

## **Completing the New Storm Water Quality Treatment Products Information Form**

### **Purpose**

The purpose of this form is for vendors to provide information regarding storm water quality treatment devices or products to database users. Submitted information can be new data or updates.

### **Submittal, Comments, and Questions**

Any materials that cannot be submitted via the database website can be submitted through the following contact. In addition, comments and questions should also be directed through the same contact.

[productdb.cwcc@eng.hctx.net](mailto:productdb.cwcc@eng.hctx.net)

### **Abbreviations and Acronyms**

BMP – Best Management Practice

NA – Not Applicable

SWQ – Storm Water Quality

### **Definitions**

Absorption – The act or process of a substance being taken in through pores or interstices.

Adsorption – The act or process of the accumulation of gases, liquids, or solutes on the surface of a solid or liquid.

Filtration – The mechanical separation of a liquid from the undissolved particles floating in it.

Hydrodynamic separation – A separation mechanism in which the energy of the flowing water allows the sediments to efficiently separate. This may be achieved by means of swirl action or indirect filtration.

Infiltration – The act or process of water seeping into a porous substance such as soil.

Sediment – Loose particles of clay, silt, sand and other substances that are suspended in the water and settle to the bottom of a water body.

Separation – A process in which a baffle wall or other type of structure is used to collect floating pollutants from storm water.

Settling – The act or process of sediment separating from a solution or mixture due to gravitational forces.

## Instructions for New Storm Water Quality Treatment Products Information Form

In each window on the online form, there are several links and buttons used to navigate the form. The Sections box is on the left hand side of the form. The links within this box can be used to skip to the specified section of the submittal form. The section that is in bold text identifies the current section that you are in. In addition, the “Back” and “Next” links toward the bottom of the window can also be used to navigate between the various sections.

The four buttons on the bottom of the window are used to process the product submittal.

- The “Save” button is used to save and submit the information that has been entered. All “required” fields must have data entered in order to save the submittal. Sections with “required” fields are identified in the Sections box.

***Note: Entering data in the required fields is the minimum information needed to save the submittal to the database. This allows the user to enter data during multiple sessions. However, this is not intended to imply that this is the minimum requirements for being publicly posted on the Products Database. Submittals are eligible for public posting only when every section has been filled out.***

Incomplete submittals are automatically given the status “Requires Vendor Action”. To edit incomplete submittals that have been saved, select “Find My Apps” from the main menu and perform a search based on the saved information. Click on the word “Select” next to the product that needs to be edited and then click the “View/Edit” button at the bottom of the page. This will open the submittal with the previously saved data.

- The “Add/Edit Comments” button is for internal use only.
- The “Upload Documents” button is used to attach any digital files that are to be included with the product submittal. Only Adobe Acrobat (pdf file extension) and Microsoft Word (doc file extension) files less than 5 Megabytes in size may be uploaded.
- The “Back to Main” button will return to the main menu.

***Warning: If you select this button without saving the entered submittal data, all entered data will be lost.***

**Status:** The application status cannot be changed by the user. It is automatically set when the application is initially saved based on the level of completeness. If the status is “Requires Vendor Action”, not enough data has been supplied to be eligible for public posting. If the status is “Awaiting Status Determination” or “Posted to Public” most of the form fields are locked to the user. At this time you may still update the contact information, upload/delete application-specific documents, and make general comments. If any other information needs to be changed you must contact the database administrator at [productdb.cwcc@eng.hctx.net](mailto:productdb.cwcc@eng.hctx.net).

If you have not viewed or made any changes to the app within the period of one year, you will be notified via email that annual updates are required and the status will be changed to “Annual Update Required”. At this time you may make any changes to the product data, but it is not required that you do so: simply viewing the app is enough to satisfy the annual update requirements. After you have viewed or changed the app, the status is set back to “Awaiting Status Determination” and the application becomes eligible again for public posting.

1. **Date (Required):** The date the product information is submitted. This field is required and cannot be beyond the current date.
2. **Product Name (Required):** Provide the licensed product name of the SWQ treatment device or product.

3. **Contact Information (Manufacturer name required):** The minimum contact information that must be entered to save the application is the manufacturer's name. Below is a brief description of the contact information:

Manufacturer:

Provide the name of the manufacturer and the manufacturer's website address, telephone and fax numbers, e-mail address, and mailing address. Provide the name of a manufacturer contact to which correspondence or questions can be directed.

Distributor:

For SWQ treatment devices that are marketed through a distributor in the Harris County and City of Houston area, provide the name of the distributor and the distributor's website address, telephone and fax numbers, e-mail address, and mailing address. Provide the name of a distributor contact to which correspondence or questions can be directed.

Reference:

Provide the name of a company and associated representative that can be contacted as a reference. The reference should have evaluated or used the SWQ treatment product addressed in the submittal. Provide the reference's website address, contact name, telephone and fax numbers, e-mail address, and mailing address.

4. **Type of Application this Storm Water Quality product is suitable for (Required):** Check all of the application types that the SWQ treatment device or product is suitable for application. If more than one application type is applicable to the device or product, information and data required for each application type shall be submitted.

"Construction" should be checked for all SWQ treatment devices or products that are used to control pollutants generated during the construction phase. Generally, these Best Management Practices (BMPs) are temporary and will be removed from the site when they are no longer needed.

Check "Post-Construction or permanent controls for all SWQ treatment devices or products that are used to improve storm water quality from the normal daily operating activities of a site for the life of the development after construction activities have ceased.

Check "Operations/Maintenance/Pollution Prevention" type controls for all devices or products such as sorbent materials used for spill control and prevention or routine pollution prevention. Generally, these BMPs refer to portable controls intended for pollutant containment, and can be used during construction or post-construction.

5. **Current stage of development (Required):** Identify the current stage of development by checking one of the development stages.
1. Research – The SWQ treatment device or product is an idea based on current research and studies.
  2. Conceptual – The SWQ treatment device or product design has been developed based on research.
  3. Prototype – A prototype SWQ treatment device or product has been manufactured according to the conceptual design.
  4. Testing and Evaluation – The SWQ treatment device or product has been tested and studied in a laboratory setting.
  5. Field Demonstration – The SWQ treatment device or product has been tested and studied in a field setting.
  6. Commercial Application – The SWQ treatment device or product has been shown to operate as designed and is commercially in operation.

**Note: The application will not be eligible for public posting unless the vendor chooses “Commercial Application” AND certifies that this product is commercially available in the Harris County region.**

Installations:

Provide the number of SWQ treatment devices that have been installed and are currently in operation in the United States. Provide the number of SWQ treatment devices that were installed and in operation within Harris County and provide the date that the data was collected or the submittal date. Provide the number of devices that have been installed and operated in locations with similar soil type, topography, and hydrology as Harris County and the City of Houston.

Note: For SWQ treatment devices or products, which are not single, discrete units, such as filter fabric fencing, erosion control blankets, spill control absorbent, or chemical treatments, provide the number of project sites that the device or product has been installed or used, instead of providing the number of installed devices. Generally, the number of project sites should be used for any BMP that is installed as a cover material, linear control, or additive. When considering residential development, count the development as one project site. Do not count each lot as a project site.

- 6. Target pollutants:** Identify the target pollutant(s) that the SWQ treatment device or product is designed to treat. Include the removal efficiency (%) from storm water for each target pollutant identified as determined by laboratory and/or field testing. If sediment is included as a target pollutant, identify the particle size range in micrometers ( $\mu\text{m}$ ) that the removal efficiency is based upon. If a target pollutant is not identified in the list provided, check “Other” and insert a description of the pollutant. Non-target pollutants or other additional removal efficiency data can be submitted as described in Item 17.

For SWQ treatment devices and products that function independently of storm water runoff, such as adsorbent materials for spill control, identify the target pollutant(s) and enter “NA” for the removal efficiency.

- 7. Technology Basis (Required):** Check all of the technology types that the SWQ treatment device design is based upon for pollutant removal.
- 8. Advantages:** Check all of the advantages that apply to the SWQ treatment device or product. If “pollutant removal efficiency” is selected, the removal efficiency should have been entered in Item 6.

If “Cost-effective” is selected, insert a brief description. Detailed cost information will be submitted in Items 14 and 16.

If an advantage category is not provided in the list provided, check “Other” and insert a description of the advantage.

Documentation to verify the information provided in this item shall be submitted with this form.

- 9. High flow rate bypass provided:** Identify whether the SWQ treatment device or product has a high flow rate bypass or if one is available by checking yes or no. For those devices or products that do not affect concentrated flow drainage, such as erosion control blankets and adsorbent material, select “NA” (not applicable).
- 10. Limitations for application of the product:** Identify any limitations of the SWQ treatment device or product by checking “Land use”, “Site constraints”, “Flow Rate”, “Other” or “None”. For all of the items that are checked provide a brief description of the limitation. If more space is needed to elaborate on the limitation, submit additional information as an attachment to the form.

If “Land use” is selected, identify the land use type (i.e., commercial, multi-family, single family, industrial, etc.) for which the SWQ treatment device or product is not suitable. Do

not list “Construction” under “Other” as a land use that the device or product is not suitable for use. This will be assumed if “Construction” is not selected in Item 4.

11. **Sizing to meet performance goals:** Identify sizing requirements for the SWQ treatment device or product to function properly and meet performance goals. Identify whether sizing is based on water quality volume, rate of runoff, type of storm, recharge requirements, or another method. Provide a brief description to elaborate on the sizing method selected. For devices or products that do not have sizing requirements, identify the manufacturer’s recommended application rate for the product under “Other”. Select “None” for products that do not require a sizing method.

12. **Treatment effectiveness data for the targeted pollutant(s) submitted:** Provide the method used to calculate the treatment effectiveness identified for the target pollutant(s) in Item 6. Identify the method by checking one of the methods provided or by checking “Other” and providing a description.

For SWQ treatment devices and products that function independently of storm water runoff, such as adsorbent materials for spill control, provide a description of the method and corresponding data identifying the performance ability of the device or product towards the target pollutant(s).

Select “None” for products that do not have treatment effectiveness data.

13. **Recommended Maintenance Frequency:** Provide the manufacturer’s recommended maintenance frequency for the SWQ treatment device or product in the Harris County and City of Houston area. The frequency should be represented as the number of scheduled maintenance visits per year. For devices or products that are used once and disposed, such as adsorbent, enter a response of “NA”.

14. **Costs**

a. **Unit cost:** Provide an approximate cost of the SWQ treatment device or product not including installation for the Harris County and City of Houston area. Cost information should be provided as noted in the table below.

SWQ Treatment Device Type	Example	Cost Type
If the device or product is sized based on the drainage area.	Hydrodynamic Separators	Cost per acre of drainage area
If the device or product is a linear control.	Filter Fabric Fencing	Cost per linear foot
If the device or product is applied as a cover material.	Erosion Control Blanket	Cost per square yard
If the device or product does not have a sizing requirement.	Inlet protection	Cost per device
If the device or product is sold as a bulk solid.	Adsorbent material	Cost per pound
If the device or product is sold as a bulk liquid.	Flocculent	Cost per gallon
Maintenance		Cost per year

b. **Installation cost:** Provide an approximate cost to install the SWQ treatment device or product for the Harris County and City of Houston area. The installation cost should be represented in the same cost type used for the unit cost in Item 14a. For devices or products that do not require installation, such as adsorbent, enter a response of “NA”.

15. **Reliability:** Provide the estimated lifespan or the age of the SWQ treatment device in service the longest and still functioning properly for storm water quality treatment. The lifespan or age should be represented in years. If a device or product has a lifespan less than one year, enter the lifespan as a decimal approximation (i.e., 0.4 years).

For devices or products that are applied as a cover to establish vegetation, such as erosion control blankets, provide the approximate length of time for the device to degrade to an extent where the device no longer provides erosion control protection or functions as intended for storm water quality.

For devices or products that are used once and disposed, such as adsorbent, enter a response of "NA".

16. **Estimated maintenance cost/year:** Provide an estimated maintenance cost per year to maintain the SWQ treatment device's functionality. If a device or product has a lifespan less than one year, calculate a cost per year based on the lifespan entered as a decimal approximation in Item 14 (i.e., \$40/0.4 years would be entered as \$100/year). For devices or products that are used once and disposed, such as adsorbent, select "Not Applicable".

17. **Submittals:** Provide any information or data that is available regarding monitoring data for target pollutants, treatment effectiveness data, field study information, recommended maintenance procedures, and backup information on device advantages in your product submittal. Check each of the categories for which information or data is being submitted with the form. Use the "Upload Documents" button at the bottom of the page to submit digital documentation whenever possible.

Item 18 identifies the information that is requested for field study data.

18. **Field study information submitted includes:** The field study should clearly demonstrate that the device or product is effective at removal/reduction of target pollutants. For all field study information that is submitted, identify if any of the following items are included in the field study.
- Location – The field study shall be from the Harris County or City of Houston area or an alternative location. Identify in Item 19 if the location is in an alternative location, which is a location with similar soil type, rainfall, topography, and hydrology as Harris County and the City of Houston.
  - Size of unit tested – Identify the size or quantity of the SWQ treatment device or product that was evaluated in the field study.
  - Impervious cover – Identify the percentage of impervious cover in the drainage area for the SWQ treatment device or product. Provide the total drainage area in acres. This does not apply to devices or products that do not treat storm water runoff from a defined drainage area, such as adsorbents for spill control.
  - Land use – Provide a land use type of the drainage area in which the field study of the device or product was used.
  - Testing protocols – The testing protocol or methods used to evaluate the effectiveness of the device or product shall be clearly defined.
  - Number of storm events – Identify the number of storm events for which efficiency data was collected in the field study. For construction or temporary controls, field testing data for a minimum of 10 storm events in the Harris County or City of Houston area is required. The field testing data for construction controls can be from more than one sampling site. For post-construction or permanent controls, field testing data for a minimum of 10 storm events from one sampling location in the Harris County or City of Houston area is required. This is not applicable to operations, maintenance, or pollution prevention controls that

function independently of storm water runoff, such as adsorbent materials for spill control.

- Characteristics of storms sampled – Provide the flow depth, duration, antecedent dry period, and other details of the storm events for which sampling data was collected. This is not applicable to operations, maintenance, or pollution prevention controls that function independently of storm water runoff, such as adsorbent materials for spill control.
- Analytical data for the targeted parameters – Provide all analytical data resulting from the device's or product's evaluation.
- Influent and effluent concentrations – When influent and effluent concentrations are compared in order to determine the SWQ treatment device's or product's performance, provide all of the influent and effluent concentrations.
- Independent 3<sup>rd</sup> party verification – It is required that all field testing be performed by an independent 3<sup>rd</sup> party.

19. **Alternatives to a local field study:** As an alternative to submitting field testing performed in the Harris County or City of Houston area, one of the following can be met:

- Study performed in a similar area – If a field study was performed in a location with similar soil type, rainfall, topography, and hydrology as Harris County and the City of Houston, that study can be submitted for consideration.
- Local support by a local representative – A local manufacturer's or distributor's representative agrees to provide routine on-site inspection of the SWQ treatment device or product for a duration of project completion for construction controls or a duration of 2 years for permanent controls. The local representative will coordinate an independent 3<sup>rd</sup> party monitoring and evaluation program for the duration specified above. The local representative will also properly maintain the device or product and perform any repairs that are needed to keep the device or product functioning as designed. All independent 3<sup>rd</sup> party monitoring data and results and all maintenance and repairs will be submitted for review updating.

Select "None" if field testing for the Harris County and the City of Houston area has been submitted.

20. **Additional comments:** Provide any addition comments that are relevant to the review of the SWQ treatment device or product. Discuss the results of the studies, the effectiveness of the control, or maintenance claims.