# **QPL 17 EROSION PREVENTION AND SEDIMENT CONTROL**

# SECTION A: EROSION PREVENTION AND SEDIMENT CONTROL PRODUCTS FOR USE IN STANDARD DRAWINGS

### **PROCEDURES**

#### GENERAL

This evaluation procedure outlines the Department's approval process for Erosion Prevention and Sediment Control Products used for Standard Drawings.

#### **SPECIFICATIONS**

Tennessee Department of Transportation Standard Drawings Library

**Tennessee Department of Transportation Statewide Storm Water Management Program** 

Manual for Management of Strom water Discharges Associated with Construction Activities

**Erosion Prevention and Sediment Control Device Certification** 

### PROCEDURES

The products for each of the sections have been pre-qualified for use. The products on this list must meet the material requirements set forth in the standard drawings. Upon any change of the product the manufacturer must submit the changes for approval and placement on the Qualified Products List.

# (EC-STR-1) DEWATERING STRUCTURE

### LIST 17. SECTION A: (EC-STR-1) DEWATERING STRUCTURE

### Component QPL

Installation shall be according to the standard drawing.

### Refer to QPL 36 Geotextiles & Geosynthetics (Type III)

### System Replacement QPL

System Replacements are only applicable when EC-STR-1 is specified and shall not be substituted for other drawings. System Replacement would include replacement of Geotextile Fabric, Wood Stake, Steel Post, Machined Riprap, and/or Installation Details.

All system replacements shall meet the requirements of the Erosion Prevention and Sediment Control Device Certification along with the following:

Shall provide equivalent or better sediment capture (filtration) than the Dewatering Structure specified on standard drawing.

Shall remain structurally stable when filled to capacity.

Shall be installed per manufacturer's specifications.

Shall be Completely Removed after final stabilization.

### (EC-STR-3B) TEMPORARY SILT FENCE

### LIST 17. SECTION A: (EC-STR-3B) TEMPORARY SILT FENCE

### Component QPL

Installation shall be according to the standard drawing.

Refer to QPL 36 Section B.1: Temporary Silt Fence (EC-STR-3B).

System Replacements are only applicable when EC-STR-3B is specified and shall not be substituted for other drawings. System Replacement would include replacement of Geotextile Fabric, Post, and/or Installation Details.

All system replacements shall meet the requirements of the Erosion Prevention and Sediment Control Device Certification along with the following.

Shall provide equivalent or better sediment capture (filtration) than Geotextile fabric specified on standard drawing.

Minimum Drainage Area shall be 1/4 acre per 100 Linear Feet.

Minimum Height of Fence shall be 26 Inches.

Shall pass the flow from the 5yr-24hr storm event prior to overtopping the fence.

Shall remain structurally stable during the 5yr-24hr storm event.

Shall be installed per manufacturer's specifications.

Shall be Completely Removed after final stabilization.

# (EC-STR-3C) TEMPORARY SILT FENCE WITH WIRE BACKING

### LIST 17. SECTION A: (EC-STR-3C) TEMPORARY SILT FENCE WITH BACKING

# Component QPL

Installation shall be according to the standard drawing.

Refer to QPL 36 Section B.2: Temporary Silt Fence with Wire Backing(EC-STR-3C).

### System Replacement QPL

System Replacements are only applicable when EC-STR-3C is specified and shall not be substituted for other drawings. System Replacement would include replacement of Geotextile Fabric, Post, Wire Backing, and/or Installation Details.

All system replacements shall meet the requirements of the Erosion Prevention and Sediment Control Device Certification along with the following:

Shall provide equivalent or better sediment capture (filtration) than Geotextile fabric specified on standard drawing.

Minimum Drainage Area shall be 1 acre per 150 Linear Feet.

Minimum Height of Fence shall be 26 Inches.

Shall pass the flow from the 5yr-24hr storm event prior to overtopping the fence.

Shall remain structurally stable during the 5yr-24hr storm event.

Shall be installed per manufacturer's specifications.

# (EC-STR-3D) ENHANCED SILT FENCE

### LIST 17. SECTION A: (EC-STR-3D) ENHANCED SILT FENCE

### **Component QPL**

Installation shall be according to the standard drawing.

Refer to QPL 36 Section B.3: Enhanced Silt Fence (EC-STR-3D).

### System Replacement QPL

System Replacements are only applicable when EC-STR-3D is specified and shall not be substituted for other drawings. System Replacement would include replacement of Geotextile Fabric, Post, Wire Backing, and/or Installation Details.

All system replacements shall meet the requirements of the Erosion Prevention and Sediment Control Device Certification along with the following:]

Shall provide equivalent or better sediment capture (filtration) than Geotextile fabric specified on standard drawing.

Minimum Drainage Area shall be 1 acre per 150 Linear Feet.

Minimum Height of Fence shall be 26 Inches.

Shall pass the flow from the 5yr-24hr storm event prior to overtopping the fence.

Shall remain structurally stable during the 5yr-24hr storm event.

Shall be installed per manufacturer's specifications.

# (EC-STR-4 AND EC-STR-4A) ENHANCED SILT FENCE CHECK

#### LIST 17. SECTION A: (EC-STR-4 AND EC-STR-4A) ENHANCED SILT FENCE CHECK

### **Component QPL**

Installation shall be according to the standard drawing.

Refer to QPL 36 Geotextiles & Geosynthetics (Type III)

Refer to QPL 36 Section B.3: Enhanced Silt Fabric (EC-STR-3D).

System Replacement QPL

System Replacements are only applicable when EC-STR-4 or EC-STR-4A is specified and shall not be substituted for other drawings. System Replacement would include replacement of Geotextile Fabric, Wire Backing, Steel Post, and/or Installation Details.

All system replacements shall meet the requirements of the Erosion Prevention and Sediment Control Device Certification along with the following:

Shall provide equivalent or better sediment capture (filtration) than Geotextile fabric specified on standard drawing.

Shall pass the flow from 5yr-24hr storm event prior to overtopping the weir.

Shall remain structurally stable during the 5yr-24hr storm event.

Shall be installed per manufacturer's specifications.

### EC-STR-6 ROCK CHECK DAM

### LIST 17. SECTION A: (EC-STR-6) ROCK CHECK DAM

## Component QPL

Installation shall be according to the standard drawing.

Refer to QPL 36 Geotextiles & Geosynthetics (Type III)

System Replacement QPL

System Replacements are only applicable when EC-STR-6 is specified and shall not be substituted for other drawings. System Replacement would include replacement of Geotextile Fabric, Riprap, and/or Installation Details.

All system replacements shall meet the requirements of the Erosion Prevention and Sediment Control Device Certification along with the following:

Minimum Drainage Area shall be 10 acres.

Weir Height shall be 1.0' minimum to 3.0' maximum for 2yr-24hr storm event.

Weir Height shall be 2.0' minimum to 3.0' maximum for 5yr-24hr storm event.

Weir shall be a minimum of 1.0' lower than outer edges of check dam.

Shall pass the flow from the 2yr-24hr storm event over the weir prior to overtopping the structure for 2yr-24hr storm event.

Shall pass the flow from the 5yr-24hr storm event over the weir prior to overtopping the structure for 5yr-24hr storm event.

Shall remain structurally stable during the 5yr-24hr storm event for both the 2yr-24hr and 5yr-24hr storm events.

Shall be installed per manufacturer's specifications.

#### LIST 17. SECTION A: (EC-STR-6) ROCK CHECK DAM

#### SOURCE

#### TRADE NAME

EVAL. NO.

#### PRODUCTS LISTED UNDER LIST 17.SECTION A: (EC-STR-8) FILTER SOCK MAY BE USED AS AN ALTERNATE FOR DITCH APPLICATIONS. ROCK CHECK DAM HEIGHT AND SPACING, AS DESIGNED, MUST BE MAINTAINED AS SHOWN ON EC-STR-6 AND 6A STANDARDS, HOWEVER PRODUCTS MUST BE INSTALLED FOLLOWING EC-STR-8 AND PAID UNDER FILTER SOCK CHECK DAM.

### EC-STR-6A ENHANCE ROCK CHECK DAM

### LIST 17. SECTION A: (EC-STR-6A) ENHANCED ROCK CHECK DAM

### Component QPL

Installation shall be according to the standard drawing.

Refer to QPL 36 Geotextiles & Geosynthetics (Type III)

System Replacement QPL

System Replacements are only applicable when EC-STR-6A is specified and shall not be substituted for other drawings. System Replacement would include replacement of Geotextile Fabric, Riprap, Mineral Aggregate and/or Installation Details.

All system replacements shall meet the requirements of the Erosion Prevention and Sediment Control Device Certification along with the following:

Shall provide equivalent or better sediment capture than structure specified on standard drawing.

Minimum Drainage Area shall be 30 acres for the 2yr-24hr storm event.

Minimum Drainage Area shall be 20 acres for the 5yr-24hr storm event.

Weir Height shall be 1.5' minimum to 3.0' maximum.

Weir Shall be a minimum of 1.0' Lower than outer edges of Check Dam when used in ditches.

Weir Shall be a minimum of 2.0' Lower than outer edges of Check Dam when used in channels.

Shall pass the flow from the 2yr-24hr storm event over the weir prior to overtopping the structure for 2yr-24hr storm event.

Shall pass the flow from the 5yr-24hr storm event over the weir prior to overtopping the structure for 5yr-24hr storm event.

Shall remain structurally stable during the 5yr-24hr storm event for both the 2yr-24hr and 5yr-24hr storm events.

Shall be installed per manufacturer's specifications.

Shall be Completely Removed after final stabilization.

### LIST 17. SECTION A: (EC-STR-6A) ENHANCED ROCK CHECK DAM

PRODUCTS LISTED UNDER LIST 17.SECTION A: (EC-STR-8) FILTER SOCK MAY BE USED AS AN ALTERNATE FOR DITCH APPLICATIONS. ROCK CHECK DAM HEIGHT AND SPACING, AS DESIGNED, MUST BE MAINTAINED AS SHOWN ON EC-STR-6 AND 6A STANDARDS, HOWEVER PRODUCTS MUST BE INSTALLED FOLLOWING EC-STR-8 AND PAID UNDER FILTER SOCK CHECK DAM.

### **EC-STR-8 FILTER SOCK**

### LIST 17. SECTION A: (EC-STR-8) FILTER SOCK

Component QPL

Installation shall be according to the standard drawing.

### **Component QPL**

Installation shall be according to the standard drawing.

System Replacement QPL

System Replacements are only applicable when EC-STR-8 is specified and shall not be substituted for other drawings. System Replacement would include replacement of Filter Sock, Post, and/or Installation Details.

All system replacements shall meet the requirements of the Erosion Prevention and Sediment Control Device Certification along with the following:

Shall provide equivalent or better sediment capture than Filter Sock specifications shown on standard drawing.

Minimum Drainage Area shall be 1/4 acre per 100 Linear Feet for slope applications.

Minimum Drainage Area for ditch applications shall be 15 acres for the 2yr-24hr storm event.

Minimum Drainage Area for ditch applications shall be 10 acres for the 5yr-24hr storm event.

Minimum Height shall be 8 Inches.

Maximum Height shall be 24 Inches.

Minimum Height shall be 19 Inches for ditch applications

Shall pass the flow from the 5yr-24hr storm event over the weir prior to overtopping the structure.

Shall remain structurally stable during the 5yr-24hr storm event.

Shall be installed per manufacturer's specifications.

Shall be Completely Removed after final stabilization.

### (EC-STR-19) CATCH BASIN PROTECTION

#### LIST 17. SECTION A: (EC-STR-19) CATCH BASIN PROTECTION

### **Component QPL**

Installation shall be according to the standard drawing.

Refer to QPL for Sediment Tube for Type D.

Refer to QPL for Filter Sock for Type D.

Refer to QPL 36 Section B.2: Silt Fence With Wire Backing (EC-STR-3C) for Type E.

System Replacement QPL

System Replacements are only applicable when EC-STR-19 is specified and shall not be substituted for other drawings. System Replacement would include replacement of Riprap, Geotextile Fabric, Mineral Aggregate (Size 57), Wire Mesh, Post, Sediment Tube, Filter Sock, Silt Fence With Wire Backing, and/or Installation Details.

All system replacements shall meet the requirements of the Erosion Prevention and Sediment Control Device Certification along with the following:

Shall provide equivalent or better sediment capture than Catch Basin Protection shown on standard drawing.
Minimum Drainage Area shall be 2 acre for Type A.
Minimum Drainage Area shall be 1 acre for Type B, Type C, Type D, and Type E.
Minimum Height shall be 24 Inches for Type A.
Minimum Height shall be 12 Inches for Type B and Type C.
Minimum Height shall be 18 Inches for Type D.
Minimum Height shall be 26 Inches for Type E.
Type E shall pass the flow from the 5yr-24hr storm event prior to overtopping.
Shall remain structurally stable during the 5yr-24hr storm event.
Shall be installed per manufacturer's specifications.

Shall be Completely Removed after final stabilization.

### **EC-STR-35 FILTER BERMS**

### LIST 17. SECTION A: (EC-STR-35) FILTER BERMS

### **Component QPL**

Installation shall be according to the standard drawing.

System Replacement QPL

System Replacements are only applicable when EC-STR-35 is specified and shall not be substituted for other drawings. System Replacement would include replacement of Mulch Filter Berm, Compost Filter Berm, Silt Fence, Silt Fence with Wire Backing, and/or Installation Details.

All system replacements shall meet the requirements of the Erosion Prevention and Sediment Control Device Certification along with the following:

Shall provide equivalent or better sediment capture than Filter Berm shown on standard drawing.

Minimum Drainage Area shall be 1/4 acre per 100 Linear Feet.

Minimum Height shall be 12 Inches.

Maximum Height shall be 36 Inches.

Shall pass the flow from the 5yr-24hr storm event prior to overtopping the Filter Berm.

Shall remain structurally stable during the 5yr-24hr storm event.

Shall be installed per manufacturer's specifications.

Non biodegradable components shall be Completely Removed after final stabilization.

Biodegradable components may remain in place after final stabilization.

### **EC-STR-37 SEDIMENT TUBES**

### LIST 17. SECTION A: (EC-STR-37) SEDIMENT TUBES

### Component QPL

Installation shall be according to the standard drawing.

### **Component QPL**

Installation shall be according to the standard drawing.

### System Replacement QPL

System Replacements are only applicable when EC-STR-37 is specified and shall not be substituted for other drawings. System Replacement would include replacement of Sediment Tube, Post, and/or Installation Details.

All system replacements shall meet the requirements of the Erosion Prevention and Sediment Control Device Certification along with the following: Shall be 100% Biodegradable.

Shall provide equivalent or better sediment capture than Sediment Tube specifications shown on standard drawing.

Minimum Drainage Area shall be 1/4 acre per 100 Linear Feet for slope applications.

Minimum Drainage Area for ditch applications shall be 15 acres for the 2yr-24hr storm event.

Minimum Drainage Area for ditch applications shall be 10 acres for the 5yr-24hr storm event.

Minimum Height shall be 8 Inches.

Maximum Height shall be 24 Inches.

Minimum Height shall be 20 Inches for ditch applications

For ditch applications shall pass the flow from the 5yr-24hr storm event over the weir prior to overtopping the structure.

Shall remain structurally stable during the 5yr-24hr storm event.

Shall be installed per manufacturer's specifications.

For slope applications may remain in place after final stabilization.

For ditch applications shall be Completely Removed after final stabilization.

### **EC-STR-38 FLOATING TURBIDITY CURTAIN**

#### LIST 17. SECTION A: (EC-STR-38) FLOATING TURBIDITY CURTAIN

### Component QPL

Installation shall be according to the standard drawing.

### EC-STR-39 & 39A CURB INLET PROTECTION

#### LIST 17. SECTION A: (EC-STR-39 & 39A) CURB INLET PROTECTION

### **Component QPL**

Installation shall be according to the standard drawing.

Refer to QPL 36 Geotextiles & Geosynthetics (Type III)

System Replacement QPL

System Replacements are only applicable when EC-STR-39&39A is specified and shall not be substituted for other drawings. System Replacement would include replacement of Mineral Aggregate (Size 57), Wire Mesh, Concrete Block, Sand Bag, Gravel Bag, Wooden Frame, Geotextile Fabric, and/or Installation Details.

All system replacements shall meet the requirements of the Erosion Prevention and Sediment Control Device Certification along with the following:

Shall provide equivalent or better sediment capture than Curb Inlet Protection shown on standard drawing.

Minimum Drainage Area shall be 1 acre for Curb Inlet Protection.

Shall remain structurally stable during the 5yr-24hr.

Shall be installed per manufacturer's specifications.

# EC-STR-40 THUR 51A CATCH BASIN FILTER ASSEMBLY

### LIST 17. SECTION A: (EC-STR-40 THUR 51A) CATCH BASIN FILTER ASSEMBLY

### Component QPL

Installation shall be according to the standard drawing.

System Replacement QPL

System Replacements are only applicable when EC-STR-40 Thru 51A is specified and shall not be substituted for other drawings. System Replacement would include replacement of Mineral Aggregate (Size 57), Wire Mesh, Wooden Frame, Geotextile Fabric, and/or Installation Details.

All system replacements shall meet the requirements of the Erosion Prevention and Sediment Control Device Certification along with the following:

Shall provide equivalent or better sediment capture than Catch Basin Filter Assembly shown on standard drawing.

Shall pass the flow from the 5yr-24hr storm event.

Shall remain structurally stable during the 5yr-24hr storm event.

Shall be installed per manufacturer's specifications.

# **ALERT**

**Changes to RECP New requirements as of** 

MAY 1st. 2015

# **SECTION B: ROLLED EROSION CONTROL PRODUCTS**

#### **PROCEDURES**

### GENERAL

This evaluation procedure outlines the Department's approval process for **Rolled Erosion Control Products (RECP)**.

#### **SPECIFICATIONS**

As of May 1, 2015, TDOT Specifications for RECPs shall follow and be certified by the Erosion Control Technical Council (ECTC) Standard Specifications for Temporary Rolled Erosion Control Products with changes noted below.

Also RECPs currently listed shall have been evaluated or must be submitted to the National Product Evaluation Program (NTPEP) for evaluation between May 1<sup>st</sup>, 2015 to May 1<sup>st</sup>, 2016 for inclusion on the Tennessee Department of Transportation – TDOT Qualified Products List.

The TDOT type designation and C Factor for Rolled Erosion Control Products will be as follows:

TDOT	ECTC	<b>C FACTOR</b>
Type I	Type 2c	<b>≤0.15@3:1</b>
Type II	Type 2d	<b>≤0.14@3:1</b>
Type III	Type 3b	<b>≤0.14@3:1</b>
Type IV	Type 4	<b>≤0.11@3:1</b>

#### PROCEDURE

A completed Product Evaluation Form, MSDS sheets, if applicable, product data information **including roll dimensions and weights**, ECTC certification and NTPEP bench top and large scale test data must be submitted to the Division of Materials and Tests.

Approval is based on manufacturer's certification and NTPEP test results. Field Testing may be required based on Department findings.

If Field Testing is required, the product shall be installed at the Manufacturer's recommended application rates on a test deck to be provided by the Department. Evaluation period shall be 3 to 6 months during the growing season.

ALERT

Changes to TRM New Requirements as of JULY 1st, 2008

# SECTION C: TURF REINFORCEMENT MATTING

#### **PROCEDURES**

#### GENERAL

This evaluation procedure outlines the Department's approval process for **Turf Reinforcement Matting** used for erosion protection in ditches and channels.

#### **SPECIFICATIONS**

**Standard Drawing EC-STR-36** 

Tennessee Department of Transportation – TDOT Specifications for Turf Reinforcement Matting as of July 1<sup>st</sup>, 2009 shall follow the Erosion Control Technical Council (ECTC) Standard Specifications for Turf Reinforcement Matting.

The new type designation for Turf Reinforcement Matting will be as follows:

ECTC	Shear Stress	TDOT	Shear Stress
Type 5A	6.0 lbs/ft² (288 Pa)	Class I	6.0 lbs/ft² (288 Pa)
Type 5B	8.0 lbs/ft² (384 Pa)	Class II	8.0 lbs/ft² (384 Pa)
Type 5C	10.0 lbs/ft² (480 Pa)	Class III	10.0 lbs/ft² (480 Pa)

A letter will be sent out by August 30<sup>th</sup>, 2008 to each manufacturer informing them of this change for the 2009 construction season.

### PROCEDURE

A completed Product Evaluation Form, MSDS sheets, if applicable, product data information and sample of the product being tested must be submitted to the Division of Materials and Tests.

Approval is based on manufacture's certification that the product meets the minimum shear stress requirements (under vegetated conditions) for the applicable class.

NOTE: This procedure is currently under review by the Department and is subject to change.

LIST 17. SECTION C: TURF REINFORCEMENT MATTING CLASS I 6.0 < 8.0 LBS/FT<sup>2</sup> SHEER STRESS

### LIST 17. SECTION C: TURF REINFORCEMENT MATTING CLASS II 8.0 < 10.0 LBS/FT<sup>2</sup> SHEER STRESS

### LIST 17. SECTION C: TURF REINFORCEMENT MATTING CLASS II 8.0 < 10.0 LBS/FT<sup>2</sup> SHEER STRESS (CONT.)

#### LIST 17. SECTION C: TURF REINFORCEMENT MATTING CLASS III 10.0 LBS/FT<sup>2</sup> SHEER STRESS

# ALERT

Changes to RECP New requirements as of January 1st, 2016

See Specifications below

# SECTION D HYDRAULIC EROSION CONTROL PRODUCTS

### **PROCEDURES**

#### GENERAL

This evaluation procedure outlines the Department's approval process for **Hydraulic Erosion Control Products (HECP).** 

**SPECIFICATIONS** 

As of January 1, 2015, TDOT Specifications for HECP shall follow and be certified by the Erosion Control Technical Council (ECTC) Standard Specifications for Hydraulic Erosion Control Products.

Also all HECP's currently listed shall have been evaluated or submitted to the National Product Evaluation Program (NTPEP) for evaluation between January 1<sup>st</sup>, 2016 and January 1<sup>st</sup>, 2017 for inclusion on the Tennessee Department of Transportation – TDOT Qualified Products List.

HECP's shall meet an ECTC Type 5.

PROCEDURE

A completed Product Evaluation Form, MSDS sheets, if applicable, product data information, ECTC certification and NTPEP test data must be submitted to the Division of Materials and Tests.

Approval is based on manufacturer's certification and NTPEP test results. Field Testing may be required based on Department findings.

If Field Testing is required, the product shall be installed at the Manufacturer's recommended application rates on a test deck to be provided by the Department. Evaluation period shall be 3 to 6 months during the growing season.

- These products can be used in lieu of Type I or Type II Blankets except in concentrated flow conditions.
- These products can be used in lieu of Type I or Type II Blankets

# SECTION E: FLOCCULANTS

### PROCEDURES

### **GENERAL**

This evaluation procedure outlines the Department's approval process for **Flocculants**. <u>Flocculants are categorized as inorganics (e.g., alum, ferric chloride, polyaluminum chloride)</u>, <u>organics/synthetics, (e.g., polyacrylamide, diallyl dimethyl ammonium chloride (DADMAC)), and</u> <u>natural/biopolymers (e.g., chitosan)</u>.

### **SPECIFICATIONS**

<u>Tennessee Department of Transportation Drainage Manual</u> <u>Tennessee Department of Transportation Statewide Storm Water Management Program</u> <u>ANSI/NSF Standard 60 Drinking Water Treatment Chemical Additives</u> United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

**PROCEDURES** 

The products for each of the sections have been pre-qualified for use. The products on this list must meet the material requirements set forth in the standard drawings. Upon any change of the product the manufacturer must submit the changes for approval and placement on the Qualified Products List.

Submit a certification that your product meets the following requirements:

- Meets ANSI/NSF Standard 60 Drinking Water Treatment Chemical Additives.
- Non-Flammable according to the GHS.
- Not defined as a hazard chemical subject to the EPA Hazard Categories under SARA Title III Section 311and 312 and toxic chemicals under SARA Title III Section 313, and of 40 CFR 372.
- Flocculants shall be of the type that is manufactured for use in reducing turbidity caused by soil erosion and sediment transport.
- Flocculants shall be handled in accordance with all Occupational Safety and Health Administration (OSHA) Material Safety Data Sheet (MSDS) requirements and shall be applied in accordance with the manufacturer's recommendations for the specified use conforming to all federal, state and local laws, rules and regulations.
- Polyacrylamides (PAM) shall be of the anionic or neutrally charged type only. PAM requirements are as follows:
  - Cationic PAM is not allowed because of its toxicity to fish and aquatic life.
  - Anionic and neutrally charged PAM shall meet the EPA and FDA acrylamide monomer limits of equal to or less than 0.05% by weight acrylamide monomer.
  - Anionic and neutrally charged PAM shall have a density of 10% to 55% by weight and a molecular weight of 16 to 24 Mg/mole.
  - PAM mixtures shall be non-combustible.
  - PAM shall contain only manufacturer-recommended additives.
- All vendors and suppliers of flocculants shall present or supply a written toxicity report for both acute and chronic toxicity tests which verifies that the flocculant exhibits acceptable toxicity parameters which meet or exceed the EPA requirements for the state and federal water quality standards. Whole effluent testing does not meet this requirement as primary reactions have occurred and toxic potentials have been reduced. The toxicity document shall be a component of the field SWPPP and must be reviewed by the project design engineer, TDOT Project Manager, EPSC inspectors, QA/QC inspectors, and both the Prime Contractor and the EPSC subcontractor.
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Manufacturer will also submit their recommended Application Rates, Reapplication Frequency, and Maximum Application Rates.

#### **Item Numbers**

<u>209-09.xx</u>	FLOCCULANTS BLOCKS/LOGS/SOCKS	LBS
209-09.XX	FLOCCULANTS POWDER	LBS
<u>209-09.XX</u>	FLOCCULANTS LIQUID	GAL

### **SECTION E: POLYACRYLAMIDE**

#### PROCEDURES

#### **GENERAL**

This evaluation procedure outlines the Department's approval process for Polyacrylamide

#### **SPECIFICATIONS**

**Tennessee Department of Transportation** Standard Drawings Library

**Tennessee Department of Transportation Statewide Storm Water Management Program** 

**Manual for Management of Strom water Discharges Associated with Construction** Activities

**Erosion Prevention and Sediment Control Device Certification** 

#### **PROCEDURES**

The products for each of the sections have been pre-qualified for use. The products on this list must meet the material requirements set forth in the standard drawings. Upon any change of the product the manufacturer must submit the changes for approval and placement on the Qualified Products List.

# SECTION F: SOIL BINDERS & TACKIFIERS

#### **PROCEDURES**

#### GENERAL

This evaluation procedure outlines the Department's approval process for **Soli Binders and Tackifiers** 

#### **SPECIFICATIONS**

**Tennessee Department of Transportation Standard Drawings Library** 

**Tennessee Department of Transportation Statewide Storm Water Management Program** 

Manual for Management of Strom water Discharges Associated with Construction Activities

**Erosion Prevention and Sediment Control Device Certification** 

#### PROCEDURES

The products for each of the sections have been pre-qualified for use. The products on this list must meet the material requirements set forth in the standard drawings. Upon any change of the product the manufacturer must submit the changes for approval and placement on the Qualified Products List.

# **SECTION G: DUST PALLIATIVES**

### **PROCEDURES**

#### GENERAL

This evaluation procedure outlines the Department's approval process for **Dust Palliatives.** 

#### **SPECIFICATIONS**

**Tennessee Department of Transportation Standard Drawings Library** 

**Tennessee Department of Transportation Statewide Storm Water Management Program** 

Manual for Management of Strom water Discharges Associated with Construction Activities

### **Erosion Prevention and Sediment Control Device Certification**

#### PROCEDURES

The products for each of the sections have been pre-qualified for use. The products on this list must meet the material requirements set forth in the standard drawings. Upon any change of the product the manufacturer must submit the changes for approval and placement on the Qualified Products List.