# Montgomery County Government Department of Finance



**Tax Assessment System (TAS)** 

**Operations Guide** 

**Appendix C – DEP (Storm Water)** 

Version 1

06/23/2014

# **Table of Contents**

Document Structure	2
Roles & Responsibilities	2
General Data Flow	2
General Activity Flow	2
Annual Activities	2
Ad Hoc Activities	3
DEP Storm Water Data Inputs	3
Handling Operational Issues	5
Contributor infrastructure issues	5
Extract Issues	5
Bad Data	5
Input issues.	5
No File	5
Bad Data	5
General Operations Issues	6
Navigating the DEP Storm Water GUI Screens	7
Logging In	7
Home Page	8
Batch Job Overview	9
Real Property Tax Annual Billing Dashboard	10
Agency Contact Information	11
View Property	12
Select DEP Storm Water Functions	16
Manage Upload	17
Step 1. Preview Uploaded data	18
Step 2. Validate Uploaded Data	19
Step 3. Process Uploaded Data	20
View Charge Summary	21
View Summary	22
View Summary by Year	22
View Pending Revised Bills	23
View Transaction Change Log	24

### **Document Structure**

The Department of Environmental Protection (DEP) Division of Storm Water appendix is an extension of the TAS Operations Guide. The appendix describes TAS-related business rules, system functions, and roles and responsibilities for DEP Storm Water. For a high level overview of content provided in this document, please refer to the TAS Operations Guide.

# **Roles & Responsibilities**

DEP Storm Water provides pollution prevention services for all portions of the County with exception of Takoma Park, Gaithersburg (Storm Water), and Rockville (Storm Water). The storm water fees are categorized by the property use and if it is occupied, there are different rates based upon the categories of property.

As a key contributor in the tax billing processes, DEP Storm Water is responsible to provide the MCG Department of Finance with property charges pertaining to the aforementioned services. Once per year DEP Storm Water can have their rates modified by a Montgomery County, County Council resolution. Based on council resolution, DEP enters any new storm water rate codes into their system. Treasury must be contacted in order for new charge codes to be established in TAS.

### **General Data Flow**

The process for transferring data is facilitated by the Enterprise Service Bus (ESB) which automates file delivery and retrieval. In addition, ESB applies business rules to validate the data before it is processed (further detailed in subsequent sections). AS DEP Storm Water contributes data and provides updates, the information is imported into the TAS database by ESB. Once this import occurs, DEP Storm Water data can be reviewed and validated via the TAS Graphical User Interface (GUI).

# **General Activity Flow**

Tax activities begin with an annual tax bill which is produced at the beginning of a Levy year. During this annual billing, all real properties are billed for the annual State, County and Municipal taxes. Fees and charges applied by other contributors are included as well.

There are revisions to Real property tax bills that occur during the Levy year. Contributors either make updates using the provided GUIs or batch file uploads (further detailed in subsequent sections).

### **Annual Activities**

DEP Storm Water makes one data contribution per levy year for the Annual billing activities. The process for DEP Storm Water annual contribution starts with Treasury requesting that all contributors provide contributions by a certain date based on the predetermined deadline.

Before DEP Storm Water can prepare their data contribution they receive an extract based on the SDAT01 file. This extract updates the DEP Storm Water database in order for their annual contribution to be sent for loading.

### **Ad Hoc Activities**

Although storm water is only billed on an annual basis, DEP Storm Water users can provide updates to TAS at any time during the year. These must be completed via the TAS GUI and flagged for revision to apply changes to the bill.

# **DEP Storm Water Data Inputs**

There is a method and process by which data is received by TAS. "Method" is the way in which data is retrieved and moved into the system. "Process" is what happens to data when it has been ingested into the TAS. All data destined for the TAS database will go through a staging location where the data is held until it has been checked for errors.

Depending on the contributor, data files are either sent or placed somewhere inside the data infrastructure whereby it is retrieved and moved into the TAS environment. ESB is the actual mechanism that moves the data, which has built-in intelligence and the ability to notify of success or failure.

For DEP Storm Water, data is copied from WQPC to an assigned County network folder. ESB will monitor this network folder for the presence of this data. When the data is found, the ESB will import the data into the corresponding contributor Staging Table. This method is called "Drop to County Assigned Network Folder". The complete process is outlined below. In the case that ESB identifies errors, TAS will not ingest the file (in other words, the "all or nothing" process applies). DEP Storm water must correct the errors that are listed in the report within TAS and provide the complete corrected file once more.

# Additional notes regarding the process for inputs:

1. The DEP Storm Water file must be named "depstrmw\_yyymmdd" using the current date, and placed into the designated folder located on the MCG server. \\mcgf03\MCG\TAS \\Intake\production\DEP Storm Water

This file should be in the following text file format:

- Pipe delimited.
- No row headings.
- File structure:

[Account\_Number]
[Agency\_Code]
[Levy\_Type]
[Levy\_Year]
[Charge\_Code]
[Charge\_Amount]
[Revise]

- 2. ESB picks up the file, places a copy into the archives, and drops it into the Staging Table in TAS.
- 3. Business logic and rules are applied as the data moves from the Staging Table into Production.
- 4. TAS only ingests the file if it does not contain any errors.
- 5. A notification is sent to indicate success or failure of the input process.

# **Handling Operational Issues**

User issues generally fall into four major areas.

- Contributor infrastructure issues
- Extract issues
- Input issues
- General Operational issues

Each of these issues has a unique set of characteristics and requires specific troubleshooting and resolution.

### **Contributor infrastructure issues**

Should the contributor use their own FTP server, the physical environment must be available when the County ESB needs to download or deliver a file.

The passwords and access must be correct and the files being picked up need to be in the specific location with the correct naming convention. Should any of these not be the case, the County will not be able to retrieve or provide data to that environment.

### **Extract Issues**

When an extract is created, the contributor will receive a notification which includes a link providing the location of the data.

### **Bad Data**

The only category of error is bad data in the file. As TAS is creating the extracts there should be no issues. However, if data becomes corrupted during the process, the files could contain bad data.

FIN-IT will work directly with the contributor and their technical resources to resolve these issues. Extracts are formatted with specifications from contributors. Therefore there should be no file with bad data unless it was corrupted in the process of creation. In that case, the new file would need to be created and then sent to the contributor.

### **Input issues**

There are two major conditions which cause upload issues: (1) There is no file upload or (2) During the process in which ESB applies the TAS Business rules against the data content, the file is found to contain bad information.

### No File

The ESB jobs will indicate when there is no file. Because the ESB jobs are triggered on the presence of files, they will remain in continual wait mode.

If there are issues with loading the files, FIN-IT will receive notification and contact the contributor to identify and resolve the issue.

### **Bad Data**

Bad data in the file can be detected in two areas:

- (1) When the ESB <u>transports</u> files from the source to the staging tables of TAS where business rules are applied. The contributor, FIN-IT, and Treasury will receive a success or failure notice indicating the status of the data load.
- (2) When TAS <u>processes</u> data from the staging tables and applies the business rules associated. The business rules dictate whether the data will be saved in the TAS database or rejected. Contributors are required to enter new data to replace that which is rejected.

If there are errors in the file, it will be returned to the sender for correction. Depending on the rule being applied, TAS will either reject the file entirely, or it will ingest error-free data and return the remainder to be corrected.

Should there be a failure indication, FIN-IT and the Division of Treasury will be notified. FIN-IT will coordinate with the contributor to resolve the issue.<sup>1</sup>

### **General Operations Issues**

There are a number of general areas where contributors may need assistance. These are generally centered on items such as access, log-ins, passwords, user set-up, etc. Should a contributor have issues in these areas, they should contact the MCG Help Desk at **240-777-2828.** 

TAS users who do not work for Montgomery County Government must have an Active Directory (AD) account in order to receive support from the MCG Help Desk. In the case that a new employee (internal or external) requires an AD account for access to TAS, the MCG Help Desk must be notified. The same process applies if an employee no longer requires access (for example, if they transfer to a different position, terminate employment, etc.).

<sup>&</sup>lt;sup>1</sup> This rule does not apply to DEP SWS, DEP Storm Water, DHCA, & WSSC. These contributors will be responsible to handle the issue independently.

# **Navigating the DEP Storm Water GUI Screens**

The DEP Storm Water interface is focused on processing the annual upload, viewing and managing storm water codes and reviewing transaction logs.

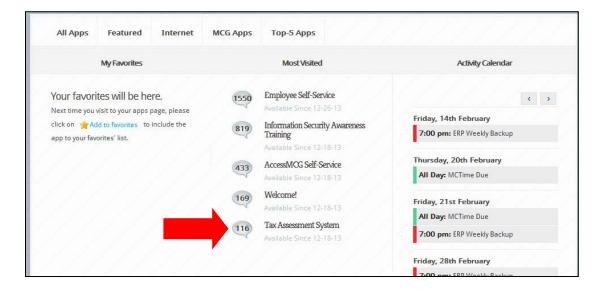
The GUI serves to upload annual data and provide information about the status of prior uploads and charges. DEP Storm Water users will also have the ability to edit property assessments.

# **Logging In**

- 1. Access the MCG ePortal at: https://eportal.montgomerycountymd.gov
- 2. Enter your user name and password.
- 3. Click Log In.



4. Select Tax Assessment System from the Apps section.



# **Home Page**

DEP Storm Water staff will launch all activities from the TAS Home Page. The home page houses a TAS system overview, data contribution status indications for annual billing, agency contact information, and a batch job overview.

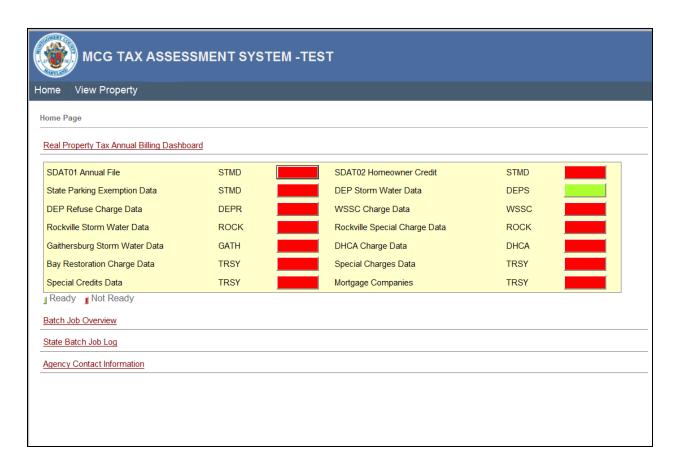


Figure 1 - DEP Storm Water Home Page

### **Batch Job Overview**

The Batch Job Overview table provides an overview of the daily, monthly, bi-monthly, quarterly, and annual batch jobs that are scheduled to run. The information includes the batch code, name, category, agency, and run frequency. The email groups listed in the table will receive a notification upon success or failure of the batch job.

Total: 15				
Batch Code	Batch Name	Category	Agency	R
01	SDAT01 - Real Property TAX Annual Billing	RPTAX	STMD	A
02	SDAT01 - Real Property TAX Monthly Revised Billing	RPTAX	STMD	Me
03	SDAT01 - Real Property TAX Monthly Update	PPTAX	STMD	М
04	SDAT01 - Real Property TAX Monthly File Export	RPTAX	STMD	Me
05	SDAT04 - New Construction	RPTAX	STMD	Qı
06	SDAT02 - Home Owner Credit	RPTAX	STMD	Bi
07	SDAT03 - Personal Property Tax	PPTAX	STMD	Bi
08	PU - Public Utility	PUTAX	TRSY	Da
09	DEP Solid Waste Charges	RPTAX	DEPR	Da
10	DEP Storm Water Charges	PPTAX	DEPS	Aı
11	WSSC Charges	RPTAX	wssc	Qı
12	Real Property Tax Special Charges	RPTAX	TRSY	Aı
13	Lenders	RPTAX	TRSY	Aı
14	Real Property Tax Special Credit	RPTAX	TRSY	Aı
15	SDAT01 - Real Property TAX Rollover	RPTAX	STMD	Aı

Figure 2 – Batch Job Overview

### Real Property Tax Annual Billing Dashboard

The Real Property Tax Annual Billing Dashboard serves to display a "Ready" or "Not Ready" status for each data contributor during the annual billing process. Once a contributor's data is ready for processing, they will simply click on the red button next to their agency name. The button will turn green to indicate that the data is ready for processing.

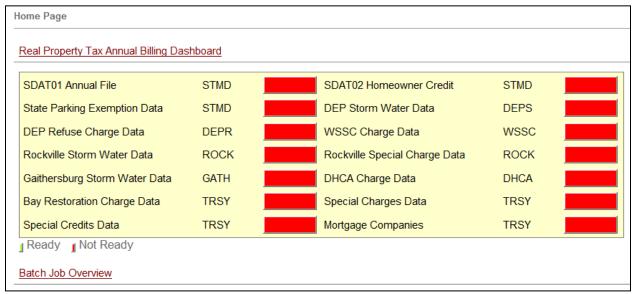


Figure 3A - Data Contribution Change Indication – Before

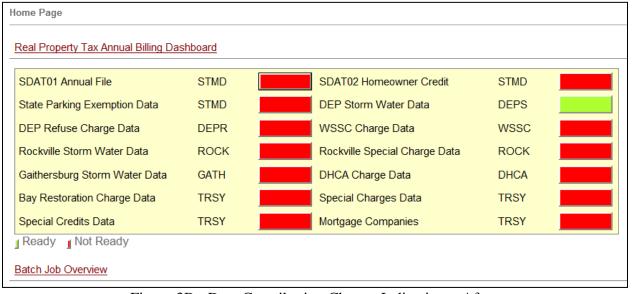


Figure 3B - Data Contribution Change Indication – After

# **Agency Contact Information**

The Agency Contact Information table provides each agency name and code in addition to the names, email addresses, and phone numbers of primary contacts from each group.

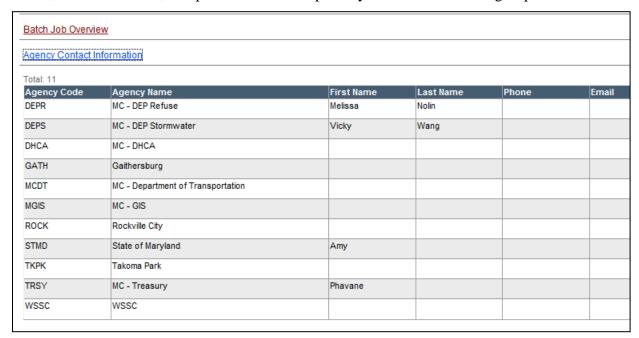


Figure 4 – Agency Contact Information

# **View Property**

The View Property screen is an inquiry screen available to all TAS users. From this screen, users can look up information for a given property to include: record information, mailing address, legal description, premise address, cycle data, prior assessment year, and more.

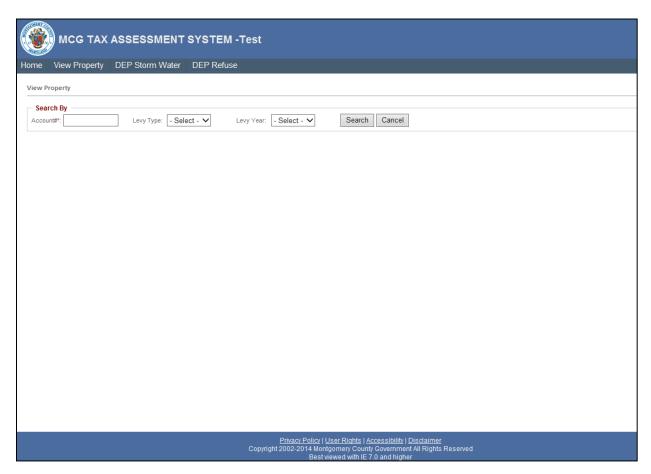


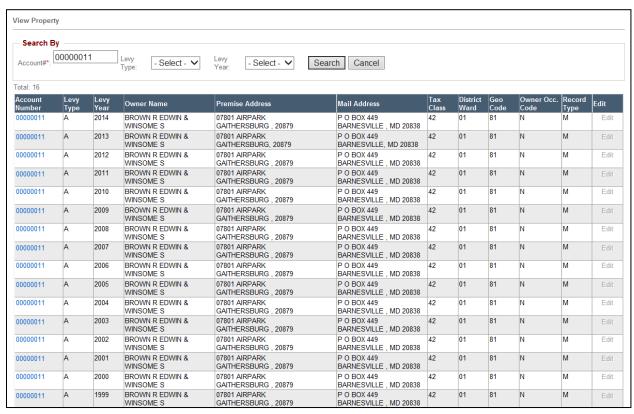
Figure 5 – View Property

### To Search for an Account

- 1. From the View Property screen, enter a eight digit account number into the Account Number field.
- 2. Click Search. \*To clear your search and start over, click "Cancel"—



In this example, upon searching for Account #00000011, a table populates with the account records for each levy year (dating back to 1999).



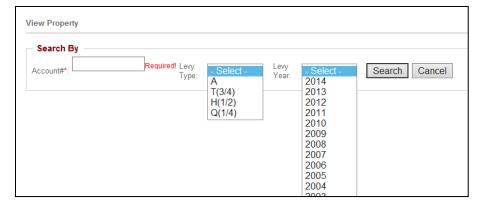
For each account, the table displays the account number, levy type, levy year, owner name, premise address, mail address, tax class, district ward, geo code, owner occupancy code, and record type.



### **Additional Notes:**

The Account Number field is required as demarcated by the red asterisk (\*).

Users may also opt to provide Levy Type and Levy Year by selecting from the drop down menus.



Doing so limits the search criteria to one levy type and one levy year as opposed to doing a more comprehensive search.

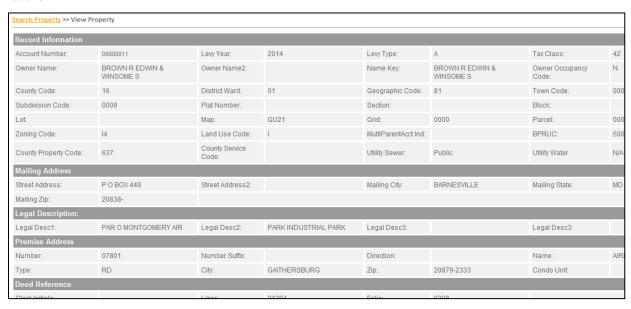


### **To View the Complete Record**

1. From the search results in the previous example, click the hyperlink in the Account Number column.

Levy Type	Levy Year	Owner Name	Premise Address	Mail Addre
A	2014	BROWN R EDWIN & WINSOME S	07801 AIRPARK GAITHERSBURG , 20879	P O BOX 44 BARNESVIL
A	2014	CASSIS JOHN DET ALTR	18970 WOODFIELD GAITHERSBURG , 20879	701 HERITA GEORGETO
A	2014	O'DONNELL JOHN P	21411 WOODFIELD GAITHERSBURG , 20882	21411 WOO GAITHERSB
	A	A 2014 A 2014	A 2014 CASSIS JOHN D ET AL TR	A 2014 BROWN R EDWIN & WINSOME S 07801 AIRPARK GAITHERSBURG , 20879  A 2014 CASSIS JOHN D ET AL TR 18970 WOODFIELD GAITHERSBURG , 20879  A 2014 O'DONNELL JOHN P 21411 WOODFIELD

Upon clicking the hyperlink for account number "00000011", a new screen appears displaying the full record.



### **Select DEP Storm Water Functions**

From the TAS Home Page, DEP Storm Water users have the option to select from three different functions located under the "DEP Storm Water" tab:

- 1. Manage Upload
- 2. View Charge Summary
- 3. View Transaction Change Log

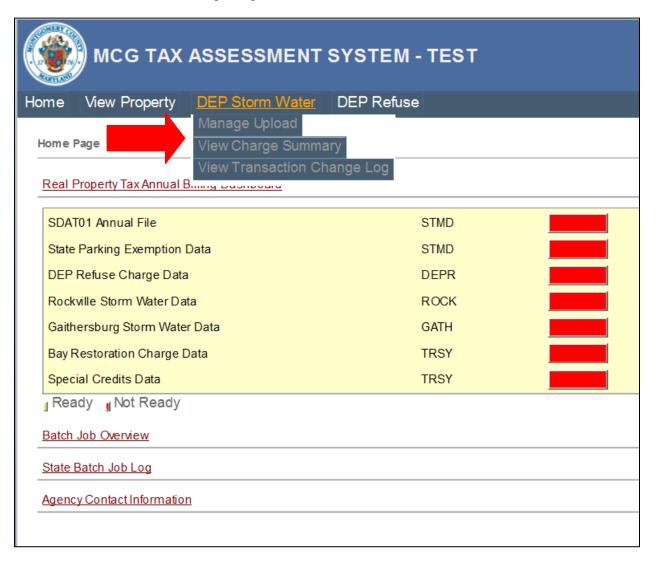


Figure 6 – Select DEP Storm Water Functions

### **Manage Upload**

Upon selecting "Manage Upload" from the DEP Storm Water menu, users are directed to a page with three tabs:

- 1. Preview Uploaded Data
- 2. Validate Uploaded Data
- 3. Process Uploaded Data

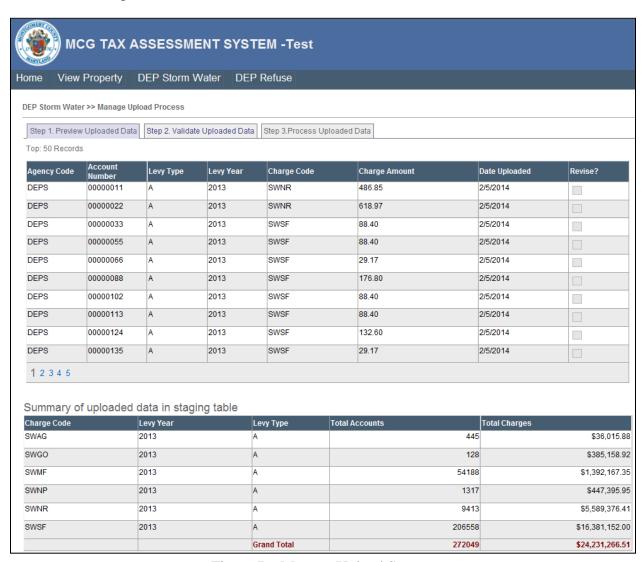


Figure 7 – Manage Upload Screen

### Step 1. Preview Uploaded data

The first tab on the "Manage Uploads" screen is "Preview Uploaded Data". This tab displays the staging table with data uploaded from the DEP Storm Water file.

In this first step, users can review data in the staging table prior to providing confirmation that it is ready to be processed. Once data has been confirmed, user will proceed in validating the data upload.

Notice, the first table on this page displays Charge Amounts on each account in addition to the levy type, levy year, charge code, and date updated.

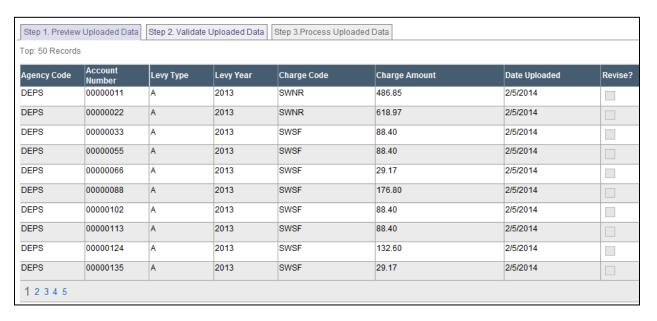


Figure 8A – Preview Uploaded Data

The second table provides a summary of total accounts and charges for each charge code.



Figure 8B – Preview Uploaded Data (Summary)

### Step 2. Validate Uploaded Data

The second tab on the "Manage Upload" screen is "Validate Uploaded Data". This tab allows users to validate the data that was uploaded from the DEP Storm Water file.

During this second step, the data is reviewed for errors by TAS. The table in this tab provides number of errors found, which accounts have errors, error description, and error type.

In the case that this subset of data should not be processed due to critical errors, DEP Storm Water must make corrections in their system and load it once more. Data will remain in the staging table until a new upload occurs. Once data has been corrected, DEP Storm Water can proceed by clicking the "Processing Upload Data" button shown in Figure 10B.

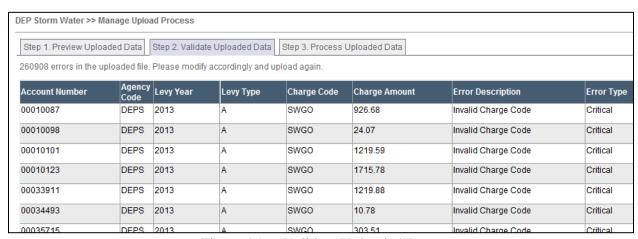


Figure 9A – Validate Uploaded Data

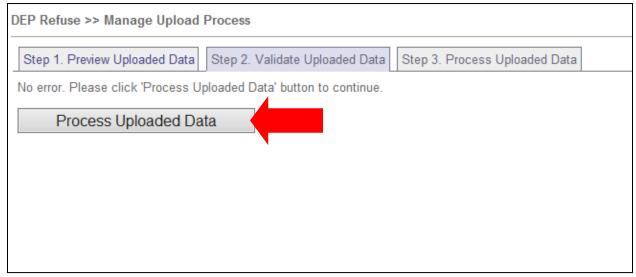


Figure 9B – Proceed to Process Uploaded Data

# Step 3. Process Uploaded Data

The third tab on the "Manage Upload" screen is "Process Uploaded Data". This tab provides confirmation that the data has been locked in for processing. It also provides the amount of inserted, updated, and revised charges.

In this final step, the uploaded data is locked in. Once a DEP Storm Water user selects "Process Uploaded Data", Treasury receives an automated notification to trigger the process.

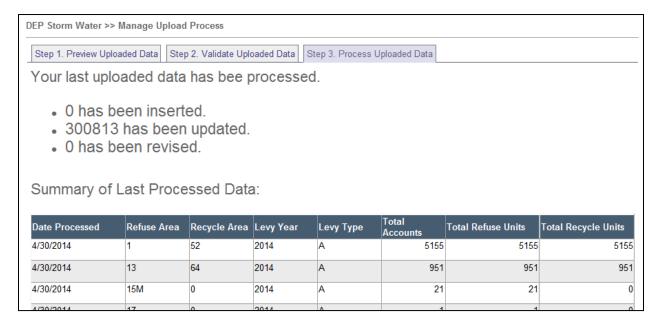


Figure 10 – Process Uploaded Data

<u>Additional Notes:</u> DEP Storm Water <u>should not pass data for void accounts or accounts with zero charge amounts</u>. Errors for void account numbers must be fixed and resubmitted.

# **View Charge Summary**

Upon selecting "View Charge Summary" from the DEP Storm Water menu, users are directed to a page with three tabs:

- 1. View Summary
- 2. View Summary by Year
- 3. View Pending Revised bills

Each summary tab displays a table with summaries for total accounts and total charge amounts per levy year and/or charge code. The third tab allows users to view revised bills that are pending in TAS. These inquiry screens allow users to view information only; no additional functionality is built in.

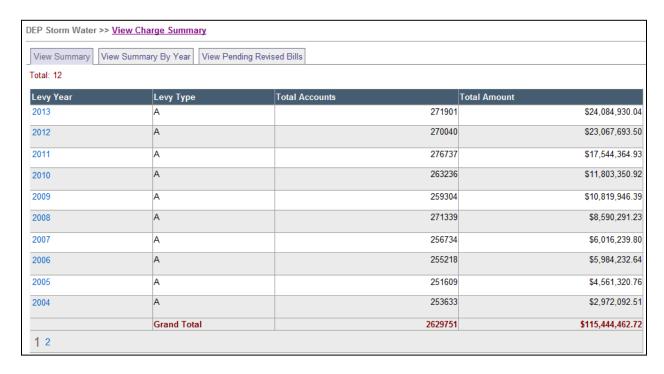


Figure 11 – View Charge Summary Field

### **View Summary**

This table provides total accounts and total charge amounts by levy year in addition to grand totals. By clicking on the hyperlink in the "Levy Year" column, users are directed to the "View Summary by Year" tab.

View Summary \	View Summary By Year Vi	ew Pending Revised Bills	
Total: 12			
Levy Year	Levy Type	Total Accounts	Total Amount
2013	Α	271901	\$24,084,930.04
2012	A	270040	\$23,067,693.50
2011	A	276737	\$17,544,364.93
2010	A	263236	\$11,803,350.92
2009	A	259304	\$10,819,946.39
2008	А	271339	\$8,590,291.23
2007	А	256734	\$6,016,239.80
2006	A	255218	\$5,984,232.64
2005	A	251609	\$4,561,320.76
2004	A	253633	\$2,972,092.51
	Grand Total	2629751	\$115,444,462.72

Figure 12 – View Summary

### **View Summary by Year**

This table provides information pertaining to total accounts and charge amounts for a given levy year.

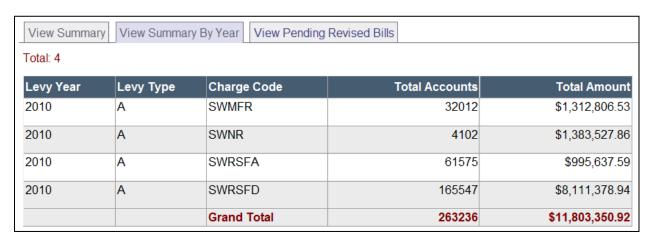


Figure 13 – View Summary by Year

# **View Pending Revised Bills**

The final tab on the "View Charge Summary" screen is "View Pending Revised Bills". When data is modified, the pending revisions are displayed here until processed.

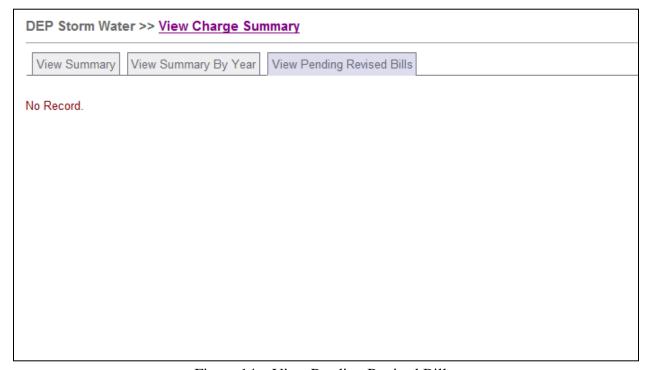


Figure 14 – View Pending Revised Bills

# **View Transaction Change Log**

Upon selecting "View Transaction Change Log" from the DEP Storm Water menu, users are directed to an inquiry-only screen. The table on this page serves to provide DEP Storm Water with a full log of the transactions made to each account.

This screen displays the up-to-date information to include the account number, levy year and type, charge amounts, and charge codes. The log records the date created and updated in addition to the user who logged each change.

To search, users must provide the "Date From" and "Date To" as demarcated by the red asterisk (\*). To narrow the search, users may also provide an account number and/or levy year.

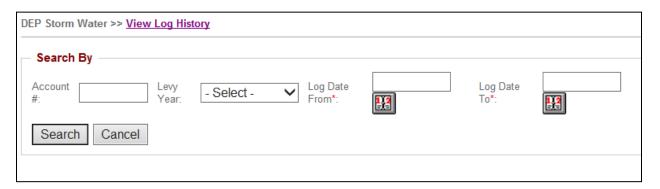


Figure 15 – View Transaction Change Log

Additional Notes: Users may preview data for another levy year by selecting from the drop down menu



# Glossary

Acronym	Description
Consolidated Tax	The real or personal property tax bill that includes all taxes and charges
Bill	from County and all STPs as applicable
DHCA	Department of Housing and Community affairs
DEP	Department of Environmental Protection
DTS	Division of Technology Services
ePilot	
ESB	Enterprise Service Bus
FIN	Finance – Department of Finance
Freeze Period	The system prevents any SDAT files received during the freeze period
	from posting to the Assessment master file.
	The freeze period occurs in the month of June.
IMS Assessment System	The legacy Tax Assessment System that is being replaced.
Initial Bill	The first real or personal property tax bill for an account generated at the beginning of a levy year and for the full year
Levy Year	The twelve month period the property tax is levied mandated by
	Maryland law and County code; the levy year is from July 1 <sup>st</sup> to June 30 <sup>th</sup>
MUNIS	The current COTS real and personal property tax billing and collection application used by the County
New Levy Year	
Original Bill	The initial annual bill. This can also be a 3/4, 1/2, or 1/4 bill. These three
	bills are considered supplemental to the original annual bill.
Pre-Billing	The annual billing cycle begins with the pre-billing process for a new
	levy year. The pre-billing process begins in early January and concludes in early June.
Pre-Billing Quality	TAS performs a quality assurance comparison of all SDAT full files
Assurance	received to the Assessment master file and will identify and report any
	exceptions between the two files. Full SDAT files are received in
	January, June, and July.
Prior Levy Year	TAS will support multiple prior tax years. Prior levy data will result in
•	Subsequent Initial, Revised, or Supplemental bills being generated.
Revised Bill	A revised bill is an adjustment to an Initial bill. Revised bills are for
	Initial bills only (annual, ¾, ½, or ¼ bill type). These bills are for initial
	bills only and are generated on a monthly basis.
Rollover	TAS will initialize all files and tables in preparation for the new levy
	year. This process is referred to as the "rollover".
RTP	Receiving Trading Partner - municipalities, MGC departments, the State
	of Maryland, and downstream systems, such as ePilot and MUNIS that
	receive files or reports from the Assessment system.

Acronym	Description
SDAT	The State of Maryland's "State Department of Assessment and
	Taxation". The county receives SDAT files up to three times a week.
SDAT Freeze	See Freeze Period above
Period	
SOA	Service Oriented Architecture
SSO	Single Sign-On
STP	Sending Trading Partner – municipalities, MGC departments, and the
	State of Maryland who provide the County with tax assessment data for
	input to the Assessment system.
Subsequent Bills	Bills that were not included in the Initial Billing process
Supplemental Bills	Bills that are for assessments above and beyond the initial bill. These are
	typically related to new construction. There can be up to 3 quarter year
	bills produced for a property.
TAS	The replacement Tax Assessment System.
WSSC	Washington Suburban Sanitary Commission – a tax partner