

# Exhibit MA5-4 Proprietary SQU Checklist

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## **ADS/Hancor/Prinsco Stormwater Quality Units**

- 1. Operations and Maintenance Manual shall include:
  - 1. The maximum sediment depth in inches, not referenced to the size of the unit.
  - 2. A graphical and written procedure for measuring the sediment.
  - 3. A procedure for removing oils and hydrocarbons.
  - 4. A maximum inspection frequency of 6 months.
  - 5. That the unit shall be cleaned at least once a year.
  - 6. That the unit is to be refilled after cleaning.
- 2. SWPPP sheet shall include:
  - 1. A construction detail that shows a minimum of 6" of #57 or #8 crushed aggregate for the bedding.
  - 2. The installation details, including the 6 step detail that is available on the manufacturers' websites.
  - 3. Concrete collars for risers when used in traffic loading conditions.
  - 4. A minimum of two 24" access openings (maintenance risers).

#### AquaShield Aqua-Swirl Stormwater Quality Units

- 1. Operations and Maintenance Manual shall include:
  - 1. A clearly specified maximum sediment depth.
  - 2. A graphical and written procedure for measuring the sediment.
  - 3. A procedure for removing oils and hydrocarbons that includes absorbent pads.
  - 4. A maximum inspection frequency of six months.
  - 5. That the unit shall be cleaned at least once a year.
  - 6. An inspection of each chamber of the unit is to be addressed.
- 2. SWPPP sheet shall include:
  - 1. A construction detail that shows a minimum of 12" of Class I bedding, compacted to 90% proctor density, extending at least 3.5' beyond the unit.
  - 2. A construction detail that shows Class I backfill, compacted to 90% proctor density, extending for the full height of the unit.
  - 3. A construction detail that shows the connection is made with a flexible connector and a sheer guard.
  - 4. A reinforced concrete pad over the unit when used in traffic loading conditions. The pad shall extend beyond the outside of the unit by 12".
  - 5. Bollards are required around the unit when in a non-traffic condition.



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Contech VortSentry Stormwater Quality Units

- 1. Operations and Maintenance Manual shall include:
  - 1. A clearly shown maximum sediment depth.
  - 2. A graphical and written procedure for measuring the sediment.
  - 3. A procedure for removing oils and hydrocarbons.
  - 4. A maximum inspection frequency of six months.
  - 5. That the unit shall be cleaned at least once a year.
- 2. SWPPP sheet shall include:
  - 1. A construction detail that shows a minimum of 6" of crushed aggregate for the bedding.

### Contech Stormvault Stormwater Quality Units

- 1. Operations and Maintenance Manual shall include:
  - 1. A clearly shown maximum sediment depth.
  - 2. A graphical and written procedure for measuring the sediment.
  - 3. A procedure for removing oils and hydrocarbons that includes absorbent pads.
  - 4. A maximum inspection frequency of six months.
  - 5. That the unit shall be cleaned at least once a year.
  - 6. Inspection of each chamber of the unit is to be addressed.
- 2. SWPPP sheet shall include:
  - 1. A construction detail of the unit that includes the bedding and backfill requirements as specified by the manufacture.

#### **Contech Vortechs Stormwater Quality Units**

- 1. Operations and Maintenance Manual shall include:
  - 1. A clearly specified maximum sediment depth.
  - 2. A graphical and written procedure for measuring the sediment.
  - 3. A procedure for removing oils and hydrocarbons.
  - 4. A maximum inspection frequency of 6 months.
  - 5. That the unit shall be cleaned at least once a year.
  - 6. That inspection of each chamber of the unit is to be addressed.
- 2. SWPPP sheet shall include:
  - 1. A construction detail of the unit that includes 6" of stone bedding.
  - 2. A note for the contractor to level the unit.
  - 3. The Inlet 90° to the side of the unit.
- 3. The unit must be off-line if peak design flow greater than 100 gpm/ft² (0.22275 cfs/ft²) of treatment (grit) chamber.



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# **Continuous Deflective Separation (CDS) Stormwater Quality Units**

- 1. Operations and Maintenance Manual shall include:
  - 1. A clearly specified maximum sediment depth.
  - 2. A graphical and written procedure for measuring the sediment.
  - 3. A procedure for removing oils and hydrocarbons.
  - 4. The maximum inspection frequency of 6 months.
  - 5. That the unit shall be cleaned at least once a year.
  - 6. That the inspection of the inner and outer areas of the screen for sediment.
- 2. SWPPP sheet shall include:
  - 1. A construction detail that shows a minimum of 6" of crushed aggregate for the bedding.
  - 2. A detail of the unit with a 2400\_m screen specified. The 4800\_m screen is prohibited.
  - 3. A minimum of a 24" access openings (maintenance risers).

### Hydro International Downstream Defender Stormwater Quality Units

- 1. Operations and Maintenance Manual shall include:
  - 1. A clearly specified maximum sediment depth.
  - 2. A graphical and written procedure for measuring the sediment.
  - 3. A procedure for removing oils and hydrocarbons.
  - 4. The maximum inspection frequency of 6 months.
  - 5. That the unit shall be cleaned at least once a year.
- 2. SWPPP sheet shall include:
  - 1. A construction detail that shows a minimum of 6" of crushed aggregate for the bedding.
  - 2. A construction detail of the unit that includes the backfill requirements as specified by the manufacture.

### Imbrium Stormceptor Stormwater Quality Units

- 1. Operations and Maintenance Manual shall include:
  - 1. A clearly specified maximum sediment depth.
  - 2. A graphical and written procedure for measuring the sediment. This should include the use of a dipstick tube equipped with a ball valve (e.g. Sludge Judge)
  - 3. A procedure for removing oils and hydrocarbons.
  - 4. A maximum inspection frequency of 6 months.
  - 5. That the unit shall be cleaned at least once a year.
- 2. SWPPP sheet shall include:
  - 1. A construction detail that shows a minimum of 6" of crushed aggregate for the bedding.
  - 2. A construction detail that shows the elevation of the outlet pipe should be a minimum of one-inch below the elevation of the inlet pipe.
  - 3. A minimum requirement of 2' of cover above the crown of the pipe to grade for the unit.
- 3. The velocity of the water entering the unit must be less than 4.27 feet per second.