



## **Guidelines for Filling Out the *City of Toronto MTD Summary Form***

### **Stormceptor® EF/EFO and Jellyfish® Filter**

The City of Toronto's *Design Criteria for Manufactured Treatment Devices* includes a requirement for submittal of the *Manufactured Treatment Device Summary Form* with each project.

The first three sections of the form (General Information, Site Design Characteristics, and Design Requirement – SWM Background) pertain to the project site and treatment parameters. The Engineer will already have this information. The remaining sections will require certain information from the MTD manufacturer pertaining to the device that is sized for the project. **The information pertaining to Stormceptor® EF/EFO and Jellyfish® Filter is outlined in the guidance below.**

#### **General MTD Information**

##### **Type**

Check the appropriate box for "Oil-Grit Separator" or "Filter Device"

##### **Proposed Model Name / Number**

Enter the *Stormceptor®* or *Jellyfish® Filter* model

##### **Tested Model Name / Number**

Enter either *Stormceptor® EF4* or *Stormceptor® EFO4* or *Jellyfish® Filter JF6-6-1*

##### **Testing / Verification / Certification**

For Stormceptor EF / EFO, check the box "ETV OGS Lab Protocol + ISO 14034 ETV Verification"

For Jellyfish Filter, check the box "TAPE Field Test Protocol + ISO 14034 ETV Verification"

##### **Scaling**

Check the box "Scaling Provisions Met"

#### **MTD Characteristics**

##### **Diameter [m]**

Refer to Table 1 or 2

##### **Surface Area [m<sup>2</sup>]**

Refer to Table 1 or 2

##### **Box Length / Width [m]**

Not applicable to Stormceptor and Jellyfish Filter manhole models

##### **Depth [m]**

Refer to Table 1 or 2

This is measured from the outlet pipe invert to the floor.



<b>Treatment Depth [m]</b>	Refer to Table 1 or 2 This is equivalent to Depth minus 50% of Maximum Sediment Depth.
<b>Internal Weir Height [m]</b>	Refer to Table 1 or 2
<b>Sediment Storage Capacity [L]</b>	Refer to Table 1 or 2 This is based on the Recommended Maintenance Sediment Depth.
<b>Total Storage Capacity [L]</b>	Refer to Table 1 or 2 For Stormceptor, this is based on measurement from the floor to the bottom of the drop pipe duct. For Jellyfish Filter, this is based on measurement from the floor to the bottom of the separator skirt (bottom of the filter cartridges).
<b>Oil Storage Capacity [L]</b>	Refer to Table 1 or 2
<b>Maximum Treatment Rate [L/s]</b>	Refer to Table 1 or 2 For Stormceptor, this is equivalent to the maximum tested surface loading rate of 1400 L/min/m <sup>2</sup> . For Jellyfish Filter, this is the design flow rate of the specified filter cartridges, as shown in the Jellyfish Filter sizing report.

#### **OGS Sizing and Performance Evaluation**

<b>Design Treatment Flows</b>	Flow rates (L/s) corresponding to the 10% and 100% annual runoff volume in the Stormceptor sizing report.
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#### **Filter Sizing and Performance Evaluation**

<b>Design Treatment Flow</b>	Flow rate (L/s) corresponding to the 90% annual runoff volume in the Jellyfish Filter sizing report.
<b>Removal Efficiency [%]</b>	For Jellyfish Filter enter 90%

<b><u>Installation Configuration</u></b>	For Stormceptor, check the box "A. Inline OGS" and check <u>all three sub-boxes</u> pertaining to "Internal Bypass Capacity" and "Maximum Scour Concentration".
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For **in-line** Jellyfish Filter, check the box “B. Inline Filter” and check the sub-box for “Internal Bypass Capacity”.  
For **off-line** Jellyfish Filter, check the box “C. Off-line OGS or Filter” and check the sub-box for “Diversion Bypass Capacity”.

## **Operations & Maintenance**

For Stormceptor, check the box “[For OGS] Provided MTD Storage Capacity > Annual Sediment Loading Volume”.

For Jellyfish Filter, check the box “[For Filter Device] Manufacturer Designed and Recommended Maintenance Interval” and enter 1X per year.

## **Attachments with SWM Report**

Provide the following Stormceptor® or Jellyfish® Filter documents:

Engineering Drawing

Sizing Report

ISO 14034 ETV Verification Statement (on Imbrium website)

Owners Manual (on Imbrium website)

**Table 1 – Stormceptor® EF / EFO Dimensions and Capacities**

<b>Model</b>	<b>EF4 / EFO4</b>	<b>EF6 / EFO6</b>	<b>EF8 / EFO8</b>	<b>EF10 / EFO10</b>	<b>EF12 / EFO12</b>
Diameter (m)	1.22	1.83	2.44	3.05	3.66
Surface Area (m <sup>2</sup> )	1.17	2.63	4.67	7.29	10.50
Depth (m)	1.52	1.93	2.59	3.25	3.89
Treatment Depth (m)	1.02	1.27	1.65	2.03	2.40
Internal Weir Height (m)	EF4 0.38 EFO4 0.15	0.38	0.38	0.38	0.38
Sediment Storage Capacity (L)	240	800	2850	4450	6410
Total Storage Capacity (L)	1190	3470	8780	17,790	31,220
Oil Storage Capacity (L)	265	609	1071	1673	2476
Maximum Treatment Rate (L/s)	27	61	109	170	245

**Table 2 – Jellyfish® Filter Dimensions and Capacities**

<b>Model</b>	<b>JF4</b>	<b>JF6</b>	<b>JF8</b>	<b>JF10</b>	<b>JF12</b>
Diameter (m)	1.22	1.83	2.44	3.05	3.66
Surface Area (m <sup>2</sup> )	1.17	2.63	4.67	7.29	10.50
Depth <sup>1</sup> (m)	1.98	1.98	1.98	1.98	1.98
Treatment Depth <sup>2</sup> (m)	1.68	1.68	1.68	1.68	1.68
Internal Weir Height (m)	NA	NA	NA	NA	NA
Sediment Storage Capacity <sup>3</sup> (L)	356	802	1424	2223	3203
Total Storage Capacity <sup>4</sup> (L)	712	1604	2848	4446	6406
Oil Storage Capacity (L)	379	848	1469	2302	2771
Maximum Treatment Rate <sup>5</sup> (L/s)	See Sizing Report	See Sizing Report	See Sizing Report	See Sizing Report	See Sizing Report

- 1** Standard Depth assumes use of 54-inch long cartridges. Use of shorter cartridges will reduce Depth.
- 2** Standard Treatment Depth assumes 305 mm of sediment depth and use of 54-inch long cartridges. Use of shorter cartridges will reduce Treatment Depth.
- 3** Sediment Storage Capacity assumes 305 mm of sediment depth.
- 4** Total Storage Capacity assumes 610 mm of sediment depth.
- 5** Maximum Treatment Rate is dependent on the number of hi-flo and draindown cartridges used, and the cartridge length. See Jellyfish Filter Sizing Report for the design treatment flow rate of the specific model sized for the project.