TOXICOLOGY DATABASE: HOW TO ACCESS AND RETRIEVE INFORMATION

CUSTOMER INSTRUCTIONS TO OBTAIN EFFECTS SCREENING LEVEL (ESL) AND AIR MONITORING COMPARISON VALUE (AMCV) DATA, AND DOCUMENTATION

-April 4, 2017

TABLE OF CONTENTS

Toxicity Factor Database 3

1. Description 3

1.1. Document Organization 3

2. Website 4

3. Database Definitions 4

4. Reports 6

4.2. Report Types and Descriptions 8

4.1.1. Statistical Summary Report 8

4.1.2. Tox AMCV Report 9

4.1.3. Tox Document Report 10

4.1.4. Tox ESL-Detail Report 11

4.1.5. Tox ESL-Summary Report 12

4.2. How to Run Reports 13

4.2.1. Report Selection Criteria: Types and Descriptions 13

4.2.1.1. Available Document Types 14

4.2.1.2. Dates 14

4.2.1.3. Interim Source 15

4.2.1.4. Odor Source 16

4.2.1.5. Optional Columns 16

4.2.1.6. Permitting Condition 18

4.2.1.7. Phase 18

4.2.1.8. Select Duration 19

4.2.1.9. Select File Delimiter 19

4.2.1.10. Select Parameters 20

4.2.1.11. Select Site 21

4.2.1.12. Selected Substances Box 22

4.2.1.13. SLT Basis 23

4.2.1.14. SLT Duration/Basis 24

4.2.1.15. SLT Status 24

4.2.1.16. Substance Search Box 25

4.2.2. Run a Report: Step-by-Step Guide 28

4.2.2.1. General Instructions for All Reports 28

4.2.2.2. Statistical Summary Report 29

4.2.2.3. AMCV and ESL-Detail/Summary Reports 30

4.2.2.4. Document Report 32

5. Index 34

TOXICITY FACTOR DATABASE

1. DESCRIPTION

The Toxicity Factor Database is now a part of Texas Air Monitoring Information System (TAMIS) database. This database is a one-stop-shop for information about all toxicity factors developed by the TCEQ Toxicology Division (TD).

The TAMIS Toxicity Factor Database includes not only Effects Screening Levels (ESLs), but also Air Monitoring Comparison Values (AMCVs), and all supporting documentation. The database was developed in order to reduce errors, improve database structure, provide more information and detail to our customers, and allow more dynamic and efficient data entry.

As a result of this change, there will no longer be published AMCV or ESL lists. Because data will be dynamically entered or changed, updates to values take place immediately rather than quarterly.

Old Published ESL lists will be maintained on the TD's external webpage: https://www.tceq.texas.gov/toxicology/esl/list_main.html/#esl_2.

****NOTE: Due to the calculation from µg/m^3 to ppb in the database, ppb values listed in a Development Support Document (DSD), or on previous versions of the ESL Published Lists, may differ slightly from those listed in the Database. The Database values will be the official values.****

1.1. DOCUMENT ORGANIZATION

This document is meant to provide detailed information about the components of the Toxicity Factor Database, as well as provide guidance on how to obtain data from the database. Here is the basic structure:

- Section 1 – background information on the Database
- Section 2 – website addresses
- Section 3 – definitions of terms used and found within the database
- Section 4 – descriptions of the Reports
    - Section 4.1 – information on Report types
    - Section 4.2 – information on how to run a report
        - Section 4.2.1 – detailed descriptions for all components of the reports
        - Section 4.2.2 – **a step-by-step guide to running a report** – the step-by-step guide is split according to the type of report the user has chosen to run
- Section 5 – an index for quick reference in the document

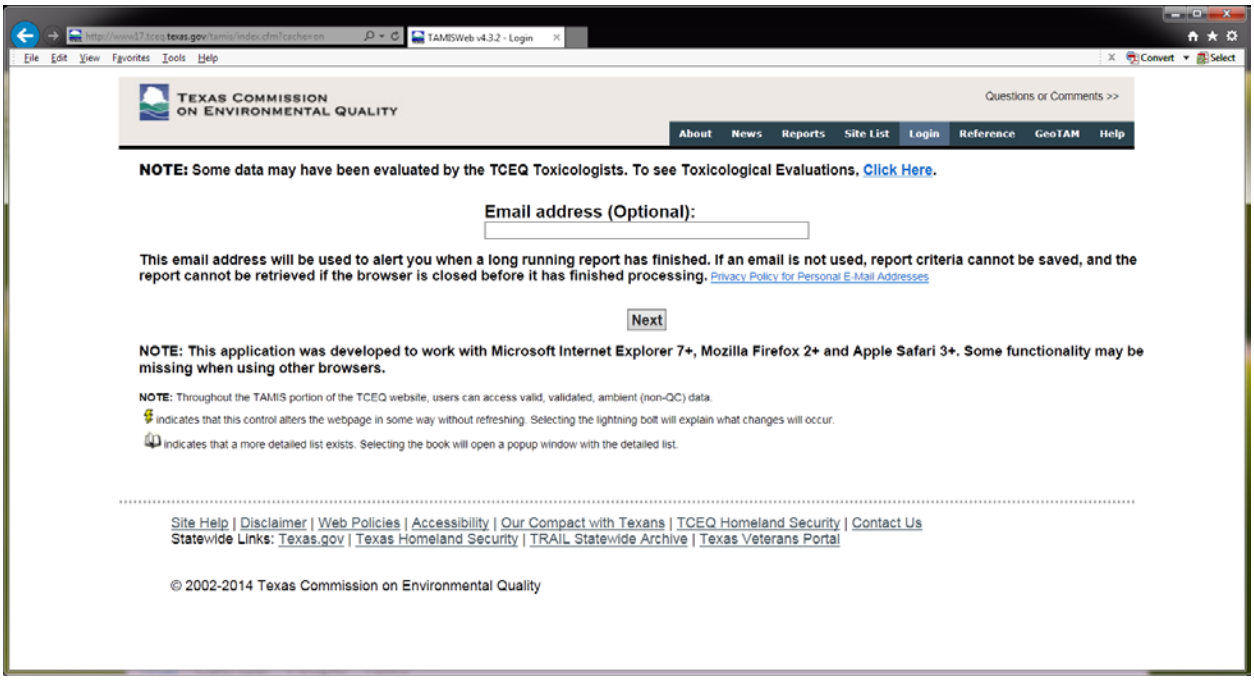
Shortened, step-by-step instructions on how to run a report are found in Section 4.2.2.

2. WEBSITE

http://www17.tceq.texas.gov/tamis/index.cfm

Users may login by entering their email address. This is, however, optional. The email address is used to alert the user when a report has finished. It is helpful to do this with long-running reports. This also allows the user to save the report for retrieval at a later time. See Figure 1 below.

Figure 1. Texas Air Monitoring Information System (TAMIS) Login Screen



3. DATABASE DEFINITIONS

AMCV – Air Monitoring Comparison Value. AMCVs are screening levels; more specifically, AMCV is a collective term that refers to all odor-, vegetation-, and health-based screening values used in the evaluation of ambient air monitoring data.

CAS# – Chemical Abstracts Service Registry Number. This is a unique numerical identifier assigned by the CAS to every chemical substance described in the open scientific literature (from at least 1957 to present). **If a CAS# is available, it is recommended this be the default search within the database as the database may not have all available spellings or synonyms of a substance.**

Document Type – Refers to the types of documentation available for a specific substance documenting the derivation of the toxicity factors. Current Document Types include:

1. **DSD** – Development support document. Document outlining the derivation of the toxicity factors, following the TCEQ Guidelines to Develop Toxicity Factors (RG-442).

2. **DSD Appx** – Development support document appendix.
3. **DSD Fact Sheet** – Development support document fact sheet. One-to-two page general fact sheet summarizing the DSD for public consumption.
4. **DSD Public Cmnts** – Development support document public comments. Public comments received on the DSD, along with responses to the comments.
5. **DSD-24hr** – Development support document for a 24-hour toxicity factor.
6. **DSD Public Cmnts-24hr** – Public comments, and response to public comments, received on a 24-hour DSD.
7. **DSD Amend-Public Cmnts** – Public comments, and response to public comments, received on an amendment to a DSD.
8. **Interim ESL Doc** – Interim ESL document. This documents the derivation of an interim ESL.
9. **MSDS** – Material Safety Data Sheet.
10. **SFo Doc** – Cancer slope factor document. This documents the derivation of an SFo.
11. **RfD Doc** – Reference dose document. This documents the derivation of an RfD.
12. **URF Doc** – Unit risk factor document. This documents the derivation of an URF.
13. **RfC Doc** – Reference concentration document. This documents the derivation of an RfC.
14. **DSD Oral** – Development support document for oral toxicity factors.
15. **DSD Oral Fact Sheet** – Development support document fact sheet for oral toxicity factors.
16. **DSD Oral Public Cmnts** – Public comments, and response to public comments, received on oral toxicity factors.

DSD – Development support document. Document outlining the derivation of the toxicity factors, following the TCEQ Guidelines to Develop Toxicity Factors (RG-442).

ESL – Effects Screening Level. ESLs are screening levels; more specifically, they are chemical-specific air concentrations set to protect human health and welfare in the air permitting process.

PM – Particulate matter. PM may also be accompanied by a number, signifying a specific aerodynamic diameter cut-off point (e.g., PM4 includes particles less than or equal to 4 µm in diameter).

Surrogate – In the case of the database, a surrogate refers to the toxicity factor(s) of a substance that functions as a substitute for another substance's toxicity factor(s). In other words, when data are not

available for a substance to derive a toxicity factor(s), a surrogate may be chosen (i.e., a parent compound), in which the parent substance toxicity factor(s) is adopted by the child substance. Surrogation may be done one of two ways:

- **Straight surrogation**, in which the child adopts the parent toxicity factor(s), or
- **Relative potency approach**, in which the parent toxicity factor(s) is multiplied by a relative potency factor to derive the child-appropriate toxicity factor(s).

****NOTE: Due to the calculation from µg/m^3 to ppb in the database, ppb values listed in a Development Support Document (DSD), or on previous versions of the ESL Published Lists, may differ slightly from those listed in the Database. <u>The Database values will be the official values</u>.****

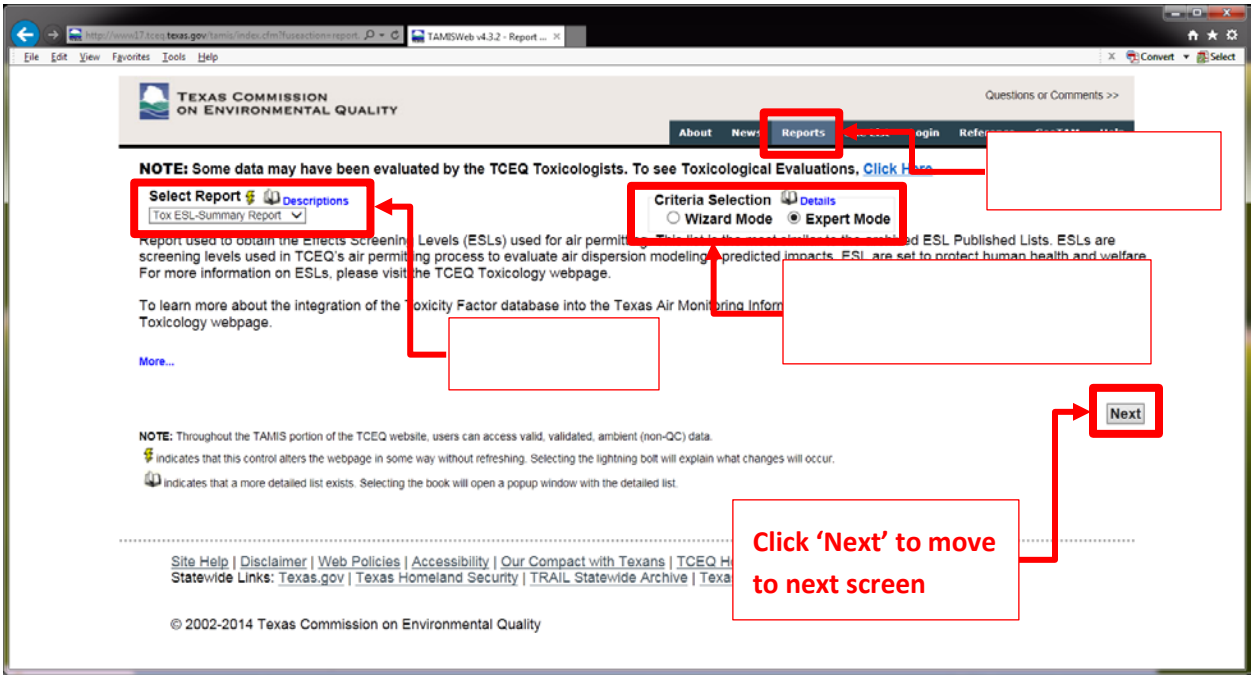
4. REPORTS

Click the '**Reports**' ribbon at the top right side of the TAMIS Home or Login page. Once on this page, the Reports are accessed through the dropdown list under '**Select Report**' at the top left side of the page. At this point, the '**Criteria Selection**' Mode must be chosen: (1) Wizard or (2) Expert (see Section 4.2.1 for more information). Once the desired report is selected, the user must click '**Next**'. See Figure 2 below.

There are 5 Toxicology Database Reports:

1. Statistical Summary Report
2. Tox AMCV Report
3. Tox Document Report
4. Tox ESL-Detail Report
5. Tox ESL-Summary Report

Figure 2. Texas Air Monitoring Information System (TAMIS) Report Access



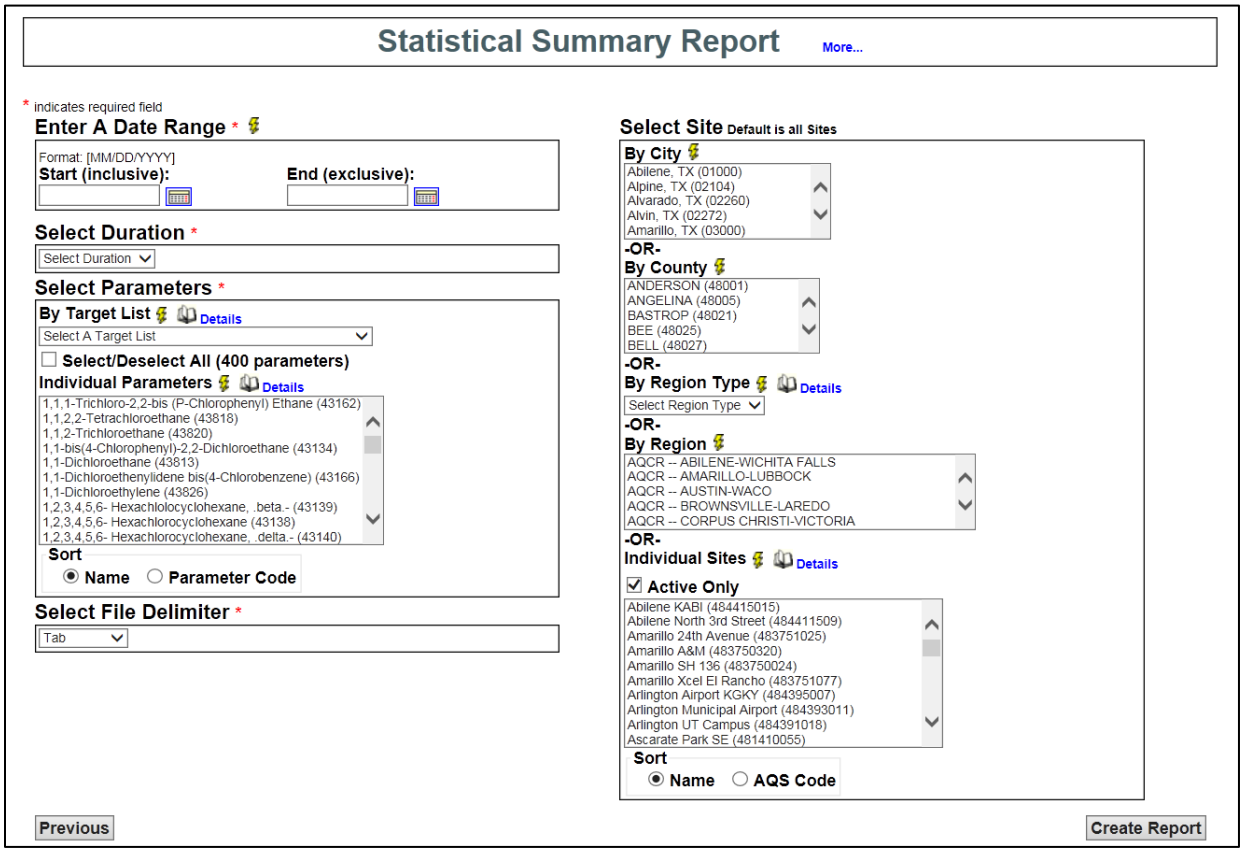
4.2. REPORT TYPES AND DESCRIPTIONS

4.1.1. STATISTICAL SUMMARY REPORT

This report is used to obtain Summary Statistics of measurement results from ambient air monitoring sites in Texas with comparisons to TCEQ Air Monitoring Comparison Values (AMCVs). This data file is designed for importing into analysis software such as Excel.

See Figure 3 for an example of the Statistical Summary Report Expert Mode screen.

Figure 3. Statistical Summary Report – Expert Mode

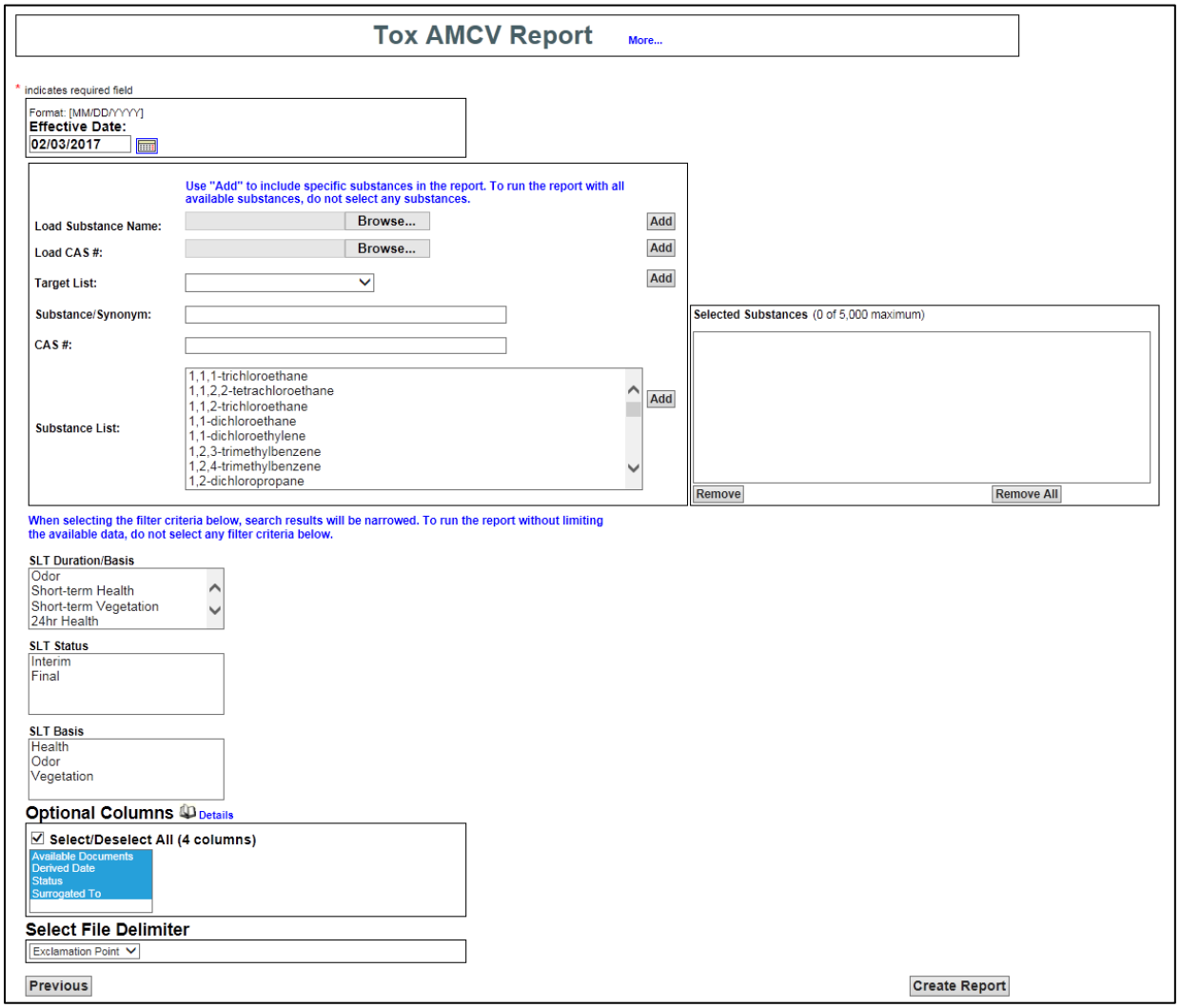


4.1.2. TOX AMCV REPORT

This report is used to obtain Air Monitoring Comparison Values (AMCVs). AMCVs are screening levels for ambient air data that are set to protect human health and welfare. For more information on AMCVs, please visit the TCEQ Toxicology webpage: https://www.tceq.texas.gov/toxicology/amcv/about.

See Figure 4 for an example of the TOX AMCV Report Expert Mode Screen.

Figure 4. TOX AMCV Report – Expert Mode

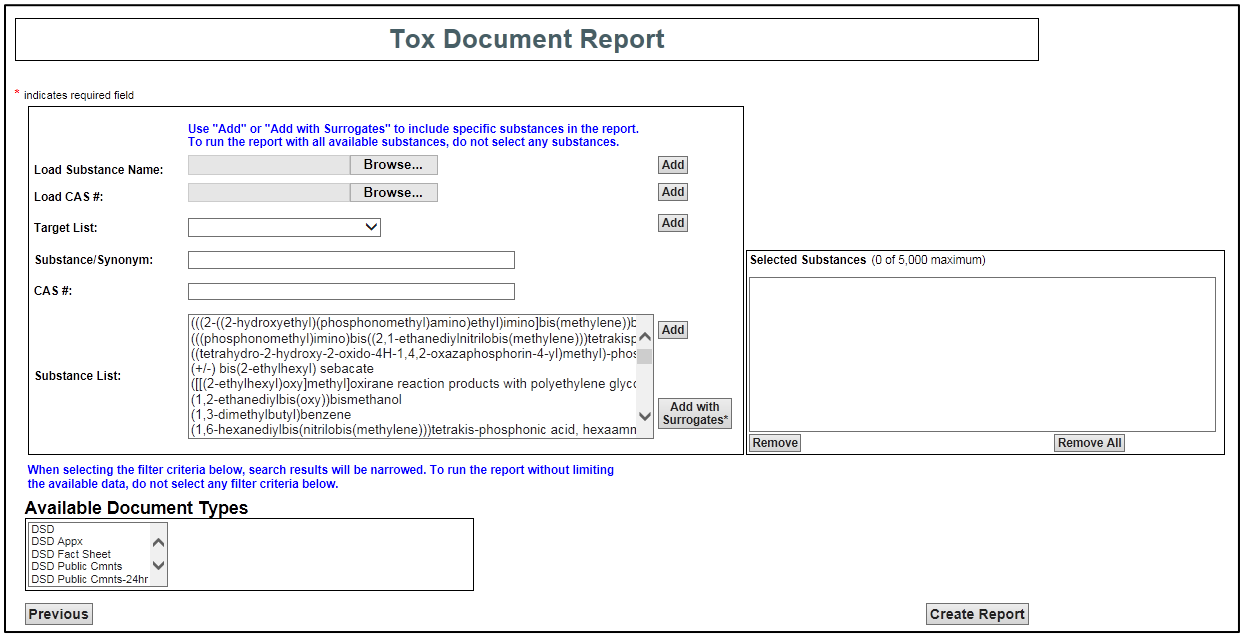


4.1.3. TOX DOCUMENT REPORT

This report is used to display documents, such as development support documents (DSDs), associated with a specific substance in the database.

See Figure 5 for an example of the TOX Document Report Expert Mode screen.

Figure 5. TOX Document Report – Expert Mode

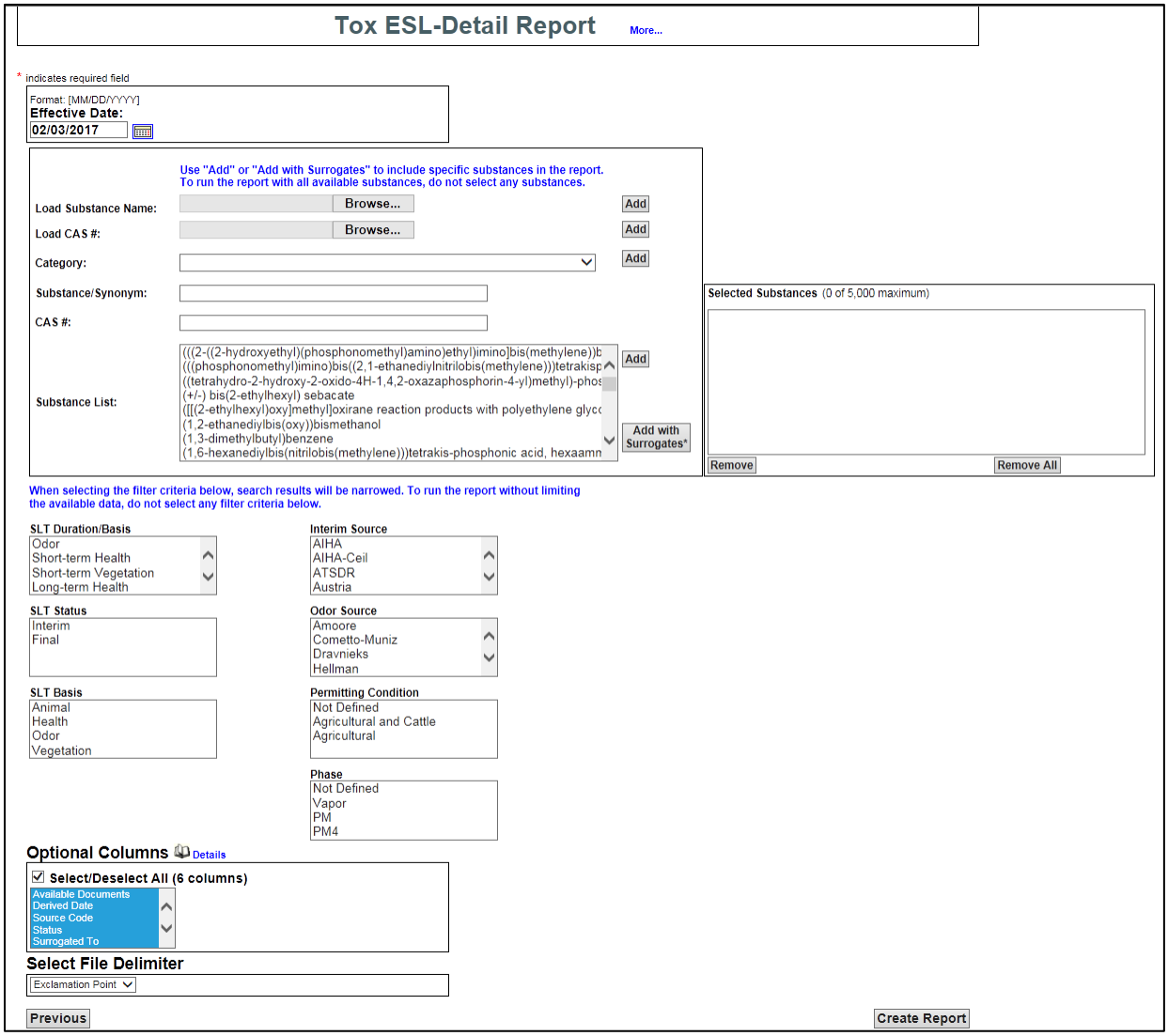


4.1.4. TOX ESL-DETAIL REPORT

This report is used to obtain the Effects Screening Levels (ESLs) used for air permitting, as well as a substance's associated health-based ESLs when the air permitting ESLs are welfare-based. ESLs are screening levels used in TCEQ's air permitting process to evaluate air dispersion modeling's predicted impacts. ESL are set to protect human health and welfare. For more information on ESLs, please visit the TCEQ Toxicology webpage: https://www.tceq.texas.gov/toxicology/esl/ESLMain.html.

See Figure 6 for an example of the TOX ESL-Detail Report Expert Mode screen.

Figure 6. TOX ESL-Detail Report – Expert Mode

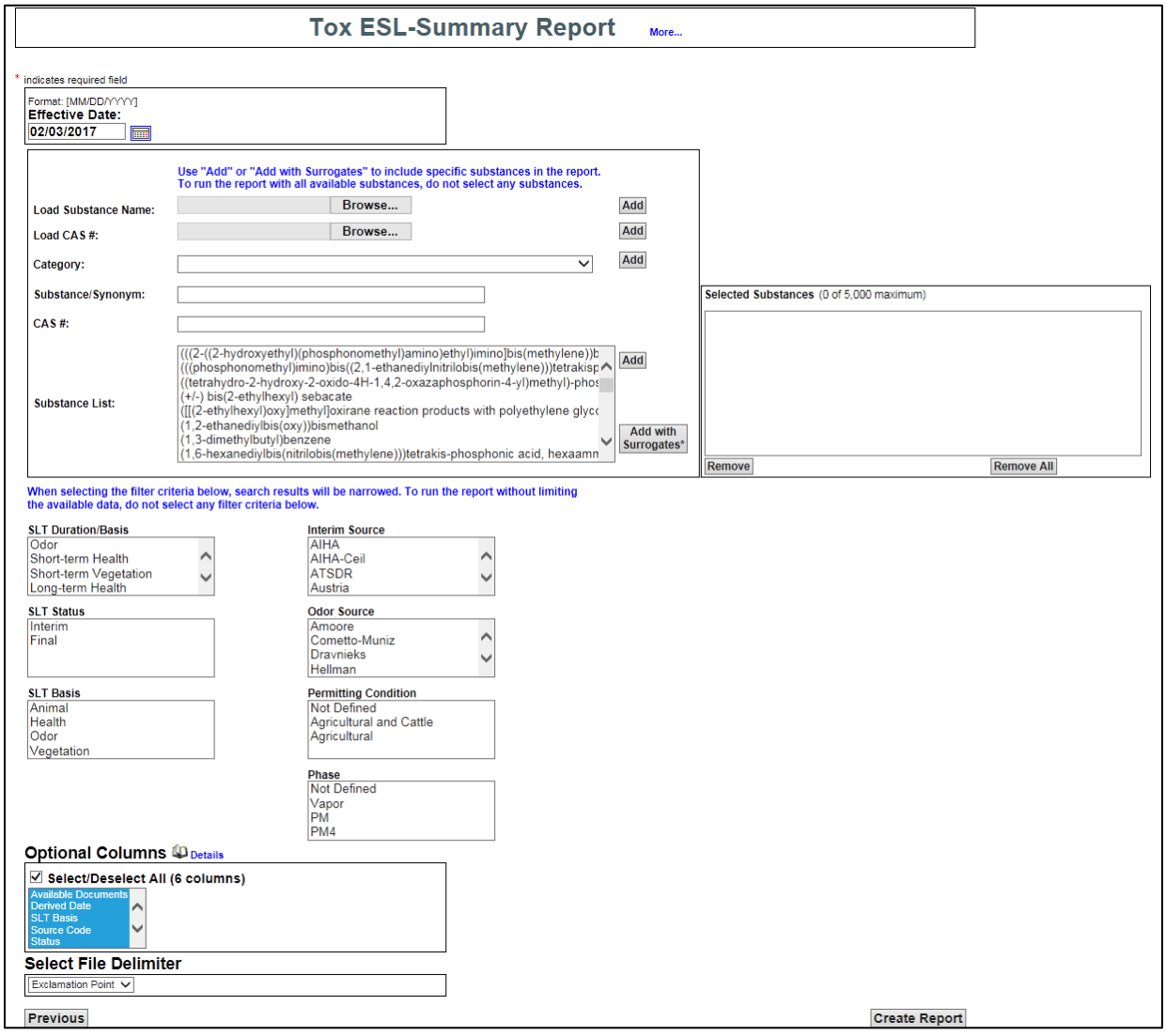


4.1.5. TOX ESL-SUMMARY REPORT

This report is used to obtain the Effects Screening Levels (ESLs) used for air permitting. ***This list is the most similar to the archived ESL Published Lists.*** ESLs are screening levels used in TCEQ's air permitting process to evaluate air dispersion modeling's predicted impacts. ESL are set to protect human health and welfare. For more information on ESLs, please visit the TCEQ Toxicology webpage: https://www.tceq.texas.gov/toxicology/esl/ESLMain.html.

See Figure 7 for an example of the TOX ESL-Summary Report Expert Mode screen.

Figure 7. TOX ESL-Summary Report – Expert Mode



4.2. HOW TO RUN REPORTS

4.2.1. REPORT SELECTION CRITERIA: TYPES AND DESCRIPTIONS

The following Sections provide detailed descriptions of the filter criteria used to tell the database what data the user would like it to retrieve. Filter criteria are provided below in alphabetical order.

When selecting the filter criteria, search results will be narrowed. The more filters that are chosen, the narrower the search results will become. It is possible for a user to select themselves out of data. **To run the report without limiting the available data, do not select any filter criteria**. In other words, if the user would like all returnable data, the user should select nothing (i.e., no filters) and run the report.

When different selection criteria are chosen (i.e., choosing criteria from each criteria box), the criteria will be considered as an AND statement. This means, if the user searches for a specified substance with a duration of 1 HOUR, and a status of Final, and an Interim Source Code of AIHA, the database will look for the substance that meets all of the chosen criteria. *The result of this search will be zero files because final values do not have interim source codes.* Interim source codes only apply to interim ESL values. It is important for the user to consider this when selecting specific report criteria. **Otherwise, the user can unknowingly select themselves out of data**.

The only exception to this rule are the source codes. Selecting a specific interim source code and an odor source code function in the search as an **OR** statement. This means, if the user searches for values associated with a specific interim source and a specific odor source, values will be returned that meet the criteria specified, independent of each other.

Available selection report criteria depend on the report type. Not all of the selection report criteria described below will be available for all reports.

In TAMIS, reports are run after filter criteria are selected. There are two modes in which a user can select filter criteria:

1. **Wizard Mode** – A step-by-step, multi-screen approach to criteria selection, where criteria are listed on different screens by when, where (statistical summary report only), what, and other options.

2. **Expert Mode** – All selection criteria are listed on one page (i.e., screen), so selections can be made in one step.

All instructions and descriptions in this document are based on the Expert Mode for criteria selection. The descriptions apply to the Wizard Mode as well, but screen shots may look different.

4.2.1.1. AVAILABLE DOCUMENT TYPES

Report(s) applicable to: TOX Document

This allows the user to filter the returned data based on the type of document sought (e.g., DSD, DSD Appx, DSD Fact Sheet, Interim ESL Doc, DSD Oral, etc.). See Figure 8 below. **This only applies to the Document Report**.

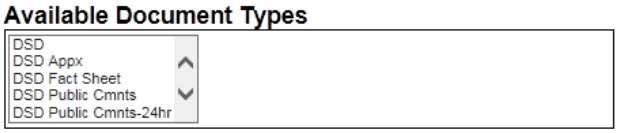
This filter functions as an **OR** filter. For instance, if the user selects '**DSD**', the database will only return a list of substances that have a DSD. But, if the user selects '**DSD**' and '**Interim ESL Doc**', the database will return a list of substances that have a DSD, as well as including substances that have an interim ESL document, independent of each other.

The database will only return a list of substances that match the filter criteria. If the user filters for DSD, the system will only return a list of substances that meet that criteria.

To return all substances regardless of document type, select **NONE** of the choices in this filter. To do this, leave all choices un-highlighted to keep from restricting the data search. If a choice is selected, to de-select, press and hold the '**Ctrl**' key and click the selection.

****NOTE: To manually select more than one item not in sequential order, press and hold the 'Ctrl' key and click the desired selection. To select a block of items that are in sequential order, select the top item, press and hold the 'Shift' key and select the bottom item.****

Figure 8. 'Available Document Types' Filter Criteria



4.2.1.2. DATES

4.2.1.2.1. ENTER A DATE RANGE

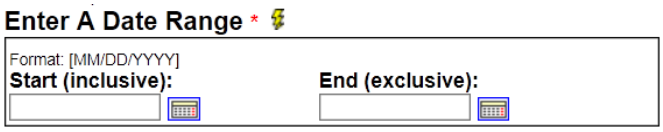
Report(s) applicable to: Statistical Summary

The report this applies to returns ambient air monitoring data, so the date range covers the dates in which the user would like to receive data (see Figure 9). This is a required entry for the Statistical Summary Report. There are two aspects to the date range:

- **Start (inclusive)** – this is the first day for which data should be returned
- **End (exclusive)** – this is the day after the last day for which data should be returned

Example: If the desired date range for data return is all of 2016, '**Start**' would be 01/01/2016 and '**End**' would be 01/01/2017.

Figure 9. 'Enter A Date Range' Filter Criteria

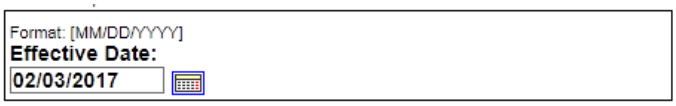


4.2.1.2.2. EFFECTIVE DATE

Report(s) applicable to: TOX AMCV, TOX ESL-Detail, and TOX ESL-Summary

This is the date in which the data returned were effective. In other words, on the entered date, the returned data were in effect (see Figure 10). For the most current data, the effective date defaults to today's date. To search for data effective in the past, enter the desired past date.

Figure 10. 'Effective Date' Filter Criteria



4.2.1.3. INTERIM SOURCE

Report(s) applicable to: TOX ESL-Detail and TOX ESL-Summary

This allows the user to filter the returned data based on the source of the interim value (i.e., the study, Agency, etc., that the values are based upon). See Figure 11 below.

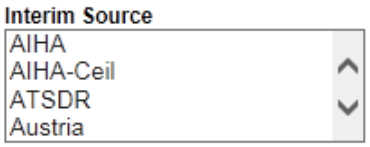
This filter functions as an **OR** filter. For instance, if the user selected '**AIHA**', the database will only return values that are associated with that source. But, if the user selects '**AIHA**' and '**ATSDR**', the database will return all values associated with AIHA, as well as those associated with ATSDR.

The database will only return values for substances that match the filter criteria.If the user filters for AIHA, the system will only return the values for substances that meet that criteria.

To return all substances regardless of source code, select **NONE** of the choices in this filter. To do this, leave all choices un-highlighted to keep from restricting the data search. If a choice is selected, to de-select, press and hold the '**Ctrl**' key and click the selection.

****NOTE: To manually select more than one item not in sequential order, press and hold the 'Ctrl' key and click the desired selection. To select a block of items that are in sequential order, select the top item, press and hold the 'Shift' key and select the bottom item.****

Figure 11. 'Interim Source' Filter Criteria



4.2.1.4. ODOR SOURCE

Report(s) applicable to: TOX ESL-Detail and TOX ESL-Summary

This allows the user to filter the returned data based on the source of the odor value (i.e., the study that the value is based upon). See Figure 12 below.

This filter functions as an **OR** filter. For instance, if the user selected '**Amoore**', the database will only return values that are associated with that source. But, if the user selects '**Amoore**' and '**Dixon**', the database will return all values associated with Amoore, as well as those associated with Dixon.

The database will only return values for substances that match the filter criteria. If the user filters for Amoore, the system will only return the values for substances that meet that criteria.

To return all substances regardless of source code, select **NONE** of the choices in this filter. To do this, leave all choices un-highlighted to keep from restricting the data search. If a choice is selected, to de-select, press and hold the '**Ctrl**' key and click the selection.

****NOTE: To manually select more than one item not in sequential order, press and hold the 'Ctrl' key and click the desired selection. To select a block of items that are in sequential order, select the top item, press and hold the 'Shift' key and select the bottom item.****

Figure 12. 'Odor Source' Filter Criteria

4.2.1.5. OPTIONAL COLUMNS

Report(s) applicable to: TOX AMCV, TOX ESL-Detail, and TOX ESL-Summary

This box allows the user to decide if they would like certain columns to display in the report output (see Figure 13). Optional Columns depend on the report type, and include the following:

i. Available Documents – Selecting this will display a hyperlink to documents that are associated with a substance. **NOTE: This may cover several columns, depending on how many documents are available. There will be one column displayed for each document type.** Column names will be associated with the document type. Document type possibilities include (but aren't limited to):

   a. DSD
   b. DSD Appx
   c. DSD Fact Sheet
   d. DSD Public Cmnts
   e. DSD-24hr
   f. DSD Public Cmnts-24hr
   g. Interim ESL Doc

   If documents are available for a substance, and this series of columns are selected to display, all document types available for that substance will display whether or not a document type corresponds to the values in the report output.

ii. **Derived Date** – Selecting this will display the date that an SLT was derived. Format is in Day-Month-YY.

iii. **SLT Basis –** Selecting this will display the basis for an SLT (i.e., health, odor, vegetation, animal).

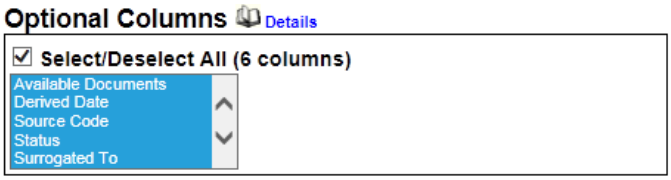
iv. **Source Code –** Selecting this will display the source code for an interim or odor value. **Only available for ESL-Detail and ESL-Summary Reports**.

v. **Status** – Selecting this will display the status of an SLT (i.e., interim, under review, or final).

vi. **Surrogated To** – Selecting this will display the parent substance for the SLT. When a substance is surrogated, and this columns displays, the user will know the substance SLT is surrogated if there is a substance name in this column. The substance name in this columns is the parent of the SLT value associated with it (i.e., the substance associated with the value is a child of the parent substance listed in this column).

vii. **Used for Air Permit Review** – Selecting this will display whether an SLT is used for air permitting or not (i.e., if the SLT is used for air permitting, the cell will say '**Yes**'). **Only available for ESL-Detail Report** (since that report contains values that are used for air permitting as well as values that are not).

Figure 13. 'Optional Columns' Filter Criteria



4.2.1.6. PERMITTING CONDITION

Report(s) applicable to: TOX ESL-Detail and TOX ESL-Summary

This allows the user to filter the returned data based on the permitting condition for the SLT (i.e., Not Defined, Agricultural and Cattle, and Agricultural). See Figure 14 below.

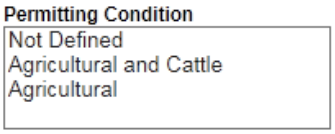
This filter functions as an **OR** filter. For instance, if the user selected '**Agricultural**', the database will only return values that are associated with that permitting condition. But, if the user selects '**Agricultural**' and '**Not Defined**', the database will return all values associated with an agricultural permitting condition, as well as those associated with not defined permitting conditions.

The database will only return values for substances that match the filter criteria. If the user filters for Agricultural, the system will only return the values for substances that meet that criteria.

To return all substances regardless of source code, select **NONE** of the choices in this filter. To do this, leave all choices un-highlighted to keep from restricting the data search. If a choice is selected, to de-select, press and hold the '**Ctrl**' key and click the selection.

****NOTE: To manually select more than one item not in sequential order, press and hold the 'Ctrl' key and click the desired selection. To select a block of items that are in sequential order, select the top item, press and hold the 'Shift' key and select the bottom item.****

Figure 14. 'Permitting Condition' Filter Criteria



4.2.1.7. PHASE

Report(s) applicable to: TOX ESL-Detail and TOX ESL-Summary

This allows the user to filter the returned data based on the phase associated with the SLT (i.e., Not Defined, Vapor, PM, PM4). See Figure 15 below.

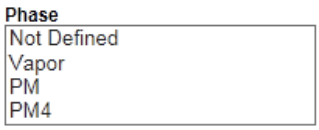
This filter functions as an **OR** filter. For instance, if the user selected '**Vapor**', the database will only return values that are associated with that phase. But, if the user selects '**Vapor**' and '**PM**', the database will return all values associated with the vapor phase, as well as those associated with the PM phase.

The database will only return values for substances that match the filter criteria. If the user filters for Vapor, the system will only return the values for substances that meet that criteria.

To return all substances regardless of source code, select **NONE** of the choices in this filter. To do this, leave all choices un-highlighted to keep from restricting the data search. If a choice is selected, to de-select, press and hold the '**Ctrl**' key and click the selection.

****NOTE: To manually select more than one item not in sequential order, press and hold the 'Ctrl' key and click the desired selection. To select a block of items that are in sequential order, select the top item, press and hold the 'Shift' key and select the bottom item.****

Figure 15. 'Phase' Filter Criteria



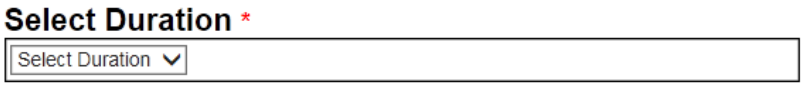
4.2.1.8. SELECT DURATION

Report(s) applicable to: Statistical Summary

This allows the user to select the ambient air sample duration for which data should be returned (see Figure 16). Available sample durations include: All Durations, 1 HOUR, 3 HOURS, 24 HOURS. For instance, choosing a sample duration of 24 HOURs will return data that was collected over 24 HOURS (e.g., canister sampler data).

This is a required field, a duration must be chosen for the report to run.

Figure 16. 'Select Duration' Filter Criteria



4.2.1.9. SELECT FILE DELIMITER

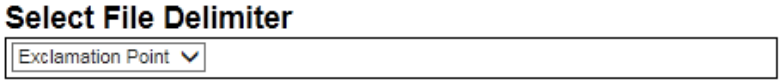
Report(s) applicable to: Statistical Summary, TOX AMCV, TOX ESL-Detail, and TOX ESL-Summary

The report output is in the form of a .txt file. In order to delimit the data into a program such as excel, a file delimiter must be selected (see Figure 17). For the TOX AMCV,

Document, ESL-Detail, and ESL-Summary Reports, due to the special characters in the substance names, an unconventional file delimiter of '**Exclamation Point**' is provided, and is the default. However, if the user prefers, tab may also be chosen as the file delimiter.

For the Statistical Summary Report, tab is the default. However, the user may also select semicolon if preferred. Comma, while available, should not be used as a delimiter due to the commas present in some substance names.

Figure 17. 'Select File Delimiter' Filter Criteria



4.2.1.10. SELECT PARAMETERS

Report(s) applicable to: Statistical Summary

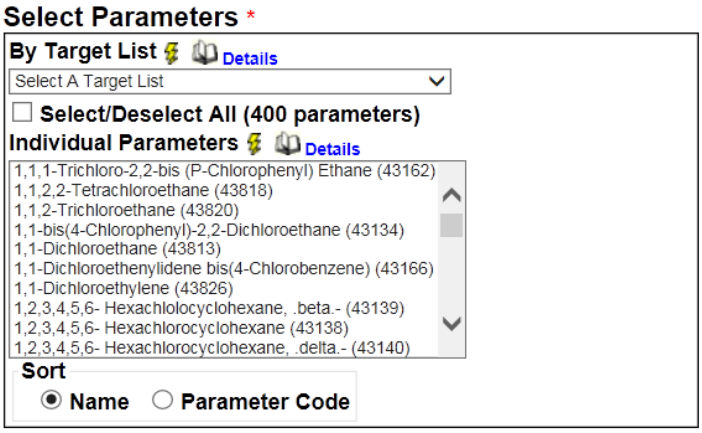
This allows the user to choose the analyte parameters for which data should be returned (see Figure 18). There are several choices in this box:

- **By Target List** – This allows the user to select the parameters based on the Target List. For instance, if choosing **AMCV Canister Parameters (85 Parameters)**, the database will return ambient air monitoring data for these parameters (which include 85 volatile organic compounds measured via a 24-hour canister sampler), if data are available based on the requested date range/sampling site.
    - **Select/Deselect All (400 parameters)** – This box allows the user to quickly select/deselect all 400 parameters available in the database.
- **Individual Parameters –** This allows the user to manually select individual, or multiple substances in the list.

****NOTE: To manually select more than one item not in sequential order, press and hold the 'Ctrl' key and click the desired selection. To select a block of items that are in sequential order, select the top item, press and hold the 'Shift' key and select the bottom item.****

- **Sort** – This allows the user to sort the output either by parameter name, or by parameter code (parameter codes are 5 digit numbers unique to each parameter). The default is to sort by Name.

Figure 18. 'Select Parameters' Filter Criteria



4.2.1.11. SELECT SITE

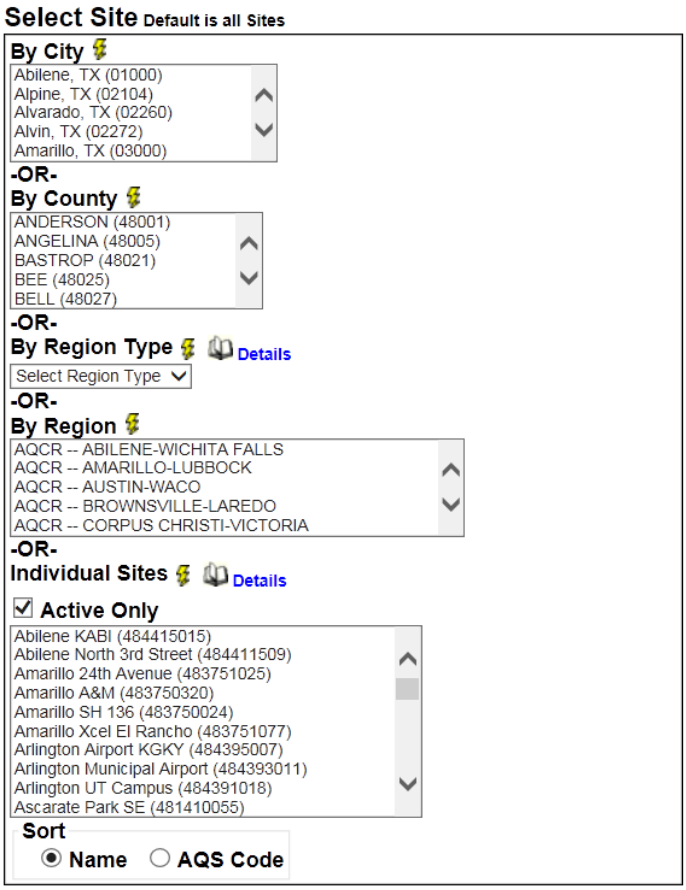
Report(s) applicable to: Statistical Summary

This allows the user to narrow down the returned data based on the monitoring site(s) (see Figure 19). The default is for all sites (i.e., no selections in this box). There are several ways to narrow down the data return:

- **By City** – This allows the user to obtain data from monitoring sites located in a city, or multiple cities
- **By County –** This allows the user to obtain data from monitoring sites located in a county, or multiple counties
- **By Region Type –** This allows the user to obtain data from monitoring sites located in a specific Region, or multiple Regions
- **By Region –** This allows the user to obtain data from monitoring sites located in a specific TCEQ Region, or multiple TCEQ Regions
- **Individual Sites –** This allows the user to obtain data by manually choosing a specific monitoring site(s)
    - **Active Only** – This limits the available monitoring sites to those that are active. Unchecking this box will populate deactivated sites as well.
- **Sort** – This allows the user to sort the output either by site name, or by AQS code (AQS codes are 9 digit numbers unique to each site). The default is to sort by Name.

****NOTE: To manually select more than one item not in sequential order, press and hold the 'Ctrl' key and click the desired selection. To select a block of items that are in sequential order, select the top item, press and hold the 'Shift' key and select the bottom item.****

Figure 19. 'Select Site' Filter Criteria



4.2.1.12. SELECTED SUBSTANCES BOX

Report(s) applicable to: TOX AMCV, TOX Document, TOX ESL-Detail, and TOX ESL-Summary

This box informs the database as to which substance(s) the user would like to search the database for retrievable data (see Figure 20). In order to add substances into this box, the user must use one of the methods from Section 4.2.1.16 to select a substance(s) to add to this box. There are two ways to add a substance, or list:

a) Click '***Add***'

   This allows the user to add a selected substance, or list, to the '***Selected Substances***' box and then search the database for the substance(s).

   -**OR**-

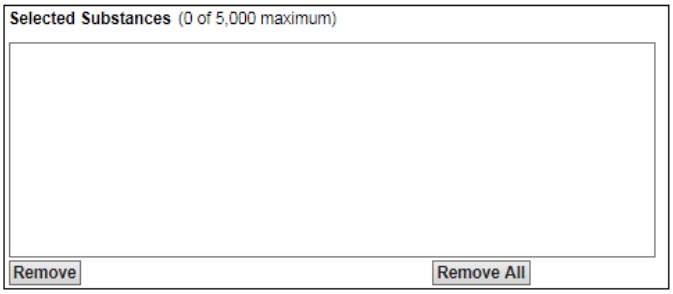
b) Click 'Add with Surrogates'

   This allows the user to search for a substance and any surrogates of that substance. In this case, surrogates refer to substances with limited toxicity data that have utilized a

parent substance's values (one way to view this is as a parent-child relationship – the parent is the main substance and the child, which is using the parent's values, is the surrogate of the parent). A user may want search the database for a parent and all children associated with that parent. In that case, the user would add the parent substance to the '***Selected Substances***' box with this button.

****NOTE: There is a maximum limit for the 'Selected Substances' box – only 5,000 substances may be entered and searched for using this box. If a user would like all 7,000+ substances in the database returned, no substances should be input into the 'Selected Substances' box.**

Figure 20. 'Selected Substances' Box Filter Criteria



4.2.1.13. SLT BASIS

Report(s) applicable to: TOX AMCV, TOX ESL-Detail, and TOX ESL-Summary

This allows the user to filter the returned data based on the basis alone (i.e., health, odor, vegetation, animal (based on report type)). This is different than the '**SLT Duration/Basis**' filter as it allows the user to filter for all Health values, or all Vegetation values, etc., independent of the duration. See Figure 21 below.

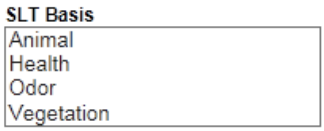
This filter functions as an **OR** filter. For instance, if the user selected '**Vegetation**', the database will only return values that have a basis of vegetation associated with them. But, if the user selects '**Vegetation**' and '**Odor**', the database will return all vegetation values, as well as all odor values.

The database will only return values for substances that match the filter criteria. If the user filters for vegetation, the system will only return the values for substances that meet that criteria.

To return all substances regardless of basis, select **NONE** of the choices in this filter. To do this, leave all choices un-highlighted to keep from restricting the data search. If a choice is selected, to de-select, press and hold the '**Ctrl**' key and click the selection.

****NOTE: To manually select more than one item not in sequential order, press and hold the 'Ctrl' key and click the desired selection. To select a block of items that are in sequential order, select the top item, press and hold the 'Shift' key and select the bottom item.****

Figure 21. 'SLT Basis' Filter Criteria



4.2.1.14. SLT DURATION/BASIS

Report(s) applicable to: TOX AMCV, TOX ESL-Detail, and TOX ESL-Summary

This allows the user to filter the returned data based on the duration (i.e., short-term, 24-hour (depending on report type), or long-term) and basis (i.e., odor, health, vegetation, animal (depending on report type)) of the SLTs. See Figure 22 below.

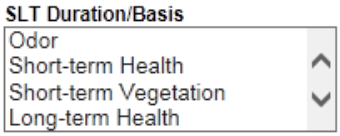
This filter functions as an **OR** filter. For instance, if the user selects '**Odor**', the database will only return values that have an odor basis. But, if the user selects '**Odor**' and '**Short-term Vegetation**', the database will return substances that have an odor values, as well as substances that have a short-term vegetation basis, independent of each other.

The database will only return values for substances that match the filter criteria. If the user filters for odor, the system will only return a list of substances that meet that criteria.

To return all substances regardless of duration and basis, select **NONE** of the choices in this filter. To do this, leave all choices un-highlighted to keep from restricting the data search. If a choice is selected, to de-select, press and hold the '**Ctrl**' key and click the selection.

****NOTE: To manually select more than one item not in sequential order, press and hold the 'Ctrl' key and click the desired selection. To select a block of items that are in sequential order, select the top item, press and hold the 'Shift' key and select the bottom item.****

Figure 22. 'SLT Duration/Basis' Filter Criteria



4.2.1.15. SLT STATUS

Report(s) applicable to: TOX AMCV, TOX ESL-Detail, and TOX ESL-Summary

This allows the user to filter the returned data based on the status of the SLTs (i.e., interim, final, or under review). See Figure 23 below.

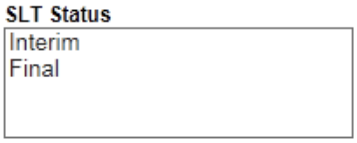
This filter functions as an **OR** filter. For instance, if the user selects '**Interim**', the database will only return values that have an interim status. But, if the user selects '**Interim**' and '**Final**', the database will return substances that have an interim status, as well as substances that have a final status.

The database will only return values for substances that match the filter criteria. IIf the user filters for final, the system will only return a list of substances that meet that criteria.

To return all substances regardless of status, select **NONE** of the choices in this filter. To do this, leave all choices un-highlighted to keep from restricting the data search. If a choice is selected, to de-select, press and hold the '**Ctrl**' key and click the selection.

****NOTE: To manually select more than one item not in sequential order, press and hold the 'Ctrl' key and click the desired selection. To select a block of items that are in sequential order, select the top item, press and hold the 'Shift' key and select the bottom item.****

Figure 23. 'SLT Status' Filter Criteria



4.2.1.16. SUBSTANCE SEARCH BOX

Report(s) applicable to: TOX AMCV, TOX Document, TOX ESL-Detail, and TOX ESL-Summary

This allows the user to choose the substance for which data should be returned. Once a substance, or group, has been selected, the user must click the '***Add***' button to add the substance to the '***Selected Substances***' box for searching the database (see Figure 24). There are multiple ways to search for a substance:

a) Load information into the database

The database has the ability to upload a list from the user of substance names/synonyms or CAS #s. The database will only look at the first line in the uploaded file (excel or .txt), all other data will be disregarded. *If a substance name/synonym or CAS # does not match one existing in the database, the database will provide a list of those data in a new box above the '**Selected Substances**' box.* To utilize this method, the user may:

i. Upload an excel or .txt file of substance names/synonyms

The user can click the '***Browse***' button to browse to the location of the saved file on their computer. Once the file is located and selected, click the '***Open***' button in the window to open the file.

****NOTE: Only excel or .txt files may be uploaded.****

-**OR**-

ii. Upload an excel or .txt file of CAS #s

The user can click the '***Browse***' button to browse to the location of the saved file on their computer. Once the file is located and selected, click the '***Open***' button in the window to open the file.

****NOTE: Only excel or .txt files may be uploaded.****

****NOTE: The database will only look at the first column in the first spreadsheet, any other data will be disregarded.****

b) Search the Database

The database has the ability to search within the database for a specific substance using different options. Once a substance, or group, are identified, they may be added to the '***Selected Substances***' box. See Section 4.2.1.12 for more detail.

i. Select a Target List (if available based on report type)

Target lists allow the user to select the substances associated with the target lists available when downloading ambient air monitoring data (i.e., AMCV AutoGC Parameters, AMCV Canister Parameters, etc.).

-**OR**-

ii. Select a Category (if available based on report type)

Categories allow the user to select a group of pre-defined substances at one time (i.e., alcohol, ethoxylated, not otherwise specified; carboxylic acid; etc.)

-**OR**-

iii. Enter a Substance or Synonym Name

-**OR**-

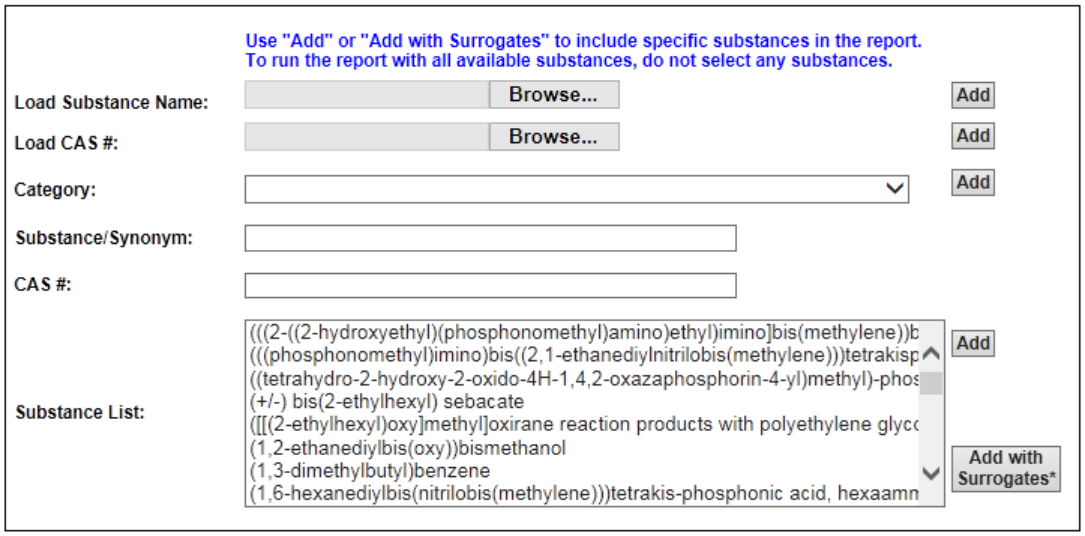
iv. Enter a CAS # (if known/available)

c) Manually select substances in the '***Substance List***'

A user may scroll through the '***Substance List***' and click on the name of the substance to be added to the '***Selected Substances***' box.

****NOTE: To manually select more than one item not in sequential order, press and hold the 'Ctrl' key and click the desired selection. To select a block of items that are in sequential order, select the top item, press and hold the 'Shift' key and select the bottom item.****

Figure 24. Substance Search Box Filter Criteria



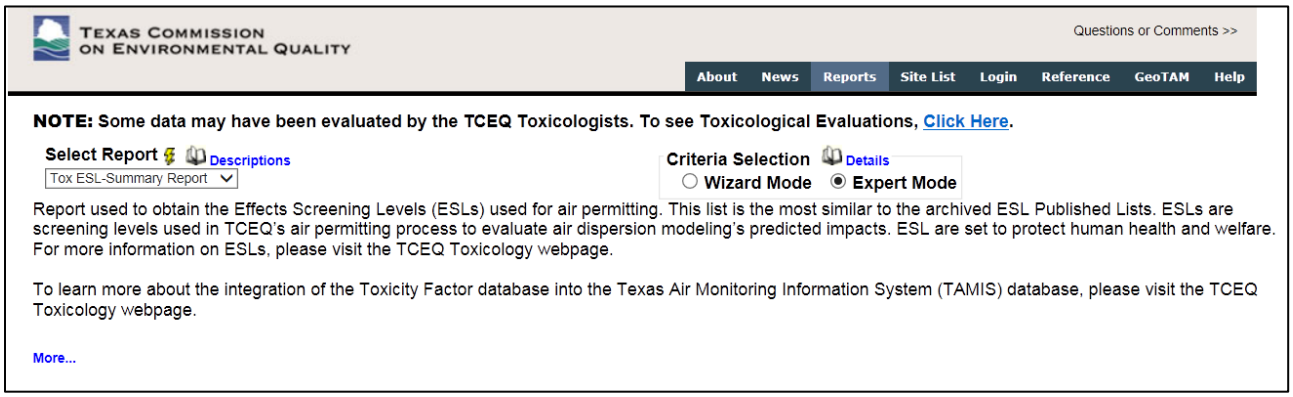
4.2.2. RUN A REPORT: STEP-BY-STEP GUIDE

The following provides step-by-step instructions to run a report. The instructions are provided in four parts: General Instructions (Section 4.1.3.1); Instructions specific to the Statistical Summary Report (Section 4.1.3.2); Instructions specific to the AMCV, ESL-Detail, and ESL-Summary Reports (Section 4.1.3.3); and Instructions for the Document Report (Section 4.1.3.4).

4.2.2.1. GENERAL INSTRUCTIONS FOR ALL REPORTS

1. Login (optional)
2. Click the '**Reports**' ribbon at the top right side of the screen
3. The '**Select Report**' screen will appear
4. Choose a report from the dropdown menu (see Section 4.1 for report types and descriptions and Figure 25 for a visual)

Figure 25. Report Selection Access



5. Select '**Wizard Mode**' or '**Expert Mode**'
   a. Wizard Mode – provides step-by-step criteria selection over multiple pages to run the report.
   b. Expert Mode – provides all selection criteria on one page, allowing selections to be made in one step to run the report.
6. Click '**Next**'

****NOTE: From this point forward, the instructions will use Expert Mode in Internet Explorer. Due to browser differences, screens and descriptions may vary from below.****

4.2.2.2. STATISTICAL SUMMARY REPORT

7. Enter 'Date Range'
    a. '**Start**' is inclusive, this is the day the data return should begin with
    b. '**End**' is exclusive, this is the day after the data return should end, see Section 4.2.1.2.1 for more information
8. Select '**Duration**' (see Section 4.2.1.8 for description)
9. Select '**Parameters**' (see Section 4.2.1.10 for description)

    NOTE: *To select multiple filters that are not listed sequentially, press and hold the '**Ctrl**' key and click the desired selection. To select multiple values that are listed sequentially, click the top filter, press and hold the '**Shift**' key, and click the bottom filter. To deselect highlighted values, hold the '**Ctrl**' key and click the highlighted value. Or click one value so that only one is selected, and then press and hold the '**Ctrl**' key and click the last remaining highlighted value.*

10. Select '**Sort**' based on '**Name**' or '**Parameter Code**'
11. Select '**File Delimiter**' (see Section 4.2.1.9 for description)
12. Select '**Site**', if sites need to be narrowed, if not, do not select anything under '**Select Site**' (see Section 4.2.1.11 for description)
13. Select '**Sort**' based on '**Name**' or '**AQS Code**'
14. Click '**Create Report**'
15. When report is ready, click '**Report File**' link to open .txt file
16. A pop-up will appear at the bottom of the window asking to open or save the file. Click either '**Open**' or '**Save**' – these instructions will go forward with '**Open**'
17. Copy all of the data in the .txt file
    a. To quickly select all data, press and hold '**Ctrl**' key and press '**A**' key at the same time, selection should be highlighted
    b. To quickly copy, press and hold '**Ctrl**' key and press '**C**' key at the same time
    c. Open excel
    d. Select cell A1, if not already selected
    e. To quickly paste, press and hold '**Ctrl**' key and press '**V**' key at the same time

f. DO NOT CLICK ANY CELLS IN THE SHEET AT THIS TIME

   i. If a cell was accidentally clicked, go to the top of the columns and click column '**A**' to highlight the entire column A and continue with step g

g. Go to the '**DATA**' ribbon at the top of the page

h. Click the '**Text to Columns**' button

i. Click the '**Delimited**' radial button

j. Click '**Next**'

k. Pick the Delimiter used in the .txt output file

   i. If tab was chosen, check the box next to '**Tab**'

   -OR-

   ii. If semicolon was chosen, check the box next to '**Semicolon**'

l. Click '**Next**'

m. Click '**Finish**'

n. The data should now be in the correct columns, if not, re-do, beginning with step 18.a above.

18. To change filter criteria, or re-run the report, click '**Edit Query**'

19. Begin again with step 7 above

4.2.2.3. AMCV AND ESL-DETAIL/SUMMARY REPORTS

7. Enter '**Effective Date**' (if applicable)

8. Select substances to search for (or leave blank to search for all)

9. Click '**Add**' button to add the substance to the '**Selected Substances**' box

   NOTE: Substance must be listed in the '**Selected Substances**' box in order to limit the database report to the desired substances. The reports have a limit of 5,000 substances for filtering. If the user would like data from all available substances returned (more than 5,000 for some reports), do not select any substances (i.e., leave the '**Selected Substances**' box empty).

10. To remove one or more substances from the '**Selected Substances**' box, click the '**Remove**' or '**Remove All**' buttons at the bottom of the box

11. Select filter criteria, if desired (see Section 4.2.1 for descriptions)

    NOTE: To select multiple filters that are not listed sequentially, press and hold the '**Ctrl**' key and click the desired selection. To select multiple values that are listed sequentially, click the top filter, press and hold the '**Shift**' key, and click the bottom filter. To deselect highlighted values, hold the '**Ctrl**' key and click the highlighted value. Or click one value so that only one is selected, and then press and hold the '**Ctrl**' key and click the last remaining highlighted value.

12. Select Optional Columns (see Section 4.2.1.5 for descriptions)

13. Select File Delimiter (see Section 4.2.1.9 for description)

14. Click '**Create Report**'

15. When report is ready, click '**Report File**' link to open .txt file

16. A pop-up will appear at the bottom of the window asking to open or save the file. Click either '**Open**' or '**Save**' – these instructions will go forward with '**Open**'

17. Copy all of the data in the .txt file

    a. To quickly select all data, press and hold '**Ctrl**' key and press '**A**' key at the same time

    b. To quickly copy, press and hold '**Ctrl**' key and press '**C**' key at the same time

    c. Open excel

    d. Select cell A1, if not already selected

    e. To quickly paste, press and hold '**Ctrl**' key and press '**V**' key at the same time

    f. DO NOT CLICK ANY CELLS IN THE SHEET AT THIS TIME

    g. If a cell was accidentally clicked, go to the top of the columns and click column '**A**' to highlight the entire column A and continue with step g

    h. Go to the '**DATA**' ribbon at the top of the page

    i. Click the '**Text to Columns**' button

    j. Click the '**Delimited**' radial button

    k. Click '**Next**'

    l. Pick the Delimiter used in the .txt output file

        i. If tab was chosen, check the box next to '**Tab**'

-OR-

ii. If exclamation point was chosen, check the box next to '**Other**' and type an '**!**' in the box

m. Click '**Next**'

n. Click '**Finish**'

o. The data should now be in the correct columns, if not, re-do, beginning with step 18.a above.

18. To change filter criteria, or re-run the report, click '**Edit Query**'

19. Begin again with step 7 above

4.2.2.4. DOCUMENT REPORT

NOTE: *This report is different than the other reports; it returns a table in TAMIS listing substances and the number of documents associated with that substance, there is no report output .txt file.*

7. Select substances to search for (or leave blank to search for all)

8. Click '**Add**' button to add the substance to the '**Selected Substances**' box

   NOTE: Substance must be listed in the '**Selected Substances**' box in order to limit the database report to the desired substances. The reports have a limit of 5,000 substances for filtering. If the user would like data from all available substances returned (more than 5,000 for some reports), do not select any substances (i.e., leave the '**Selected Substances**' box empty).

9. To remove one or more substances from the '**Selected Substances**' box, click the '**Remove**' or '**Remove All**' buttons at the bottom of the box

10. Select filter criteria, if desired (see Section 4.2.1 for descriptions)

    NOTE: To select multiple filters that are not listed sequentially, press and hold the '**Ctrl**' key and click the desired selection. To select multiple values that are listed sequentially, click the top filter, press and hold the '**Shift**' key, and click the bottom filter. To deselect highlighted values, hold the '**Ctrl**' key and click the highlighted value. Or click one value so that only one is selected, and then press and hold the '**Ctrl**' key and click the last remaining highlighted value.

11. Click '**Create Report**'

12. A table will appear in TAMIS listing the substances that meet the search criteria

13. Click the '**Available Document**' number next to the desired substance
14. A detailed table of Documents will appear at the bottom of the page
15. Click the '**File Name**' to open the desired document
16. A pop-up will appear at the bottom of the window asking to open or save the file. Click either '**Open**' or '**Save**' – these instructions will go forward with '**Open**'
17. A .pdf file will open
18. To change filter criteria, or re-run the report, click '**Edit Query**'
19. Begin again with step 7 above

5. INDEX

Available Documents *18*

Derived Date.....*18*

Duration.....*24*, *25*

Effective Date.....*16*

Enter a Date Range *15*

Permitting Condition.....*19*

Phase.....*19*

SLT Basis *18*, *24*

Source Code.....*14*, *18*

Status.....*18*, *25*

Substance *23*, *26*, *27*, *28*, *31*, *33*

Surrogated To.....*18*

Used for Air Permit Review *18*