0.000000
PA0008443	053	External	А	0	12/1/2010	12/31/2010	Yes	31	0.121	Cadmium, total (as Cd)	01027	<	0.05	0.354938	0.354938375	0.000000
PA0008443	053	External	А	0	12/1/2010	12/31/2010	Yes	31	0.121	Chloride (as Cl)	00940	=	17.825	253.071061	253.0710614	0.000000
PA0008443	053	External	А	0	12/1/2010	12/31/2010	Yes	31	0.121	Chromium, hexavalent (as Cr)	01032	<	0.01	0.070988	0.070987675	0.000000
PA0008443	053	External	А	0	12/1/2010	12/31/2010	Yes	31	0.121	Iron, total (as Fe)	01045	<	1.5	10.648151	10.64815125	0.000000
PA0008443	053	External	А	0	12/1/2010	12/31/2010	Yes	31	0.121	Lead, total (as Pb)	01051	<	0.15	1.064815	1.064815125	0.000000
PA0008443	053	External	А	0	12/1/2010	12/31/2010	Yes	31	0.121	Mercury, total (as Hg)	71900	<	0.0002	0.001420	0.001419754	0.000000
PA0008443	053	External	А	0	12/1/2010	12/31/2010	Yes	31	0.121	Oil & grease	00556	<	3	21.296303	21.2963025	0.000000
PA0008443	053	External	А	0	12/1/2010	12/31/2010	Yes	31	0.121	Selenium, total (as Se)	01147	<	0.5	3.549384	3.54938375	0.000000
PA0008443	053	External	А	0	12/1/2010	12/31/2010	Yes	31	0.121	Silver, total (as Ag)	01077	<	0.1	0.709877	0.70987675	0.000000
PA0008443	053	External	А	0	12/1/2010	12/31/2010	Yes	31	0.121	Solids, total suspended	00530	=	3	42.592605	42.592605	0.000000
PA0008443	053	External	А	0	12/1/2010	12/31/2010	Yes	31	0.121	Thallium, total (as Tl)	01059	<	0.5	3.549384	3.54938375	0.000000
PA0008443	151	Internal	А	0	12/1/2010	12/31/2010	No	31	0	Chlorine, free available	50064	=		0.000000	0	0.000000
PA0008443	152	Internal	А	0	12/1/2010	12/31/2010	No	31	0	Chlorine, free available	50064	=		0.000000	0	0.000000
PA0008443	153	Internal	А	0	12/1/2010	12/31/2010	Yes	31	0.009	BOD, carbonaceous, 05 day, 20 C	80082	<	6	3.168045	3.168045	0.000000
PA0008443	153	Internal	А	0	12/1/2010	12/31/2010	Yes	31	0.009	Chlorine, total residual	50060	=	1.14	1.203857	1.2038571	0.000000
PA0008443	153	Internal	А	0	12/1/2010	12/31/2010	Yes	31	0.009	Solids, total suspended	00530	<	4	2.112030	2.11203	0.000000

The following data comes from the Advanced Search of the DMR Pollutant Loading Tool

Advanced Search Results Where Monitoring Period=12/01/2010 to 12/31/2010; PermitID=PA0008443; Data used for loading calculations: DMR data only; Non-detects equal to half; Estimation function: Off; Parameter grouping: Off; Nutrient aggregation: Off; Parameter grouping: Off; Parameter grouping: Off; Nutrient aggregation: Off; Parameter grouping: Off																								
NPDES ID	Outfall Number	Monitoring Location Coc	g Limit Se de Designat	et Seas tor Num	on Mo ber	onitoring Monitoring Start End	Days in Monitorin Period	Monthly Ave. Flow [50050] (MGD)	Parameter Description	Parameter Code	Quantity 1 Qualifier	Measurement Quantity 1	Quantity 2 Qualifier	Measurement Quantity 2	Concentration 1 Qualifier	Measurement Concentration 1	Concentration 2 Qualifier	Measurement Concentration 2	Concentration 3 Qualifier	Measurement Concentration 3	Pollutant Load (kg/period)	Non-detect Flag	Measurement Type	Potential Outlier?
PA0008443	50	1	А	0	12	2/1/2010 12/31/2010	) 31	8.613	Aluminum, total (as Al)	1105							=	0.35	=	0.39	353.7122243		Concentration	
PA0008443	50	1	А	0	12	2/1/2010 12/31/2010	) 31	8.613	Chlorine, total residual	50060							=	0.02	=	0.05	20.2121271		Concentration	
PA0008443	50	1	А	0	12	2/1/2010 12/31/2010	) 31	8.613	Iron, total (as Fe)	1045							=	0.94	=	0.96	949.9699737		Concentration	
PA0008443	50	1	А	0	12	2/1/2010 12/31/2010	) 31	8.613	Nitrite plus nitrate total 1 det. (as N)	630							=	1.04			1051.030609		Concentration	
PA0008443	50	1	А	0	12	2/1/2010 12/31/2010	) 31	8.613	Nitrogen, Kjeldahl, total (as N)	625							=	0.65			656.8941308		Concentration	
PA0008443	50	1	A	0	12	2/1/2010 12/31/2010	) 31	8.613	Nitrogen, total (as N)	600							=	1.49			1505.803469		Concentration	
PA0008443	50	1	A	0	12	2/1/2010 12/31/2010	) 31	8.613	Oil & grease	556							<	1	<	1	505.3031775	ND	Concentration	
PA0008443	50	1	А	0	12	2/1/2010 12/31/2010	) 31	8.613	Solids, total suspended	530							=	7	=	9	7074.244485		Concentration	
PA0008443	52	1	А	0	12	2/1/2010 12/31/2010	) 31	0.662	Aluminum, total (as Al)	1105							=	0.14	=	0.18	10.8746078		Concentration	
PA0008443	52	1	А	0	12	2/1/2010 12/31/2010	) 31	0.662	Arsenic, total (as As)	1002							<	0.002	<	0.002	0.07767577	ND	Concentration	
PA0008443	52	1	А	0	12	2/1/2010 12/31/2010	) 31	0.662	Boron, total (as B)	1022							=	0.101	=	0.119	7.84525277		Concentration	
PA0008443	52	1	А	0	12	2/1/2010 12/31/2010	) 31	0.662	Iron, total (as Fe)	1045							=	0.983	=	0.996	76.35528191		Concentration	
PA0008443	52	1	А	0	12	2/1/2010 12/31/2010	) 31	0.662	Lithium, total (as Li)	1132							=	0.019	=	0.02	1.47583963		Concentration	
PA0008443	52	1	А	0	12	2/1/2010 12/31/2010	) 31	0.662	Magnesium, total (as Mg)	927							=	16.5	=	19.3	1281.650205		Concentration	
PA0008443	52	1	А	0	12	2/1/2010 12/31/2010	) 31	0.662	Oil & grease	556							<	1	<	1	38.837885	ND	Concentration	
PA0008443	52	1	А	0	12	2/1/2010 12/31/2010	) 31	0.662	Solids, total suspended	530							<	6	=	10	233.02731	ND	Concentration	
PA0008443	52	1	А	0	12	2/1/2010 12/31/2010	) 31	0.662	Strontium, total (as Sr)	1082							=	0.477	=	0.538	37.05134229		Concentration	
PA0008443	52	1	А	0	12	2/1/2010 12/31/2010	) 31	0.662	Sulfate, total (as SO4)	945							=	298	=	355	23147.37946		Concentration	
PA0008443	53	1	А	0	12	2/1/2010 12/31/2010	) 31	0.121	Antimony, total (as Sb)	1097							<	0.5			3.54938375	ND	Concentration	
PA0008443	53	1	А	0	12	2/1/2010 12/31/2010	) 31	0.121	Cadmium, total (as Cd)	1027							<	0.05	<	0.05	0.354938375	ND	Concentration	
PA0008443	53	1	А	0	12	2/1/2010 12/31/2010	) 31	0.121	Chloride (as Cl)	940							=	17.825			253.0710614		Concentration	
PA0008443	53	1	А	0	12	2/1/2010 12/31/2010	) 31	0.121	Chromium, hexavalent (as Cr)	1032							<	0.01			0.070987675	ND	Concentration	
PA0008443	53	1	А	0	12	2/1/2010 12/31/2010	) 31	0.121	Iron, total (as Fe)	1045							<	1.5	<	1.5	10.64815125	ND	Concentration	
PA0008443	53	1	А	0	12	2/1/2010 12/31/2010	) 31	0.121	Lead, total (as Pb)	1051							<	0.15			1.064815125	ND	Concentration	
PA0008443	53	1	А	0	12	2/1/2010 12/31/2010	) 31	0.121	Mercury, total (as Hg)	71900							<	0.0002	<	0.0002	0.001419754	ND	Concentration	
PA0008443	53	1	А	0	12	2/1/2010 12/31/2010	) 31	0.121	Oil & grease	556							<	3	<	5	21.2963025	ND	Concentration	
PA0008443	53	1	А	0	12	2/1/2010 12/31/2010	) 31	0.121	Selenium, total (as Se)	1147							<	0.5	<	0.5	3.54938375	ND	Concentration	
PA0008443	53	1	А	0	12	2/1/2010 12/31/2010	) 31	0.121	Silver, total (as Ag)	1077							<	0.1			0.70987675	ND	Concentration	
PA0008443	53	1	А	0	12	2/1/2010 12/31/2010	) 31	0.121	Solids, total suspended	530							=	3	=	4	42.592605		Concentration	
PA0008443	53	1	А	0	12	2/1/2010 12/31/2010	) 31	0.121	Thallium, total (as Tl)	1059							<	0.5			3.54938375	ND	Concentration	
PA0008443	151	1	А	0	12	2/1/2010 12/31/2010	) 31	0	Chlorine, free available	50064											0		Concentration	
PA0008443	152	1	А	0	12	2/1/2010 12/31/2010	) 31	0	Chlorine, free available	50064											0		Concentration	
PA0008443	153	1	А	0	12	2/1/2010 12/31/2010	) 31	0.009	BOD, carbonaceous, 05 day, 20 C	80082							<	6			3.168045	ND	Concentration	
PA0008443	153	1	А	0	12	2/1/2010 12/31/2010	) 31	0.009	Chlorine, total residual	50060							=	1.14			1.2038571		Concentration	
PA0008443	153	1	А	0	12	2/1/2010 12/31/2010	) 31	0.009	Solids, total suspended	530							<	4			2.11203	ND	Concentration	

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#### Double Check on DMRs from PPL

The data in this table comes from the December 2010 paper DMR from PPL

NPDES ID	Outfall Number	Outfall Type	Limit Set Designator	Season Number	Monitoring Start	Monitoring End	Discharge (Yes/No)	Days in Monitoring Period	Monthly Ave. Flow [50050] (MGD)	Parameter Description	Parameter Code	Monthly Ave. Quantity Qualifier	Monthly Ave. Quantity (kg)	Monthly Ave. Conc. Qualifier	Monthly Ave. Conc. (mg/L)	Monitoring Period Load (kg/period) Paper DMRs	Monitoring Period Load (kg/period) LT Adv. Search	Difference	Comments
PA0012823	010	External	А	0	12/1/2010	12/31/2010	Yes	31	0.003	BOD, carbonaceous, 05 day, 20 C	80082	<	0.453514739	<	2	7.029478	14.05895692	7.029478	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	010	External	A	0	12/1/2010	12/31/2010	Yes	31	0.003	Chlorine, total residual	50060					0.000000	0	0.000000	
PA0012823	010	External	A	0	12/1/2010	12/31/2010	Yes	31	0.003	Nitrogen, ammonia total (as N)	00610	<	0.453514739	=	0.09	7.029478	14.05895692	7.029478	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	010	External	A	0	12/1/2010	12/31/2010	Yes	31	0.003	Solids, total suspended	00530	<	0.453514739	=	10	7.029478	14.05895692	7.029478	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	011	External	A	0	12/1/2010	12/31/2010	No	31	0	Oil & grease	00556					0.000000	0	0.000000	
PA0012823	011	External	А	0	12/1/2010	12/31/2010	No	31	0	Solids, total suspended	00530					0.000000	0	0.000000	
PA0012823	013	External	А	0	12/1/2010	12/31/2010	Yes	31	3.5	Arsenic, total (as As)	01002			<	0.002	0.410673	0.821345	0.410673	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	013	External	А	0	12/1/2010	12/31/2010	Yes	31	3.5	Cadmium, total (as Cd)	01027			<	0.0002	0.041067	0.0821345	0.041067	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	013	External	А	0	12/1/2010	12/31/2010	Yes	31	3.5	Chromium, total (as Cr)	01034			<	0.002	0.410673	0.821345	0.410673	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	013	External	А	0	12/1/2010	12/31/2010	Yes	31	3.5	Copper, total (as Cu)	01042			<	0.004	0.821345	1.64269	0.821345	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	013	External	A	0	12/1/2010	12/31/2010	Yes	31	3.5	Lead, total (as Pb)	01051			<	0.001	0.205336	0.4106725	0.205336	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	013	External	А	0	12/1/2010	12/31/2010	Yes	31	3.5	Nickel, total (as Ni)	01067			<	0.01	2.053363	4.106725	2.053363	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	013	External	А	0	12/1/2010	12/31/2010	Yes	31	3.5	Selenium, total (as Se)	01147			<	0.0008	0.164269	0.328538	0.164269	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	013	External	А	0	12/1/2010	12/31/2010	Yes	31	3.5	Vanadium, total (as V)	01087			<	0.01	2.053363	4.106725	2.053363	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	013	External	А	0	12/1/2010	12/31/2010	Yes	31	3.5	Zinc, total (as Zn)	01092			<	0.004	0.821345	1.64269	0.821345	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	213	External	А	0	12/1/2010	12/31/2010	Yes	31	3.5	Arsenic, total (as As)	01002			<	0.002	0.410673	0.821345	0.410673	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	213	External	А	0	12/1/2010	12/31/2010	Yes	31	3.5	Cadmium, total (as Cd)	01027			<	0.0002	0.041067	0.0821345	0.041067	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	213	External	А	0	12/1/2010	12/31/2010	Yes	31	3.5	Chlorine, free available	50064			=	0.03	1.026681	1.026	-0.000681	This is a chlorine discharge from a steam plant, so we multiply the
PA0012823	213	External	А	0	12/1/2010	12/31/2010	Yes	31	3.5	Chromium, total (as Cr)	01034			<	0.002	0.410673	0.821345	0.410673	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	213	External	А	0	12/1/2010	12/31/2010	Yes	31	3.5	Copper, total (as Cu)	01042			<	0.004	0.821345	1.64269	0.821345	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	213	External	Y	0	1/1/2010	12/31/2010	Yes	365	3.5	Iron, total (as Fe)	01045			=	0.195	942.890813	942.8908125	0.000000	
PA0012823	213	External	A	0	12/1/2010	12/31/2010	Yes	31	3.5	Lead, total (as Pb)	01051			<	0.001	0.205336	0.4106725	0.205336	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	213	External	A	0	12/1/2010	12/31/2010	Yes	31	3.5	Nickel, total (as Ni)	01067			<	0.01	2.053363	4.106725	2.053363	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	213	External	A	0	12/1/2010	12/31/2010	Yes	31	3.5	Oil & grease	00556			<	5	1026.681250	2053.3625	1026.681250	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	213	External	Α	0	12/1/2010	12/31/2010	Yes	31	3.5	Priority pollutants total effluent	50008				-	0.000000	0	0.000000	
PA0012823	213	External	A	0	12/1/2010	12/31/2010	Yes	31	3 5	Selenium, total (as Se)	01147			<	0.0008	0.164269	0.328538	0.164269	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	213	External	A	0	12/1/2010	12/31/2010	Yes	31	3 5	Solids total suspended	00530			<	6	1232.017500	2464 035	1232.017500	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	213	External	Δ	0	12/1/2010	12/31/2010	Yes	31	3 5	Vanadium total (as V)	01087			<	0.01	2 053363	4 106725	2 053363	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	213	External	Δ	0	12/1/2010	12/31/2010	Yes	31	3 5	Zinc total (as Zn)	01092			<	0.004	0.821345	1 64269	0.821345	ICIS is missing the "<" qualifier, which is noted on the paper DMR
PA0012823	Δ13	External	Δ	0	12/1/2010	12/31/2010	No	31	0	Arsenic total (as As)	01002				0.004	0.000000	0	0.000000	Tele le missing the st qualiter, which is noted on the paper bint
PA0012823	413 //13	External	Δ	0	12/1/2010	12/31/2010	No	31	0	Cadmium total (as Cd)	01022					0.000000	0	0.000000	
PA0012823	413	External	A A	0	12/1/2010	12/31/2010	No	31	0	Chloring, free available	50064					0.000000	0	0.000000	
PA0012823	413	External	~	0	12/1/2010	12/31/2010	No	21	0	Chromium total (as Cr)	01024					0.000000	0	0.000000	
PA0012823	413	External	~	0	12/1/2010	12/31/2010	No	21	0	Copper total (as Cir)	01034					0.000000	0	0.000000	
PA0012823	413	External	~	0	12/1/2010	12/31/2010	No	21	0	Lead total (as Ph)	01042					0.000000	0	0.000000	
PA0012823	415	External	A 	0	12/1/2010	12/31/2010	No	21	0	Nickel total (as Ni)	01051					0.000000	0	0.000000	
PA0012823	415	External	A 	0	12/1/2010	12/31/2010	No	21	0		01007					0.000000	0	0.000000	
PA0012823	415	External	A	0	12/1/2010	12/31/2010	NO	21	0	Colonium total (as Sa)	00550					0.000000	0	0.000000	
PAUU12823	413	External	A	0	12/1/2010	12/31/2010	NO	31	0	Selenium, total (as Se)	01147					0.000000	U	0.000000	
PAUU12823	413	External	A	0	12/1/2010	12/31/2010	NO	31 21	0	Vanadium tatal (as)()	00530					0.000000	U	0.000000	
PAUU12823	413	External	A	0	12/1/2010	12/31/2010	INO No	31 24	0	vanaulum, total (as v)	01087					0.000000	U	0.000000	
PAU012823	413	External	A	U	12/1/2010	12/31/2010	NO	31	U	zinc, totai (as Zh)	01092					0.000000	U	0.000000	

#### The following data comes from the Advanced Search of the DMR Pollutant Loading Tool

Advanced Search Results Where Monitoring Period=12/01/2010 to 12/31/2010; PermitID=PA0012823; Data used for loading calculations: DMR data only; Non-detects equal to half; Estimation function: Off; Parameter grouping: Off; Nutrient aggregation: Off;																									
NPDES ID	Outfall Number	Monitoring Location Cod	g Limit Set de Designator	Seasor Numbe	n Monitorin er Start	ng Monit En	toring Ma nd F	Days in onitoring Period	Monthly Ave. Flow [50050] (MGD)	Parameter Description	Parameter Code	Quantity 1 Qualifier	Measurement Quantity 1	Quantity 2 Qualifier	Measurement Quantity 2	Concentration 1 Qualifier	Measurement Concentration 1	Concentration 2 Qualifier	2 Measurement Concentration 2	2 Concentration 3 Qualifier	Measurement Concentration 3	Pollutant Load (kg/period)	Non-detect Flag Mea	surement Type P	Potential Outlier?
PA001282	3 10	1	А	0	12/1/2010	0 12/31,	/2010	31	0.003	BOD, carbonaceous, 05 day, 20 C	80082	=	0.453514739					=	2			14.05895692		Quantity	
PA001282	3 10	1	А	0	12/1/201	0 12/31,	/2010	31	0.003	Chlorine, total residual	50060											0	Co	oncentration	
PA001282	3 10	1	А	0	12/1/201	0 12/31,	/2010	31	0.003	Nitrogen, ammonia total (as N)	610	=	0.453514739					=	0.09			14.05895692		Quantity	
PA001282	3 10	1	А	0	12/1/201	0 12/31,	/2010	31	0.003	Solids, total suspended	530	=	0.453514739					=	10			14.05895692		Quantity	
PA001282	3 11	1	А	0	12/1/201	.0 12/31,	/2010	31	0	Oil & grease	556											0	Co	oncentration	
PA001282	3 11	1	А	0	12/1/201	.0 12/31,	/2010	31	0	Solids, total suspended	530											0	Co	oncentration	
PA001282	3 13	1	А	0	12/1/201	0 12/31,	/2010	31	3.5	Arsenic, total (as As)	1002							=	0.002			0.821345	C	oncentration	
PA001282	3 13	1	А	0	12/1/2010	0 12/31,	/2010	31	3.5	Cadmium, total (as Cd)	1027							=	0.0002			0.0821345	C	oncentration	
PA001282	3 13	1	А	0	12/1/201	0 12/31,	/2010	31	3.5	Chromium, total (as Cr)	1034							=	0.002			0.821345	C	oncentration	
PA001282	8 13	1	A	0	12/1/2010	0 12/31,	/2010	31	3.5	Copper, total (as Cu)	1042							=	0.004			1.64269	C	oncentration	
PA001282	8 13	1	А	0	12/1/2010	0 12/31,	/2010	31	3.5	Lead, total (as Pb)	1051							=	0.001			0.4106725	Co	oncentration	
PA001282	8 13	1	А	0	12/1/2010	0 12/31,	./2010	31	3.5	Nickel, total (as Ni)	1067							=	0.01			4.106725	Co	oncentration	
PA001282	8 13	1	А	0	12/1/2010	.0 12/31,	./2010	31	3.5	Selenium, total (as Se)	1147							=	0.0008			0.328538	Co	oncentration	
PA001282	8 13	1	A	0	12/1/2010	.0 12/31/	./2010	31	3.5	Vanadium, total (as V)	1087							=	0.01			4.106725	Co	oncentration	
PA001282	3 13	1	A	0	12/1/2010	0 12/31/	/2010	31	3.5	Zinc, total (as Zn)	1092							=	0.004			1.64269	Co	oncentration	
PA001282	3 213	1	A	0	12/1/2010	0 12/31/	/2010	31	3.5	Arsenic, total (as As)	1002							=	0.002			0.821345	C	oncentration	
PA001282	3 213	1	A	0	12/1/2010	0 12/31/	/2010	31	3.5	Cadmium, total (as Cd)	1027							=	0.0002			0.0821345	C	oncentration	
PA001282	3 213	1	A	0	12/1/2010	0 12/31/	/2010	31	3.5	Chlorine, free available	50064							=	0.03	=	0.03	1.026	C	oncentration	
PA001282	3 213	1	A	0	12/1/2010	0 12/31/	/2010	31	3.5	Chromium, total (as Cr)	1034							=	0.002	=	0.002	0.821345	C	oncentration	
PA001282	3 213	1	A	0	12/1/2010	0 12/31/	/2010	31	3.5	Copper, total (as Cu)	1042							=	0.004			1.64269	C	oncentration	
PA001282	3 213	1	Ŷ	0	12/1/2010	0 12/31/	/2010	31	3.5	Iron, total (as Fe)	1045							=	0.195			942.8908125	C	oncentration	
PA001282	3 213	1	A	0	12/1/2010	0 12/31/	/2010	31	3.5	Lead, total (as Pb)	1051							=	0.001			0.4106725	C	oncentration	
PA001282	3 213	1	A	0	12/1/2010	0 12/31/	/2010	31	3.5	Nickel, total (as Ni)	1067							=	0.01		-	4.106/25	C	oncentration	
PA001282	3 213	1	A	0	12/1/2010	0 12/31/	/2010	31	3.5	Oil & grease	556							=	5	=	5	2053.3625		oncentration	
PA001282	3 213	1	A	0	12/1/2010	0 12/31/	/2010	31	3.5	Priority pollutants total effluent	50008								0.0000			0		oncentration	
PA001282	3 213	1	A	0	12/1/2010	0 12/31/	/2010	31	3.5	Selenium, total (as Se)	1147							=	0.0008		0.7	0.328538		oncentration	
PA001282	3 213 > 212	1	A	0	12/1/2010	0 12/31/	/2010	31	3.5	Solids, total suspended	530							=	6	=	8.7	2464.035		oncentration	
PA001282	213	1	A	0	12/1/2010	0 12/31/	/2010	31 21	3.5	Vanadium, total (as V)	1087							=	0.01		0.004	4.106725		oncentration	
PAU01282	5 213 0 412	1	A	0	12/1/2010	0 12/31/	/2010	31 21	3.5	Zinc, total (as Zn)	1092							=	0.004	=	0.004	1.64269		oncentration	
PA001282	$\begin{array}{c} 413 \\ 112 \end{array}$	1	A	0	12/1/2010	0 12/31/	/2010	31 21	0	Arsenic, total (as As)	1002											0		oncentration	
PAU01282	$\begin{array}{c} 413 \\ 112 \end{array}$	1	A	0	12/1/2010	0 12/31/	/2010	31 21	0	Chloring, free available	1027											0		oncentration	
PAUU1282	413	1	A	0	12/1/2010	0 12/31/	/2010	31 21	0	Chromium total (as Cr)	1024											0		oncentration	
PAUU1282	$\begin{array}{c} 413 \\ 112 \end{array}$	1	A	0	12/1/2010	0 12/31/	/2010	31 21	0	Connor, total (as Cr)	1042											0		oncentration	
PA001282	$\begin{array}{c} 415 \\ 112 \end{array}$	1	A	0	12/1/2010	0 12/31/	/2010	21	0	Load total (as Cu)	1042											0		oncentration	
PA001282	2 /12	1 1	A 	0	12/1/2010	0 12/31/	/2010	31	0	Nickel total (as Ni)	1067											0		oncentration	
PΔ001202	, 413 ( /12	1	A 	0	12/1/2010	0 12/31/	/2010	21	0		556											0		oncentration	
PΔ001202	, 413 ( /12	1	A 	0	12/1/2010	0 12/31/	/2010	21	0	Selenium total (as Se)	11/7											0		oncentration	
DA001202	2 /112	1	A ^	0	12/1/2010	0 12/31/	/2010	21	0	Solids total suspended	520											0		oncentration	
FA001202	, 415 () /12	1 1	A 	0	12/1/2010	0 12/31/	/2010	31	0	Vanadium total (as V)	1087											0		oncentration	
DAUU1202	2 /12	1	A 	0	12/1/2010	0 12/31/ 0 12/31	/2010	21	0	Zinc total (as Zp)	1007											0		oncentration	
FAUUIZ6Z	9 413	T	A	0	12/1/2010	.0 12/51/	./ 2010	21	0	2000, total (dS 20)	1092											0		Uncentration	

# Comments

s missing the "<" qualifier, which is noted on the paper DMR s missing the "<" qualifier, which is noted on the paper DMR s missing the "<" qualifier, which is noted on the paper DMR s missing the "<" qualifier, which is noted on the paper DMR s missing the "<" qualifier, which is noted on the paper DMR s missing the "<" qualifier, which is noted on the paper DMR s missing the "<" qualifier, which is noted on the paper DMR s missing the "<" qualifier, which is noted on the paper DMR s missing the "<" qualifier, which is noted on the paper DMR s missing the "<" qualifier, which is noted on the paper DMR s missing the "<" qualifier, which is noted on the paper DMR is a chlorine discharge from a steam plant, so we multiply the Number of Days by 2/24 s missing the "<" qualifier, which is noted on the paper DMR s missing the "<" qualifier, which is noted on the paper DMR



PPL Montour, LLC 18 McMichael Road P.O. Box 128 Washingtonville, PA 17884-0128 Tel. 570.437.2081 www.pplweb.com

Cc: EPA, Region III DJ Murphy, GENPL6 Attn: N. Evans and P. Renshaw K. Maylath MONPT J. Tripoli MONPT

January 21, 2011

DEP Water Management Attn: Operations Manager 208 West Third Street, Suite 101 Williamsport, PA 17701-6338

**Operations Manager:** 

PPL MONTOUR, LLC NPDES PERMIT NO. PA0008443 December 2010

Attached is monthly discharge monitoring report for December 2010. There were no permit excedance during December 2010.

If you have any questions on this report, please contact John Tripoli, Safety, Health and Environmental Compliance Manager at (570) 437-1205 or Kathy Maylath, Compliance Professional at (570) 437-1362.

Very truly yours, nolMuncol

Michael G. Munroe Manager-Fossil Generation Assets PPL Montour, LLC

Attachment KM/cak/700N-04 DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME: ADDRESS:	PPL Montour LLC Two North Ninth Street Allentown, PA 18101-1179	PI	PA0008443 ERMIT NUMBER	ſ	DISCH	050-A IARGE NUMBER	DMR Mailing ZIP CODE: 17884-0128 MAJOR (SUBR 04)
FACILITY:	PPL MONTOUR LLC	ſ	MONI	TORI	ING PE		
LOCATION:	18 MCMICHAEL RD	ł		1			External Outfall
	WASHINGTONVILLE, PA 17884-0128						
ATTN: Daniel Crispell/SuprHS&E		FROM	12/01/2010	T	го	12/31/2010	No Discharge

PARAMETER		QUAN	TITY OR LOADING	•	QI	UALITY OR CONC	ENTRATION		NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Temperature, water deg. fahrenheit	SAMPLE MEASUREMENT	****	*****	*****	*****	40	51		0	31/31	IMERSNI
00011 1 0 Effluent Gross	PERMIT REQUIREMENT	****	*****	*****	****	Req. Mon. MO AVG	Req. Mon. DAILY MX	deg F		Daily	IMERSN
рН	SAMPLE MEASUREMENT	****	*****	*****	7.1	*****	7.6		0	31/31	GRAR
00400 1 0 Effluent Gross	PERMIT REQUIREMENT	***	*****	*****	6 MINIMUM	*****	9 MAXIMUM	SU		Daily	GRAB
Solids, total suspended	SAMPLE MEASUREMENT	*****	*****	*****	*****	7	9		0	4/31	Ссыладя
00530 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	******	*****	*****	30 MO AVG	100 DAILY MX	mg/L.		Weekly	COMP24
Oil & grease	SAMPLE MEASUREMENT	****	****	*****	****	۷ (	2		0	1/31	GRAR
00556 1 0 Effluent Gross	PERMIT REQUIREMENT	****	***	*****	****	15 MO AVG	20 DAILY MX	mg/L		Monthly	GRAB
Nitrogen, total (as N)	SAMPLE MEASUREMENT	****	*****	*****	*****	1.49	*****		0	2/31	1.14 1.23
00600 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	****	*****	*****	Req. Mon. MO AVG	****	mg/L		Monthly	CALCTD
Nitrogen, Kjeldahl, total (as N)	SAMPLE MEASUREMENT	*****	*****	*****	*****	0.65	*****		0	2/31	Card & 74
00625 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	****	*****	****	Req. Mon. MO AVG	*****	mg/L		Twice Per Month	COMP24
Nitrite plus nitrate total 1 det. (as N)	SAMPLE MEASUREMENT	*****	****	*****	*****	1.04	*****		0	2/31	1-22.024
00630 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	****	Req. Mon. MO AVG	***	mg/L		Twice Per Month	COMP24

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction of supervision in accordance with a system designed to assure that qualified personale property gather and evaluate the information submitted. Read on my invince of the person are programs then govern	unt.	TEL	EPHONE	DATE
D. J. Mussler, VP/COC	system, or those persons directly responsible for gathering the pleson or plesons with inauge are to the best of my knowledge and belief, true, accurate, and complete. I are aware that there are significant penalizes for submitting false information, including the possibility of fine and imprisonment for knowing	Manuel	570 4	+37-2081	1/21/2011
	violations.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA Code	NUMBER	MM/DD/YYYY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

THE DISCHARGE OF CLAM-TROL-1 AND CLAM-TROL-2 AT DETECTABLE LEVELS ARE NOT AUTHORIZED BY THIS PERMIT. THE PERMIT LIMIT FOR CLAM-TROL 1 & 2 IS "NON DETECT".

**DISCHARGE MONITORING REPORT (DMR)** 

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME:	PPL Montour LLC
ADDRESS:	Two North Ninth Street Allentown, PA 18101-1179
FACILITY:	PPL MONTOUR LLC
LOCATION:	18 MCMICHAEL RD WASHINGTONVILLE, PA 17884-0128

ATTN: Daniel Crispell/Supr--HS&E

PA0008443	050-A
PERMIT NUMBER	DISCHARGE NUMBER

	MONITORING PERIOD				
	MM/DD/YYYY		MM/DD/YYYY		
FROM	12/01/2010	То	12/31/2010		

DMR Mailing ZIP CODE: 17884-0128 MAJOR (SUBR 04) 050 DETENTION BASIN OUTFALL External Outfall

No Discharge

PARAMETER		QUANTITY OR LOADING QUALITY OR			UALITY OR CONC				FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Iron, total (as Fe)	SAMPLE MEASUREMENT	*****	*****	*****	*****	0.94	0.96		0	2/31	COMP24
01045 1 0 Effluent Gross	PERMIT REQUIREMENT	******	*****	*****	*****	1.7 MO AVG	3.4 DAILY MX	mg/L		Twice Per Month	COMP24
Aluminum, total (as Al)	SAMPLE MEASUREMENT	****	****	*****	****	0,35	0.39		0	2/31	COMP24
01105 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	.56 MO AVG	1.1 DAILY MX	mg/L		Twice Per Month	COMP24
CLAMTROL CT-1, TOTAL WATER	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****			~~sausalasa		"Processing and the second
04251 SC 0 See Comments	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	.1 DAILY MX	mg/L		Daily	GRAB
Betz clam-trol CT-2	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	estanometere His		-material	water the second	- Constant of the second s
49886 SC 0 See Comments	PERMIT REQUIREMENT	*****	****	*****	*****	*****	DAILY MX	mg/L		Daily	GRAB
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	8,613	15,840		*****	*****	*****	*****	0	CONTINUOUS	METER
50050 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. MO AVG	Req. Mon. DAILY MX	Mgal/d	****	****	****	*****		Continuous	METER
Chlorine, total residual	SAMPLE MEASUREMENT	****	*****	*****	*****	0.02	0.05		G	5/31	GRAZ
50060 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	.08 MO AVG	.25 INST MAX	mg/L		Weekly	GRAB



COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

THE DISCHARGE OF CLAM-TROL-1 AND CLAM-TROL-2 AT DETECTABLE LEVELS ARE NOT AUTHORIZED BY THIS PERMIT. THE PERMIT LIMIT FOR CLAM-TROL 1 & 2 IS "NON DETECT".

文 CLAM-TROL WHS NOT USED DURING DEC. 2010.

DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME:	PPL Montour LLC
ADDRESS:	Two North Ninth Street Allentown, PA 18101-1179
FACILITY:	PPL MONTOUR LLC
LOCATION:	18 MCMICHAEL RD WASHINGTONVILLE, PA 17884-0128

ATTN: Daniel Crispell/Supr--HS&E

PA0008443	052-A
PERMIT NUMBER	DISCHARGE NUMBER

	MONITORING PERIOD				
	MM/DD/YYYY		MM/DD/YYYY		
FROM	12/01/2010	то	12/31/2010		

DMR Mailing ZIP CODE: 17884-0128 MAJOR (SUBR 04) 052-STORM WATER BASIN External Outfall

No Discharge

PARAMETER		QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE	
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			¥ 8 5 Nove
Specific conductance	SAMPLE MEASUREMENT	*****	*****	*****	*****	827	914		0	2/-2.	1/27.20
00095 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	****	Req. Mon. MO AVG	Req. Mon. DAILY MX	umho/cm		Twice Per	GRAB
рН	SAMPLE MEASUREMENT	*****	****	*****	7.1	*****	7.8		0	311.21	C.A.102
00400 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	6 MINIMUM	*****	9 MAXIMUM	SU		Daily	GRAB
Solids, total suspended	SAMPLE MEASUREMENT	*****	*****	*****	****	46	10		0	4/21	C. Anil
00530 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	30 MO AVG	100 DAILY MX	mg/L	N	. <u>191</u> Weekly	COMP24
Oil & grease	SAMPLE MEASUREMENT	*****	****	*****	*****	2	4		0	1/2:	1.03.4
00556 1 0 Effluent Gross	PERMIT REQUIREMENT	****	*****	*****	*****	15 MO AVG	20 DAILY MX	mg/L		Monthly	GRAB
Calcium, total (as Ca)	SAMPLE MEASUREMENT	****	*****	*****	*****	126	145		0	2/21	C
00916 1 0 Effluent Gross	PERMIT REQUIREMENT	****	*****	*****	*****	Req. Mon. MO AVG	Req. Mon. DAILY MX	mg/L		Twice Per	COMP24 COMP24
Magnesium, total (as Mg)	SAMPLE MEASUREMENT	*****	*****	*****	*****	16.5	19 2		0	2/	d
00927 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	Req. Mon. MO AVG	Req. Mon. DAILY MX	mg/L		Twice Per	COMP24
Sulfate, total (as SO4)	SAMPLE MEASUREMENT	****	*****	*****	****	798			0	2/4	and the second
00945 1 0 Effluent Gross	PERMIT REQUIREMENT	****	****	*****	*****	Req. Mon. MO AVG	Req. Mon. DAILY MX	mg/L	-960 <i>1</i> *	/ ≥/ Twice Per Month	COMP24

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel property gather and		TE	EPHONE	DATE 1
D. J. Murphy, VP/COO	evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete 1 am aware that there are significant penalities for submitting fails information building the submitting the submitting tables.	Munlog	570 4	37-2081	1/21/2011
TYPED OR PRINTED	violations.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA Code	NUMBER	MM/DD/YYYY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME:	PPL Montour LLC
ADDRESS:	Two North Ninth Street Allentown, PA 18101-1179
FACILITY:	PPL MONTOUR LLC
LOCATION:	18 MCMICHAEL RD WASHINGTONVILLE, PA 17884-0128

ATTN: Daniel Crispell/Supr--HS&E

PA0008443	052-A
PERMIT NUMBER	DISCHARGE NUMBER

	MONIT	ORING	PERIOD
	MM/DD/YYYY		MM/DD/YYYY
FROM	12/01/2010	то	12/31/2010

DMR Mailing ZIP CODE:	17884-0128
MAJOR	
(SUBR 04)	
052-STORM WATER BASIN	

External Outfall

No Discharge

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION					FREQUENCY OF ANALYSIS	SAMPLE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS	]		
Arsenic, total (as As)	SAMPLE MEASUREMENT	*****	*****	*****	*****	40.002	20.002		0	2/31	Concern
01002 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	Req. Mon. MO AVG	Req. Mon. DAILY MX	mg/L		Twice Per Month	COMP24
Boron, total (as B)	SAMPLE MEASUREMENT	****	*****	*****	*****	0.101	0.119		0	2/21	COMP24
01022 1 0 Effluent Gross	PERMIT REQUIREMENT	****	****	*****	*****	Req. Mon. MO AVG	Req. Mon. DAILY MX	mg/L		Twice Per Month	COMP24
Iron, total (as Fe)	SAMPLE MEASUREMENT	*****	*****	*****	*****	0.983	0.996		0	2/21	Constant
01045 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	Req. Mon. MO AVG	Req. Mon. DAILY MX	mg/L		Twice Per Month	COMP24
Strontium, total (as Sr)	SAMPLE MEASUREMENT	*****	*****	*****	*****	0.477	0.538		0	2/31	Carezii
01082 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	****	Req. Mon. MO AVG	Req. Mon. DAILY MX	mg/L		Twice Per Month	COMP24
Aluminum, total (as Al)	SAMPLE MEASUREMENT	*****	****	*****	*****	0.140	0.180	1	0	2/31	COMORIA
01105 1 0 Effluent Gross	PERMIT REQUIREMENT	****	*****	*****	*****	1.1 MO AVG	2.2 DAILY MX	mg/L		Monthly	COMP24
Lithium, total (as Li)	SAMPLE MEASUREMENT	****	****	*****	*****	0.019	0.020		0	2/31	en salt 7 si
01132 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	Req. Mon. MO AVG	Req. Mon. DAILY MX	mg/L.		Twice Per Month	COMP24
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	0.662	9.72		****	*****	*****	*****	0	51/31	1. 12 12
50050 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. MO AVG	Req. Mon. DAILY MX	Mgal/d	****	*****	*****	*****		Daily	WEIR

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information exhinition.	Sailla	TEI	EPHONE	DATE	
D. J. Murphy, VP/COO	system, or those persons directly responsible for gathering the information the information submitted is, system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I an aware that there are significant penalities for submitting fails information, including the brosshiftly of fine and imprisonment for knowledge.	Montendo	570 437-2081		1/21/2011	
TYPED OR PRINTED	violations.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA Code	NUMBER	MM/DD/YYYY	

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Form Approved OMB No. 2040-0004

DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME:	PPL Montour LLC
ADDRESS:	Two North Ninth Street Allentown, PA 18101-1179
FACILITY:	PPL MONTOUR LLC
LOCATION:	18 MCMICHAEL RD WASHINGTONVILLE, PA 17884-0128

ATTN: Daniel Crispell/Supr--HS&E

PERMIT NUMBER	
PA0008443	053-A

	MM/DD/YYYY		MM/DD/YYYY								
FROM	12/01/2010	То	12/31/2010								

DMR Mailing ZIP	CODE:	17884-0128
MAJOR		

(SUBR 04) 053 FLUE GAS DESULFURIZATION OUTFALL External Outfall

No Discharge

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION					FREQUENCY OF ANALYSIS	SAMPLE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
рН	SAMPLE MEASUREMENT	***	*****	*****	8.2	*****	8.4		0	31/31	Call DE
00400 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	6 MINIMUM	*****	9 MAXIMUM	SU		Daily	GRAB
Solids, total suspended	SAMPLE MEASUREMENT	****	*****	*****	*****	3	4		0	4/21	100024
00530 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	****	10 MO AVG	20 DAILY MX	mg/L		Weekly	COMP24
Oil & grease	SAMPLE MEASUREMENT	*****	*****	*****	***	<i>i</i> 3	4.5		0	4/31	GLAB
00556 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	15 MO AVG	20 DAILY MX	mg/L		Weekly	GRAB
Chloride (as Cl)	SAMPLE MEASUREMENT	****	*****	*****	*****	17,825	*****	1	0	4/31	Consol 4
00940 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	****	Req. Mon. MO AVG	***	mg/L		Weekty	COMP24
Cadmium, total (as Cd)	SAMPLE MEASUREMENT	*****	*****	****	****	20.05	20.05		0	4/31	COMPIN
01027 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	.24 MO AVG	.37 DAILY MX	mg/L	1	Weekly	COMP24
Chromium, hexavalent (as Cr)	SAMPLE MEASUREMENT	****	*****	*****	*****	40.010	****		0	1/21	GUAB
01032 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	****	****	****	Req. Mon. MO AVG	****	mg/L.	1	Monthly	GRAB
Iron, total (as Fe)	SAMPLE MEASUREMENT	*****	*****	*****	****	41.5	e1.5		0	4/31	Con un 2 1
01045 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	****	*****	****	5 MO AVG	7.5 DAILY MX	mg/L		Weekly	COMP24

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accurdance with a system designed to assure that qualified personnel properly gather and relation the information equivalent to the state of the state of the system of the state of		TEI	EPHONE	DATE
D. J. Murphy, VP/COO	evaluate the information summittee, based on my induity of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I an aware that there are significant renalities for a submitting fails information including the possibility of free and imprivatement for provide	MyUlulop	570 437-2081		1/21/2011
<u>Eastern Fossil &amp; Hydro</u> TYPED OR PRINTED	violations.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA Code	NUMBER	MM/DD/YYYY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Form Approved OMB No. 2040-0004 DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME: ADDRESS:	PPL Montour LLC Two North Ninth Street Allentown, PA 18101-1179	PA0008443 053-A PERMIT NUMBER DISCHARGE NUMBER				DMR Mailing ZIP CODE: 17884-0128 MAJOR
FACILITY:	Y: PPL MONTOUR LLC		MONITORING PERIOD			(SUBR 04) 053 FLUE GAS DESULFURIZATION OUTFALL
LUCATION:	WASHINGTONVILLE, PA 17884-0128	[	MM/DD/YYYY		MM/DD/YYYY	External Outfall
ATTN: Danie	Crispell/SuprHS&E	FROM [	12/01/2010	∫тс	12/31/2010	No Discharge

PARAMETER		QUAN	TITY OR LOADING	;	Q	UALITY OR CON	ENTRATION		NO. EX	FREQUENCY OF ANALYSIS	SAMPLE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Lead, total (as Pb)	SAMPLE MEASUREMENT	*****	*****	*****	****	£0,150	***		0	4/31	CONIP24
01051 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	Req. Mon. MO AVG	****	mg/L.		Monthly	COMP24
Thallium, total (as TI)	SAMPLE MEASUREMENT	*****	*****	****	*****	+0.500	*****		0	4/31	Course 2.4
01059 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	Req. Mon. MO AVG	****	mg/L		Monthly	COMP24
Silver, total (as Ag)	SAMPLE MEASUREMENT	*****	*****	*****	*****	20.100	***		0	4/31	CAU1024
01077 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	***	*****	*****	Req. Mon. MO AVG	****	mg/L		Monthly	COMP24
Antimony, total (as Sb)	SAMPLE MEASUREMENT	****	*****	*****	*****	20.500	****		0	4/31	10:412.4
01097 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	Req. Mon. MO AVG	*****	mg/L		Monthly	COMP24
Selenium, total (as Se)	SAMPLE MEASUREMENT	*****	*****	*****	*****	20.50	20.50		0	4/31	1000024
01147 1 0 Effluent Gross	PERMIT REQUIREMENT	****	*****	*****	****	3.4 MO AVG	5.3 DAILY MX	mg/L		Weekly	COMP24
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	0.121	0.241		*****	*****	*****	*****	0	31/31	METER
50050 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. MO AVG	Req. Mon. DAILY MX	Mgal/d	*****	*****	*****	*****		Daily	METER
Mercury, total (as Hg)	SAMPLE MEASUREMENT	****	****	*****	*****	40.0007	20.000Z		0	4/21	CASEP721
71900 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	****	.027 MO AVG	.043 DAILY MX	mg/L		Weekly	COMP24

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information systemitief. Based on my invariance that aparticle of the second system and the system of the second s	Carilla.	TEI	EPHONE	DATE
D. J. Murphy, VP/COO	system, or those persons directly responsible for gathering the information, the information submitted is, system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I are aware that there are significant penalities for submitting fails information, including the possibility of fine and improvement for knowing.	Monulor	570 4	37-2081	1/21/2011
TYPED OR PRINTED	violations.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA Code	NUMBER	MM/DD/YYYY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME: ADDRESS: FACILITY:	PPL Montour LLC Two North Ninth Street Allentown, PA 18101-1179 PPL MONTOUR LLC		PI	PA0008443 ERMIT NUMBER		151-A		DMR Mailing MAJOR (SUBR 04)	ZIP CO	DE: 17884	4-0128
ATTN: Danie	18 MCMICHAEL RD WASHINGTONVILLE, PA 17 I Crispell/SuprHS&E	7884-0128	FROM	MM/DD/YYYY 12/01/2010	то	MM/DD/YYYY 12/31/2010		DRAIN/OVEF Internal Outfa	RFLW/U≉ ∥	41 COOL TOV No D	V BAS ischarge
1	PARAMETER		QUANTITY	OR LOADING		QUALITY	Y OR CONCENTRATION	998 Mala Mandala an	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE

PARAMETER		QUAN				UALITY OR CONC	ENTRATION		EX	OF ANALYSIS	TYPE	No. of Lot, No.
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS		:	1.1.7 800	and the second se
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	maaana K	****		****	*****	****	*****	~* alacami00409		**************************************	
50050 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. MO AVG	****	Mgal/d	*****	*****	****	*****		Daily	ESTIMA	Second second second
Chlorine, free available	SAMPLE MEASUREMENT	*****	****	*****	****	romanina Fi	Streamanner		"castility"	managan K	· · · · · · · · · · · · · · · · · · ·	and the second second
50064 1 0 Effluent Gross	PERMIT REQUIREMENT	****	****	*****	****	.2 DAILY MX	.5 INST MAX	mg/L		Daily	GRAB	and the second second

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and mathematical structures are assured as a system designed to assure that a system of the system of		TEI	EPHONE	DATE
D. J. Murphy, VP/COO	variance use information submittee. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible (or gathering the uniformation, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I an aware that there are significant penalizes for submitting false information, including the possibility of fine and impressonment for knowing	MA Munelog	570 4	37-2081	1/21/2011
	10.60.0015.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA Code	NUMBER	MM/DD/YYYY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

#### \* NO DRAIN OVERFLOW FROM UNIT # 1 COOLING TOWER BASIN DURING DEC. 2010.

EPA Form 3320-1 (Rev.01/06) Previous editions may be used.

DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME: ADDRESS: FACILITY:	PPL Montour LLC Two North Ninth Street Allentown, PA 18101-1179 PPL MONTOUR LLC	)	P	PA0008443 ERMIT NUMBER		152-A ISCHARGE NUMBER		DMR Mailing MAJOR (SUBR 04)		DE: 178	384-0128	3
ATTN: Danie	18 MCMICHAEL RD WASHINGTONVILLE, PA I Crispell/SuprHS&E	17884-0128	FROM	MM/DD/YYYY 12/01/2010	то	MM/DD/YYYY 12/31/2010		Internal Outfal	rlvv/07	No	OW BAS	, irge
	PARAMETER		QUANTITY	OR LOADING		QUALITY	Y OR CONCENTRATION		NO. FX	FREQUENC	Y SA	MPLE

FARAWETER		·····		E)						OF ANALYSIS	TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS	1		
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	ry concentration and the second	*****		****	*****	****	*****	-	t.	
50050 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. MO AVG	*****	Mgal/d	*****	*****	*****	******		Daily	ESTIMA
Chlorine, free available	SAMPLE MEASUREMENT	*****	****	*****	****	n, ann an	-contactions	40.000000000000	• And and appendix		an the second
50064 1 0 Effluent Gross	PERMIT REQUIREMENT	****	****	*****	****	.2 DAILY MX	.5 INST MAX	mg/L		Daily	GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my innoire, of the person creaters who may are the		TEL	EPHONE	DATE
Eastern Fossil & Hydro	system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalities for submitting false information, including the possibility of fine and imprisonment for knowing in	MyMundoy	570 4	37-2081	1/21/2011
TYPED OR PRINTED	violations.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA Code	NUMBER	MM/DD/YYYY
COMMENTS AND EXPLANATION OF ANY VIOLATIC	NIC (Defense of the track of th			I	

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

NO DRAIN OVER FLOW FROM UNIT # 2 COOLING TOWER BASIN DURING DEC. 2010.

÷.

DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME		PPL Montour LLC
ADDR	ESS:	Two North Ninth Street Allentown, PA 18101-1179
FACIL	ITY:	PPL MONTOUR LLC
LOCA	TION:	18 MCMICHAEL RD WASHINGTONVILLE, PA 17884-0128

ATTN: Daniel Crispell/Supr--HS&E

PA0008443	153-A
PERMIT NUMBER	DISCHARGE NUMBER
MONITO	

	MM/DD/YYYY		MM/DD/YYY
FROM	12/01/2010	то	12/31/2010

DMR Mailing ZIP CODE: 17884-0128 MAJOR (SUBR 04) 153 STP DISCHARGE TO SW BASIN Internal Outfall

No Discharge

PARAMETER		QUAN	QUANTITY OR LOADING			UALITY OR CONC	ENTRATION		NO. EX	FREQUENCY OF ANALYSIS	SAMPLE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS	1		
рН	SAMPLE MEASUREMENT	*****	*****	*****	6.8	***	7.4		0	31/31	GRAB
00400 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	***	*****	6 MINIMUM	*****	9 MAXIMUM	SU		Daily	GRAB
Solids, total suspended	SAMPLE MEASUREMENT	*****	*****	*****	*****	44	*****		0	1/21	CAMPL
00530 1 0 Effluent Gross	PERMIT REQUIREMENT	****	*****	*****	****	30 MO AVG	*****	mg/L		Monthly	COMP-6
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	0.009	0.026		*****	*****	****	*****	0	31/31	LIEIR
50050 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. MO AVG	Req. Mon. DAILY MX	Mgal/d	*****	****	*****	*****		Daily	WEIR
Chlorine, total residual	SAMPLE MEASUREMENT	*****	****	*****	*****	1.14	*****		0	31/31	GRAR
50060 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	****	*****	****	Req. Mon. MO AVG	****	mg/L		Five Per Week	GRAB
Coliform, fecal general	SAMPLE MEASUREMENT	*****	*****	*****	****	15	*****		0	1/31	GR AB
74055 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	***	2000 MO GEOMN	****	#/100mL		Monthly	GRAB
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	*****	*****	*****	*****	26	*****		0	1/31	CONDE
80082 1 0 Effluent Gross	PERMIT REQUIREMENT	****	*****	*****	*****	25 MO AVG	*****	mg/L		Monthly	COMP-6

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information systemized Based on my invariance that approach to penalty of the approach.	Legel A	TEL	EPHONE	DATE
D. J. Murphy, VP/COO	system, or those menois districtly responsible for gathering the information, the information submitted is, in the best of my knowledge and belief, rule, accurate, and complete. I an aware that there are significant penalties for submitting fails information, including the possibility of fine and imprisonment for knowline.	Monulor	570 4	37-2081	1/21/2011
TYPED OR PRINTED	violations.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA Code	NUMBER	MM/DD/YYYY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

THIS OUTFALL FOR THE STP WAS PREVIOUSLY NAMED 051.

Form Approved OMB No. 2040-0004

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Signa	ature:	MAN	Lulog	Date	e: 1/21/2011	Telephon	e: (570) 437	-1200

NPDES Permit PA0008443

**Usage Rate** 

Outfall: 001

**Usage Rate** 

Derry and DelewareTownships, Montour and Northumberland County

Nalco Trasar

3DT121

500 lbs/day

**Usage Rate** 

**PPL Montour LLC** 

Additive Name:

Allowable Usage

Rate:

DAY

System (i.e. cooling, boiler, etc) in which the additive is used: Cooling 240 Warra

Nalco Sure-Cool

1393

72 lbs/day per unit

(2 units)

**Usage Rate** 

DISCHARGE MONITORING REPORT – CHEMICAL ADDITIVES	
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**Usage Rate** 

John "

**Usage Rate** 

2010

Usage Rate

10DWatershed
PPL Martins Creek, LLC 6605 Foul Rift Road Bangor, PA 18013-4857 Tel. 610.498.2282 Fax 610.498.6014 www.pplweb.com



January 20, 2010

PA DEPARTMENT OF ENVIRONMENTAL PROTECTION WATER MANAGEMENT PROGRAM Northeast Regional Office 2 Public Square Wilkes-Barre, PA 18711-0790

### MARTINS CREEK STEAM ELECTRIC STATION DECEMBER DISCHARGE MONITORING REPORT NPDES PERMIT NO. PA 0012823

Attached is the Discharge Monitoring Report from Martins Creek Steam Electric Station for December 2010. Monitoring was conducted in accordance with the requirements contained in the new NPDES permit effective January 1, 2010. No exceedances of permit limits occurred during the month.

As of September 9, 2009 there is no longer any discharge at Outfall 413. All precipitation falling within Ash Basin 4 is being pumped to the IWTB.

If you have any questions on this report, please do not hesitate to call Steve Holler at (610) 498-6210.

Very truly yours,

Steven E. Hollen

Steven E. Holler, PE Senior Engineer PPL Martins Creek, LLC

SEH/cjc By certified mail

Attachment cc: Molly A. Clay

- MCKPT

NPDES Enforcement Branch (3WP42) Office of Permits & Enforcement Water Protection Division US EPA – Region III 1650 Arch Street Philadelphia, PA 19103-2029



#### COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER STANDARDS AND FACILITY REGULATION

# SUPPLEMENTAL LABORATORY ACCREDITATION FORM<sup>1</sup>

Permittee Name: PPL	Martins Creek, LLC									
Address: <u>Marti</u>	ns Creek SES									
<u>6605</u>	Foul Rift Road									
Bang	or, PA 18013-4857		·····							
PE		MONITORING PERIOD Year/Month/Day								
	PA 0012823	10	12	01	то	10	12	31		
PARAMETER	ANALYSIS METHOD			18				<b>D</b> <sup>2</sup>		
Flow	NA	Ma	rtins Creek	Plant		48	B-00810	N.		
Total Residual Chlorir	e EPA 330.5	Martins Creek Plant				48-00810				
рН	EPA 150.1	Martins Creek Plant				48-00810				
Dissolved Oxygen	EPA 360.1	Ма	rtins Creek	Plant		48-00810				
Temperature	EPA 170.1	Ma	rtins Creek	Plant		48-00810				
Free Available Chlorin	e EPA 330.5	Mai	tins Creek	Plant		48	-00810			
TSS	EPA 160.2	PPL Syst	em Chemica	Laboratory		40	-00568			
Oil & Grease	EPA 1644 Rev A	PPL Syst	em Chemica	Laboratory		40	-00568			
Ammonia -N (NH3-N)	EPA 350.1	Benchmark Analytical Laboratory				39	-00401			
Fecal Coliform	SM 20 9222D	Benchmark Analytical Laboratory				39	-00401			
CBOD	SM 20 5210B	Benchma	rk Analytical	Laboratory		39-00401				

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, 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 possibly of fine and imprisonment for knowing violations.

Name/Title	Principal	Executive	Officer
------------	-----------	-----------	---------

Phone: 610-498-6200

Signature of Principal Executive Officer or Authorized Agent Steven E. Holler

Dennis J Murphy - VP PPL Generation, LLC	Date:	January 19,	2011
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<sup>1</sup> Submit this form with each Discharge Monitoring Report (DMR), Annual Report or Recordkeeping and Reporting Form, where sample results are submitted to the Department for compliance purposes.

<sup>2</sup> For parameter(s) covered under accreditation-by-rule, submit the lab's registration number in lieu of an accreditation number.



#### COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER STANDARDS AND FACILITY REGULATION

# SUPPLEMENTAL LABORATORY ACCREDITATION FORM<sup>1</sup>

Permittee Name:	PPL Martins	s Creek, LLC									
Address:	Martins Cre	ek SES									
	6605 Foul F	Rift Road									
	<u>Bangor, PA</u>	18013-4857									
	PERMIT	NUMBER	MONITORING PERIOD Year/Month/Day								
	PA 00	12823	10	12	01	то	10	12	31		
PARAME	ANALYSIS METHOD		LAB NAM	IE		LABI	D NUMBE	R <sup>2</sup>			
Total Arse	Total Arsenic EPA 200.7				al Laboratory		4	0-00568			
Total Cadr	Total Cadmium EPA 200.7 PPL System Ch				al Laboratory		40-00568				
Total Chror	nium	EPA 200.7	PPL System Chemical Laboratory				40-00568				
Total Cop	per	EPA 200.7	PPL Sys	tem Chemica	al Laboratory		40-00568				
Total Le	ad	EPA 200.7	PPL Sys	tem Chemica	al Laboratory		40-00568				
Total Nic	kel	EPA 200.7	PPL Sys	tem Chemica	al Laboratory		40	0-00568			
Total Seler	nium	EPA 200.7	PPL Sys	tem Chemica	al Laboratory		40	0-00568			
Total Vana	dium	EPA 200.7	PPL Sys	tem Chemica	al Laboratory		40	0-00568			
Total Zlı	nc	EPA 200.7	PPL System Chemical Laboratory				4(	0-00568			
Total Irc	n	EPA 200.7	PPL System Chemical Laboratory				40-00568				

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, 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 possibly of fine and imprisonment for knowing violations.

Name/Title Principal Executive Officer

Phone: 610-498-6200

Signature of Principal Executive Officer or Authorized Agent

Dennis J Murphy - VP PPL Generation, LLC Date: January 19, 2011

Atwen E. Holler

<sup>1</sup> Submit this form with each Discharge Monitoring Report (DMR), Annual Report or Recordkeeping and Reporting Form, where sample results are submitted to the Department for compliance purposes.

<sup>2</sup> For parameter(s) covered under accreditation-by-rule, submit the lab's registration number in lieu of an accreditation number.

DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME:	PPL Martins Creek, LLC		PA0012823		010 0
ADDRESS:	Two North Ninth Street Allentown, PA 18101-1179	PERMIT NUMBER		DISCHARGE NUMBER	
FACILITY:	PPL - MARTINS CREEK STEAM ELEC STAT	r			
	6605 FOUL RIFT RD		MONIT	ORING I	PERIOD
200411011.	BANGOR, PA 180134857		MM/DD/YYYY		MM/DD/YYYY
ATTN: Steve	n E Holler DE DI S	FROM	12/01/2010	1 то Г	12/31/2010

ATTN: Steven E. Holler, PE, PLS

	MONITO	RING	PERIOD
	MM/DD/YYYY		MM/DD/YYYY
M	12/01/2010	то	12/31/2010

DMR Mailing ZIP CODE:	180134857
MAJOR	
(SUBR 02)	
SEWAGE TREATMENT PL	ANT 010A

External Outfall

No Discharge

PARAMETER		QUAN			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Oxygen, dissolved (DO)	SAMPLE MEASUREMENT	******	*****	*****	8.7	******	*****		$\bigcirc$	1/10	GRAB
00300 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	******	*****	INST MIN	****	*****	mg/L		Monthly	GRAB
рН	SAMPLE MEASUREMENT	*****	*****	*****	7.1	*****	8.0		$\cap$	19/21	GPAR
00400 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	****	*****	6 INST MIN	******	9 INST MAX	SU		Weekly	GRAB
Solids, total suspended	SAMPLE MEASUREMENT	<1	*****		*****	10.0	*****		0	1/Mo	CONP-8
00530 1 0 Effluent Gross	PERMIT REQUIREMENT	6 MO AVG	*****	lb/d	*****	30 MO AVG	*****	mg/L		Monthly	COMP-8
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	< 1	****		*****	0.09	****		$\cap$	VMA	MONP-8
00610 1 0 Effluent Gross	PERMIT REQUIREMENT	4 MO AVG	*****	lb/d	*****	20 MO AVG	*****	mg/L		Monthly	COMP-8
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	0.003	0.006		****	*****	*****	*****	$\bigcirc$	DALLY	NFASEN
50050 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. MO AVG	Req. Mon. DAILY MX	Mgal/d	****	****	*****	*****		Monthly	MEASRD
Chlorine, total residual	SAMPLE MEASUREMENT	*****	****	******	****	GG	GG		$\cap$		
50060 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	****	*****	****	1.2 MO AVG	2.8 INST MAX	mg/L		Monthly	GRAB
Coliform, fecal general	SAMPLE MEASUREMENT	*****	*****	*****	*****	<1	****		$\bigcirc$	1/MA	GRAB
74055 1 0 Effluent Gross	PERMIT	*****	*****	*****	*****	200 MO GEOMN	*****1	#/100mL		Monthly	GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and	PI PILI	TEI	LEPHONE	DATE
DENNIS J. MURPHY/VP GSS	system, or how previous securities and on my industry of me person or persons who manage the system, or how persons directly responsible for gathering the information, the automation the the system to the best of my knowledge and beher, true accurate, and complete 1 am aware that there are significant persons a submitting disk information. Including the parasitivity of fine and imparament for knowledge.	priver E. Holler	616 4	98-6200	01/19/2011
TYPED OR PRINTED	violations	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA Code	NUMBER	MM/DD/YYYY
COMMENTS AND EXPLANATION OF ANY VIOLATI	ONS (Reference all attachments here)				

THE TOTAL RESIDUAL CHLORINE LIMIT APPLIES ONLY TO EMERGENCY USE OF CHLORINE. -NODI CODE GG

#### DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME: ADDRESS:	PPL Martins Creek, LLC Two North Ninth Street Allentown, PA 18101-1179	PI	PA0012823 ERMIT NUMBER		010-A DISCHARGE NUMBER	DN MA (SI	IR Mailing ZIP CODE: AJOR	180134857
LOCATION:	6605 FOUL RIFT RD	[	MONITO	ORIN	G PERIOD	SE	WAGE TREATMENT PL	ANT 010A
	BANGOR, PA 180134857		MM/DD/YYYY		MM/DD/YYYY	Ex	ternal Outfall	
ATTN: Stever	n E. Holler, PE, PLS	FROM	12/01/2010	] тс	12/31/2010			No Discharge

PARAMETER		QUANTITY OR LOADING QUALITY OR CONCENTRATION			QUANTITY OR LOADING		QUALITY OR CONCENTRATION				FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS				
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	<	****		*****	<2.0	*****		$\bigcirc$	MAD	COMP-8	
Effluent Gross	PERMIT REQUIREMENT	MO AVG	****	lb/d	*****	25 MO AVG	*****	mg/L		Monthly	COMP-8	

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and within the information when the direction or incoming of the system.	81	TEL	EPHONE	DATE
DENNIS J. MURPHY/VP GSS	system, or those persons directly responsible my token person or persons want intange the to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalities to submitting false information, including the possibility of fine and imprisonment for knowing violations.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR	6104	98-6200	01/19/2011
COMMENTS AND EXPLANATION OF ANY VIOLATIC		AUTHORIZED AGENT	ANEA COUR	NUMBER	MMUDUYYYY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here) THE TOTAL RESIDUAL CHLORINE LIMIT APPLIES ONLY TO EMERGENCY USE OF CHLORINE.

DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME: ADDRESS:	PPL Martins Creek, LLC Two North Ninth Street Allentown, PA 18101-1179	PE	PA0012823	D	011-A SCHARGE NUMBER	<b>DMR Mailing Zi</b> MAJOR	P CODE:	180134857
FACILITY:	PPL - MARTINS CREEK STEAM ELEC STAT 6605 FOUL RIFT RD	[	MONIT	ORING	PERIOD	(SUBR 02) STILLING PONE	011A	
200411011.	BANGOR, PA 180134857		MM/DD/YYYY		MM/DD/YYYY	External Outfall		
ATTN: Steve	n E. Holler, PE, PLS	FROM	12/01/2010	] то	12/31/2010			No Discharge

PARAMETER		QUANTITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
рН	SAMPLE MEASUREMENT	*****	*****	*****		*****					
00400 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	Reg. Mon. INST MIN	*****	Req. Mon. INST MAX	SU		Weekiy	GRAB
Solids, total suspended	SAMPLE MEASUREMENT	****	****	*****	*****		******				
00530 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	Req. Mon. MO AVG	******	mg/L		Monthly	GRAB
Oil & grease	SAMPLE MEASUREMENT	*****	****	*****	******		*****				
00556 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	****	*****	*****	Reg. Mon. MO AVG	******	mg/L		Monthly	GRAB
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT				*****	*****	*****	*****			
50050 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. MO AVG	Req. Mon. DAILY MX	Mgal/d	*****	****	*****	*****		Monthly	MEASRD

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information relievant. According to the system of the syste	84 8 11 11	TELEPHONE	DATE
DENNIS J. MURPHY/VP GSS	sections are manimized standard based on injuritation of the person of persons who manage me system; or those persons directly responsible for gathering the milormation, the milormation submitted is to the best of my knowledge and belief, thus accurate and complete 1 am aware that there are significant penalutes its valumiting false information. Including the possibility of fine and improvement for knowing	Deven C. Holler	610 498-620	1106 11 19 2011
TYPED OR PRINTED	Volations	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA Code NUMBER	MM/DD/YYYY
COMMENTS AND EXPLANATION OF ANY MOLATI				

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

 
 NAME:
 PPL Martins Creek, LLC

 ADDRESS:
 Two North Ninth Street Allentown, PA 18101-1179

 FACILITY:
 PPL - MARTINS CREEK STEAM ELEC STAT

LOCATION: 6605 FOUL RIFT RD BANGOR, PA 180134857

ATTN: Steven E. Holler, PE, PLS

PA0012823	013-A
PERMIT NUMBER	DISCHARGE NUMBER

	MONIT	ORING	PERIOD
	MM/DD/YYYY		MM/DD/YYYY
FROM	12/01/2010	То	12/31/2010

DMR Mailing ZIP CODE: 180134857 MAJOR (SUBR 02) INDUSTRIAL WASTE TMT DISCHARGE - 013A

External Outfall

		_
	Dia di la construcción de la con	
NO	1 JISCD2FGO	
	DISCHA146	

PARAMETER		QUAN	TITY OR LOADING	;	6	QUALITY OR CONC	ENTRATION		NO. EX	FREQUENCY OF ANALYSIS	SAMPLE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS	1		
Temperature, water deg. fahrenheit	SAMPLE MEASUREMENT	*****	*****	******	******	42	*****	-	0	Max	MATR
00011 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	Reg. Mon. DAILY MX	*****	deg F		Weekly	IMRSTB
рH	SAMPLE MEASUREMENT	*****	*****	*****	7,3	*****	7.8		$\overline{\cap}$	11/21	CPAR
00400 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	****	*****		*****	9 MAXIMUM	SU		Weekly	GRAB
Arsenic, total (as As)	SAMPLE MEASUREMENT	*****	****	*****	*****	0.002	*****		$\overline{0}$	2/110	MAMP-9
01002 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	******	*****	*****	Req. Mon. MO AVG	*****	mg/L		Twice Per Month	COMP-8
Cadmium, total (as Cd)	SAMPLE MEASUREMENT	*****	*****	*****	*****	ND/<0.0002	*****		$\cap$	2/100	PANID-2
01027 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	Req. Mon. MO AVG	*****	mg/L		Twice Per Month	COMP-8
Chromium, total (as Cr)	SAMPLE MEASUREMENT	*****	****	*****	*****	ND ((0.002)	*****		a	2/100	ANNO-8
01034 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	****	Req. Mon. MO AVG	*****	mg/L		Twice Per Month	COMP-8
Copper, total (as Cu)	SAMPLE MEASUREMENT	*****	*****	*****	*****	ND (20.004)	****		$\cap$	2/100	MALAP-8
01042 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	Req. Mon. MO AVG	*****	mg/L		Twice Per Month	COMP-8
Lead, total (as Pb)	SAMPLE MEASUREMENT	*****	*****	*****	*****	ND (< 0.001)	****		$\cap$	2/MD	MANP-8
01051 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	Req. Mon. MO AVG	*****	mg/L		Twice Per Month	COMP-8

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information multimitted. Based on my instrume of the metros or neurone information and the system of the metros or neurone in the system.	26	TEL	EPHONE		DATE
DENNIS J. MURPHY/VP GSS	system, or those persons directly responsible for gathering the information the information is automatical is to the best of my knowledge and belief, true, accurate, and complete 1 am aware that there are significant penalities for submitting false information, including the possibility of fine and imprisonment to knowing.	Deven C. Moller	610 4	98-6200	01	19/2011
TYPED OR PRINTED		AUTHORIZED AGENT	AREA Code	NUMBER	N	IM/DD/YYYY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

 

 NAME:
 PPL Martins Creek, LLC

 ADDRESS:
 Two North Ninth Street Allentown, PA 18101-1179

 FACILITY:
 PPL - MARTINS CREEK STEAM ELEC STAT

 LOCATION:
 6605 FOUL RIFT RD BANGOR, PA 180134857

ATTN: Steven E. Holler, PE, PLS

PA0012823	013-A
PERMIT NUMBER	DISCHARGE NUMBER

	MONIT	ORING	PERIOD					
	MM/DD/YYYY MM/DD/YY							
FROM	12/01/2010	То	12/31/2010					

DMR Mailing ZIP CODE: 180134857 MAJOR (SUBR 02)

INDUSTRIAL WASTE TMT DISCHARGE - 013A External Outfall

		_
<b>NI</b> O	licoborgo	
1110	DISCHARDE	

PARAMETER		QUAN	TITY OR LOADING	}	<u>م</u>	UALITY OR CONC	ENTRATION		NO. FX	FREQUENCY OF ANALYSIS	SAMPLE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Nickel, total (as Ni)	SAMPLE MEASUREMENT	*****	*****	*****	*****	<0.010	*****	<u>i</u>	0	2/140	P.SIANS
01067 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	******	*****	Reg. Mon. MO AVG	****	mg/L	$\cup$	Twice Per	COMP-8
Vanadium, total (as V)	SAMPLE MEASUREMENT	*****	*****	*****	****	<0.010	*****		$\cap$	ZINA	MALOS
01087 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	****	*****	*****	Req. Mon. MO AVG	*****	mg/L	$\bigcirc$	Twice Per Month	COMP-8
Zinc, total (as Zn)	SAMPLE MEASUREMENT	****	*****	*****	****	ND (KO.004)	*****		$\bigcirc$	2/100	MAMQ.8
01092 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	****	*****	*****	Req. Mon. MO AVG	*****	mg/L		Twice Per Month	COMP-8
Selenium, total (as Se)	SAMPLE MEASUREMENT	*****	*****	*****	*****	ND (40,000)	*****		Ω	2/MA	MANR-9
01147 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	Req. Mon. MO AVG	*****	mg/L		Twice Per Month	COMP-8
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	3.50	6.12		*****	******	*****	*****	$\bigcirc$	1/WIK	NEASPIN
50050 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. MO AVG	Req. Mon. DAILY MX	Mgal/d	*****	*****	*****	*****		Weekly	MEASRD

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my mounts of the according to the property gather and evaluate the information submitted. Based on my mounts of the according to the second person of the property gather and the information of the second person of the according to the second person of the second person perso	84 8 61 10	TELE	PHONE	DATE
DENNIS J. MURPHY/VPGSS	system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, two, accurate, and complete I am aware that there are significant penalises for submitting lalse information, including the possibility of fine and improvement. If or knowing	Saver L. Holler	610 49	8-6200	01/19/2011
TYPED OR PRINTED	Volution	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA Code	NUMBER	MM/DD/YYYY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME: PPL Martins Creek, LLC ADDRESS: Two North Ninth Street Allentown, PA 18101-1179 PPL - MARTINS CREEK STEAM ELEC STAT FACILITY: LOCATION: 6605 FOUL RIFT RD BANGOR, PA 180134857

ATTN: Steven E. Holler, PE, PLS

PA0012823	213-A
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD MM/DD/YYYY MM/DD/YYYY FROM 12/01/2010 то 12/31/2010

DMR Mailing ZIP CODE: 180134857 MAJOR (SUBR 02) INDUSTRIAL WASTE TMT BASIN -213A External Outfall

No Discharge

PARAMETER		QUAN		3	QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
0		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Solids, total suspended	SAMPLE MEASUREMENT	*****	******	******	****	< 6.0	8.7		0	Mar	GRAR
00530 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	******	*****	****	30 MO AVG	100 DAILY MX	mg/L		Weekly	GRAB
Oil & grease	SAMPLE MEASUREMENT	*****	*****	*****	*****	<5.0	<5.0		$\cap$	MAG	GRAR
00556 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	******	15 MO AVG	30 DAILY MX	mg/L	$\sim$	Monthly	GRAB
Arsenic, total (as As)	SAMPLE MEASUREMENT	*****	***	******	*****	< 0.002	*****		0	2/MD	COMP.8
01002 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	Req. Mon. MO AVG	******	mg/L		Twice Per Month	COMP-8
Cadmium, total (as Cd)	SAMPLE MEASUREMENT	*****	*****	******	*****	ND(<0.0002)	*****		$\cap$	2/100	MONP-8
01027 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	******	*****	Req. Mon. MO AVG	*****	mg/L		Twice Per Month	COMP-8
Chromium, total (as Cr)	SAMPLE MEASUREMENT	*****	*****	******	*****	ND (<0.007)	ND(<0.002)		$\cap$	2/111	MAND-8
01034 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	******	*****	MO AVG	DAILY MX	mg/L		Twice Per Month	COMP-8
Copper, total (as Cu)	SAMPLE MEASUREMENT	*****	*****	******	*****	ND(KO.M4)	*****		$\cap$	Z/MA	CANP-8
01042 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	Req. Mon. MO AVG	*****	mg/L		Twice Per Month	COMP-8
Lead, total (as Pb)	SAMPLE MEASUREMENT	*****	****	******	*****	ND(<0.001)	*****		$\cap$	2/100	CAND-8
01051 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	****	*****	*****	Reg. Mon. MO AVG	*****	mg/L		Twice Per Month	COMP-8

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I centry under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gither and valuate the information adjustical Receipton program of the prepared receipton and the system of th	84 . 8 11 1 1	TEL	EPHONE	DATE
DENNIS J. MURPHY/VP GSS	system, or those persons directly responsible for gathering the information as used in a second personal with the association of the second personal with the second second personal methods and belief, two, accurate, and complete 1 am aware that there are significant to the best of maintaining false information, nuclealing the possibility of fine and impressionment for knowing to evolve the second second personal methods are associated as a second	Suver C. Holler	604	98-6200	01/19/2011
TYPED OR PRINTED	viola dolts	AUTHORIZED AGENT	AREA Code	NUMBER	MM/DD/YYYY

ITS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Sampling for priority pollutants is required only when cooling tower maintenance chemical additives other than CI are used. Use NODI code "GG" to report "Conditional Monitoring-Not Required This Period" when appropriate.

DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME:	PPL Martins Creek, LLC
ADDRESS:	Two North Ninth Street Allentown, PA 18101-1179
FACILITY:	PPL - MARTINS CREEK STEAM ELEC STAT
LOCATION:	6605 FOUL RIFT RD BANGOR, PA 180134857

ATTN: Steven E. Holler, PE, PLS

PA0012823	213-A
PERMIT NUMBER	DISCHARGE NUMBER

	MONITORING PERIOD							
MM/DD/YYYY MM/DD/YY								
FROM	12/01/2010	то	12/31/2010					

DMR Mailing ZIP CODE: 180134857 MAJOR (SUBR 02) INDUSTRIAL WASTE TMT BASIN -213A External Outfall

No Discharge

PARAMETER		QUAN	TITY OR LOADING		QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS	1		
Nickel, total (as Ni)	SAMPLE MEASUREMENT	******	******	*****	*****	<0.010	*****		$\cap$	2/MA	POMP-8
01067 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	Req. Mon. MO AVG	******	mg/L		Twice Per Month	COMP-8
Vanadium, total (as V)	SAMPLE MEASUREMENT	*****	*****	*****	*****	<0.010	*****		$\cap$	2/MA	CONP 8
01087 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	****	*****	*****	Req. Mon. MO AVG	*****	mg/L		Twice Per Month	COMP-8
Zinc, total (as Zn)	SAMPLE MEASUREMENT	*****	*****	*****	*****	ND (KO.004)	NN(<0.004)		0	2/110	COMP-8
01092 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	****	MO AVG	1 DAILY MX	mg/L		Twice Per Month	COMP-8
Selenium, total (as Se)	SAMPLE MEASUREMENT	*****	*****	*****	*****	ND (<0.0008	******		()	2/MD	CAND-8
01147 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	****	******	*****	Req. Mon. MO AVG	******	mg/L		Twice Per Month	COMP-8
Priority pollutants total effluent	SAMPLE MEASUREMENT	*****	*****	*****	*****	*****	GG		0	-3	
50008 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	******	*****	****	*****	Req. Mon. DAILY MX	mg/L		Weekly	COMP-8
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	3.50	10.12		*****	*****	*****	*****	$\cap$	MALK	NEASPN
50050 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. MO AVG	Req. Mon. DAILY MX	Mgai/d	****	*****	*****	*****	<u> </u>	Weekly	MEASRD
Chlorine, free available	SAMPLE MEASUREMENT	*****	*****	*****	*****	0.03	0.03		$\cap$	1/1010	GPAB
50064 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	****	*****	******	.2 MO AVG	DAILY MX	mg/L		Monthly	GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my increase of the content property of the second secon	St. 2 & 11-1 Pro	TEL	EPHONE	DATE
DENNIS J. MURPHY/VP GSS	system, or those persons invitience based of my industy of use person of persons who manage they system, or those persons intercely responsible for gathering the information submitted is, to the best of my knowledge and beinf; true, accurate, and complete 1 am eware that there are significant penalities for a unimiting fails information, including the possibility of time and improvomment for knowing.	DUDER C. HOUL	6104	198-6200	01 19 2011
TYPED OR PRINTED	violations	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA Code	NUMBER	MM/DD/YYYY
COMMENTS AND EXPLANATION OF ANY VIOLATIC	NS (Reference all attachmente have)				

NG

chments here)

Sampling for priority pollutants is required only when cooling tower maintenance chemical additives other than Cl are used. Use NODI code "GG" to report "Conditional Monitoring-Not Required This Period" when appropriate. Monitor Ì Chlorinat equinement MONTH ہ ہ

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DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME:	PPL Martins Creek, LLC		PA0012823		213-Y		DMR Mailing ZIP CODE:	180134857
ADDRESS:	Two North Ninth Street Allentown, PA 18101-1179	P	ERMIT NUMBER	DI	CHARGE NUMBER		MAJOR	
FACILITY:	PPL - MARTINS CREEK STEAM FLFC STAT	r					(SUBR 02)	
			MONIT	ORING	PERIOD		BASIN	
LUCANON.	BANGOR, PA 180134857		MM/DD/YYYY		MM/DD/YYYY		External Outfall	
ATTN: Steve	n E. Holler, PE, PLS	FROM	01/01/2010	] то	12/31/2010			No Discharge

PARAMETER		QUANTITY OR LOADING QUALITY OR CONCENTRATION NO.					NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE		
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
рН	SAMPLE MEASUREMENT	*****	***	*****	7.3	*****	7.8		0	11/2,	GRAB
00400 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	Req. Mon. INST MIN	****	Req. Mon. INST MAX	SU		Annual	GRAB
Iron, total (as Fe)	SAMPLE MEASUREMENT	*****	*****	*****	*****	0.195	*****		$\cap$	2/MO	RANID-8
01045 1 0 Effluent Gross	PERMIT REQUIREMENT	******	*****	*****	****	Reg. Mon. AVERAGE	*****	mg/L		Annual	GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel property gather and evaluate the automation mismittel. Based on my insource of the persons of persons of persons of the	84 8 11 11 .	TEL	EPHONE	DATE
DENNIS J. MURPHY/VPGSS	extern or those persons directly responsible for gathering the information. The information submitted is, to the best of my knowledge and before, true accurate, and complete 1 am aware that there are significant penalities to a submitting false information, including the possibility of fine and imprisonment for Knowing.	Daven C. Hollin	610.40	8-6200	01/19/2011
TYPED OR PRINTED	AINRUNA	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA Code	NUMBER	MM/DD/YYYY
COMMENTS AND EXPLANATION OF ANY VIOLATIC	NS (Pafaranaa all attachments have)				

Samples should be taken at Outfall 213, the discharge from the IW-tmt basin prior to mixing with other wastewaters.

DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME:	PPL Martins Creek, LLC
ADDRESS:	Two North Ninth Street Allentown, PA 18101-1179
FACILITY:	PPL - MARTINS CREEK STEAM ELEC STAT
LOCATION:	6605 FOUL RIFT RD BANGOR, PA 180134857

ATTN: Steven E. Holler, PE, PLS

PA0012823	413-A
PERMIT NUMBER	DISCHARGE NUMBER

.

	MONITORING PERIOD								
	MM/DD/YYYY	MM/DD/YYYY MM/DD/YYYY							
FROM	12/01/2010	То	12/31/2010						

DMR Mailing ZIP CODE: 180134857 MAJOR (SUBR 02) FLYASH/PRECIP WASH/STRMWATR - 413A External Outfall

No Discharge

DADAMETER								CANDIE			
PARAMETER				QUALITY OR CONCENTRATION			EX.	OF ANALYSIS	TYPE		
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS	1		
Solids, total suspended	SAMPLE MEASUREMENT	*****	*****	******	******	ė					
00530 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	30 MO AVG	100 DAILY MX	mg/L		Weekly	GRAB
Oil & grease	SAMPLE MEASUREMENT	****	*****	******	*****						
00556 1 0 Effluent Gross	PERMIT REQUIREMENT	****	*****	*****	*****	15 MO AVG	30 DAILY MX	mg/L		Monthly	GRAB
Arsenic, total (as As)	SAMPLE MEASUREMENT	*****	****	*****	****		*****				
Effluent Gross	PERMIT REQUIREMENT	*****	*****	******	*****	Req. Mon. MO AVG	******	mg/L		Twice Per Month	COMP-8
Cadmium, total (as Cd)	SAMPLE MEASUREMENT	*****	******	******	***		*****				
01027 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	******	<b>前我</b> 大士大士	Req. Mon. MO AVG	*****	mg/L		Twice Per Month	COMP-8
Chromium, total (as Cr)	SAMPLE MEASUREMENT	*****	*****	*****	*****		*****				
01034 1 0 Effluent Gross	PERMIT REQUIREMENT	****	*****	******	*****	Req. Mon. MO AVG	*****	mg/L		Twice Per Month	COMP-8
Copper, total (as Cu)	SAMPLE MEASUREMENT	******	*****	*****	*****		*****				
01042 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	***	Req. Mon. MOAVG	******	mg/L		Twice Per Month	COMP-8
Lead, total (as Pb)	SAMPLE MEASUREMENT	*****	*****	*****	*****		*****				
01051 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	******	******	****	Reg. Mon. MO AVG	*****	mg/L		Twice Per Month	COMP-8

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	tuly under penalty of low that this document and all attachments were prepared under my direction or rtvision in accordance with a system designed to assure that qualified personnel property gather and usite the information submitted. Based on my induity of the person or pressons his manage the	81. 10 8 61 10	TEL	EPHONE	DATE
DENNIS J. MURPHY/VP GSS	ern, or those per sons directly responsible for gathering the information, the information abunited is, so best of my knowledge and belief, true, accurate, and complete 1 an aware that there are significant three for submitting fails information, including the possibility of fine and improvement for knowing	Allor L. Miller	6104	98-6200	01/19/2011
		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA Code	NUMBER	MM/DD/YYYY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME:	PPL Martins Creek, LLC
ADDRESS:	Two North Ninth Street Allentown, PA 18101-1179
FACILITY:	PPL - MARTINS CREEK STEAM ELEC STAT
LOCATION:	6605 FOUL RIFT RD BANGOR, PA 180134857

ATTN: Steven E. Holler, PE, PLS

PA0012823	413-A
PERMIT NUMBER	DISCHARGE NUMBER

	MONITORING PERIOD							
	MM/DD/YYYY	MM/DD/YYYY MM/DD/YYYY						
FROM	12/01/2010	То	12/31/2010					

DMR Mailing ZIP CODE: 180134857 MAJOR

UR

(SUBR 02)

FLYASH/PRECIP WASH/STRMWATR - 413A External Outfall

No	Discharge	
110	Discharge	

PARAMETER		QUANTITY OR LOADING		UANTITY OR LOADING QUALITY OR CONCENTRATION			QUALITY OR CONCENTRATION			FREQUENCY OF ANALYSIS	SAMPLE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
Nickel, total (as Ni)	SAMPLE MEASUREMENT	*****	*****	******	*****		*****	1			
01067 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	Req. Mon. MO AVG	*****	mg/L		Twice Per Month	COMP-8
Vanadium, total (as V)	SAMPLE MEASUREMENT	*****	*****	*****	*****	-	*****				
01087 1 0 Effluent Gross	PERMIT REQUIREMENT	******	*****	*****	*****	Req. Mon. MO AVG	*****	mg/L		Twice Per Month	COMP-8
Zinc, total (as Zn)	SAMPLE MEASUREMENT	*****	******	*****	*****		*****				
01092 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	Req. Mon. MO AVG	*****	mg/L		Twice Per Month	COMP-8
Selenium, total (as Se)	SAMPLE MEASUREMENT	*****	******	*****	****		*****				
01147 1 0 Effluent Gross	PERMIT REQUIREMENT	****	******	*****	****	Req. Mon. MO AVG	*****	mg/L		Twice Per Month	COMP-8
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT				*****	****	*****	*****			
50050 1 0 Effluent Gross	PERMIT REQUIREMENT	Req. Mon. MO AVG	Req. Mon. DAILY MX	Mgai/d	****	****	*****	*****		Weekly	MEASRD
Chlorine, free available	SAMPLE MEASUREMENT	****	*****	*****	*****						
50064 1 0 Effluent Gross	PERMIT REQUIREMENT	*****	****	*****	*****	.2 MO AVG	.5 DAILY MX	mg/L		Monthly	GRAB

DENNIS J. MURPHY/VPGSS system or those provide of galaxies and belief for a subarrighter store submitted is an away that there are significant to the advertex of the submitted is possibility of fire and impressionment for knowing the second and complete is an away that there are significant to knowing the possibility of fire and impressionment for knowing the possibility of the and impression the and the possibility of the and impression the and the possibility of the and the	NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on any approach of the grant personnel properly gather and evaluate the information submitted.	R+ . 8 11 01	TELEPHONE	DATE
TYPED OR PRINTED VOLUMAS VOLUM	DENNIS J. MURPHY/UPGSS	system, or these persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true accurate, and complete 1 am aware that there are significant penalities for submitting fails information, including the possibility of fine and improsommet for knowing to the best of my knowledge and belief true accurate, and complete 1 am aware that there are significant penalities for automating fails information, including the possibility of fine and improsommet for knowing the submitting fails and the submitting fails are also and the submitting the possibility of fine and improsommet for knowing the submitting fails are also as a submitting the possibility of fine and improsommet for knowing the submitting fails are also as a submitting the possibility of the submitting the submitting the possibility of the submitting the possibility of the submitting the possibility of the submitting t	Alever C. Nouls	610 498-6200	01 19 2011
	TYPED OR PRINTED	violations	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA Code NUMBER	MM/DD/YYYY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)