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| **QUESTION** | **Application** |
| **SC10.1** | **Is the Drain Inlet Protection applied as required?** |
| **SPECs, 13-6.03C Temporary Drainage Inlet Protection** | Provide temporary drainage inlet protection around drainage inlets as changing conditions require. |
| **LTP, VIII.B** | Dischargers shall implement a combination of sediment and erosion controls to prevent or minimize sediment discharges from the site. Control measures shall include, but are not limited to, the following items:  **4.** Protect drain inlets and outfall structures with appropriate controls for erosion and to minimize sediment discharges. |

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|  | **Installation** |
| **SC10.2** | **Is the Drain Inlet Protection installed properly?** |
| **SPECs, 13-6.03C Temporary Drainage Inlet Protection** | Drainage inlet protection must be Type 1, Type 2, Type 3A, Type 3B, Type 4A, Type 4B, Type 5, Type 6A, Type 6B, or a combination, as appropriate for conditions around the drainage inlet.  For drainage inlet protection at drainage inlets in paved and unpaved areas:  1. Prevent runoff ponds from encroaching onto the traveled way or overtopping the curb or dike. Use a linear sediment barrier to redirect runoff and control ponding.  2. Clear the area around each drainage inlet of obstructions, including rocks, clods, and debris greater than 1 inch in diameter, before installing the drainage inlet protection.  3. Install the linear sediment barrier upslope of the existing drainage inlet and parallel with the curb, dike, or flow line to prevent sediment from entering the drainage inlet  If gravel-filled bags are used for Type 3A and Type 3B temporary drainage inlet protection, place the gravel-filled bags end-to-end to eliminate gaps. Stack the bags so that the upper row overlaps joints in the lower row. Arrange the bags to create a spillway by removing 1 or more gravel-filled bags from the upper layer.  Place fiber rolls over the erosion control blanket for Type 4A temporary drainage inlet protection.  If a foam barrier is used for Type 4B temporary drainage inlet protection, secure the barrier to the pavement at the angle and spacing shown. Place the barrier to provide a tight joint with the curb or dike. Cut the cover fabric or jacket to ensure a tight fit.  If a rigid sediment barrier is used for Type 6A or Type 6B temporary drainage inlet protection at a grated catch basin without a curb inlet, place the barrier using a gasket to prevent runoff from flowing under the barrier. Secure the barrier to the pavement with nails and adhesive, gravel-filled bags, or a combination.  Install a sediment filter bag for Type 5 temporary drainage inlet protection as follows:  1. Remove the drainage inlet grate  2. Place the sediment filter bag in the opening  3. Replace the grate to secure the sediment filter bag in place |
| **SPECs, 13-6.02B Rigid Plastic Barriers** | For a curb inlet without a grate, rigid plastic barriers must be sized to fit the catch basin or drainage inlet and have:  1. Horizontal flap of at least 6 inches with an under-seal gasket to prevent underflows 2. High-flow bypass 3. Vertical height of at least 7 inches after installation  For a grated catch basin without a curb inlet, rigid plastic barriers must be sized to fit the catch basin or drainage inlet and:  1. Cover the grate by at least 2 inches on each side and have an under-seal gasket to prevent underflows  2. Have a high-flow bypass  3. Have a vertical height of at least 1.5 inches after installation  For a curb inlet with a grate, rigid plastic barriers must be sized to fit the catch basin or drainage inlet and have:  1. Horizontal flap that covers the grate by at least 2 inches on the 3 sides that are away from the curb opening and must have an under-seal gasket to prevent underflows  2. High-flow bypass  3. Vertical section that covers the curb opening by at least 5 inches after installation |
| **SPECs, 13-10.02I Foam Barriers** | Secure foam barriers to:  1. Pavement with 1-inch concrete nails, 1-inch washers, and solvent-free adhesive 2. Soil with 6-inch nails and 1-inch washers |
| **SPECs, 13-10.03H Temporary Foam Barriers** | Secure temporary foam barriers to the pavement with nails and adhesive, gravel-filled bags, or a combination.  Install the foam barrier with a horizontal flap in a 3-inch deep trench and secure with nails and washers placed not more than 4 feet apart. Secure the barrier with 2 nails at the connection points where barriers overlap. Do not pierce the barrier’s core with nails or stakes. |
| **See Standard Plan Sheet T61** | Temporary Drainage Inlet Protection |
| **See Standard Plan Sheet T62** | Temporary Drainage Inlet Protection |
| **See Standard Plan Sheet T63** | Temporary Drainage Inlet Protection |
| **See Standard Plan Sheet T64** | Temporary Drainage Inlet Protection |

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|  | **Materials** |
| **SC10.3** | **Does the Drain Inlet Protection consist of the proper materials (gravel-filled bag, rigid plastic barrier, sediment filter bag, foam barrier, erosion control blanket)?** |
| **SPECs, 13-10.02C Posts** | Posts must be wood or metal.  Wood posts must be:  1. At least 2 by 2 inches in size and 4 feet long  2. Untreated fir, redwood, cedar, or pine, cut from sound timber  3. Straight and free of loose or unsound knots and other defects that could render the posts unfit for use  4. Pointed on the end to be driven into the ground  Metal posts must:  1. Be at least 4 feet long.  2. Be made of steel.  3. Have a U-shaped, T-shaped, L-shaped, or other cross-sectional shape that can resist failure from lateral loads.  4. Be pointed on the end to be driven into the ground.  5. Weigh at least 0.75 pound per foot.  6. Have a safety cap attached to the exposed end. The safety cap must be orange or red plastic and must fit snugly onto the metal post.  Posts for a temporary reinforced silt fence must be at least 6 feet in length for a Type 1 installation and 5 feet in length for a Type 2 installation. |
| **SPECs, 13-10.02B Fiber Roll** | Fiber rolls for a large sediment barrier must be Type B, except the dimensions must be from 18 to 22 inches in diameter, at least 8 feet long, and weigh at least 6.5 pounds per linear foot. |
| **SPECs, 21-1.02P Fiber Rolls** | Fiber roll must have a minimum functional longevity of 1 year and comply with the following requirements:  1. Type A fiber roll must be fabricated from an erosion control blanket rolled along its width. Secure with natural fiber twine at 6-foot intervals, and 6 inches from each end. Fiber roll size must comply with either one of the following:  1.1. 8 to 10 inches in diameter, 10 to 20 feet long, and at least 0.5 lb/ft  1.2. 10 to 12 inches in diameter, at least 10 feet long, and at least 2 lb/ft  2. Type B fiber roll must be a premanufactured roll filled with rice or wheat straw, wood excelsior, or coconut fiber. Rolls must be covered with biodegradable jute, sisal, or coir fiber netting secured tightly at each end. Fiber roll size must comply with either one of the following:  2.1. 8 to 10 inches in diameter, 10 to 20 feet long, and at least 1.1 lb/ft  2.2. 10 to 12 inches in diameter, at least 10 feet long, and at least 3 lb/ft |
| **SPECs, 21-1.02R Fasteners** | Wood stakes must be untreated fir, redwood, cedar, or pine and cut from sound timber. The ends must be pointed for driving into the ground. Notched stakes must be at least 1 by 2 by 24 inches in size. Stakes without notches must be at least 1 by 1 by 24 inches.  Metal stakes must be at least 1/2 inch in diameter and have tops bent at 90-degree angles or capped with an orange or red plastic safety cap that fits snugly onto the metal stake.  Rope to fasten fiber rolls and compost socks must be 1/4 inch in diameter and biodegradable, such as sisal or manila. |
| **SPECs, 13-5.02G Gravel-Filled Bags** | Gravel-filled bags must:  1. Be made of geosynthetic gravel-filled bag.  2. Have inside dimensions from 24 to 32 inches long and from 16 to 20 inches wide.  3. Have a bound opening to keep gravel. The opening must be sewn with yarn, bound with wire, or secured with a closure device.  4. Weigh from 30 to 50 pounds when filled with gravel.  Gravel for gravel-filled bags must be from 3/8 to 3/4 inch in diameter and must be clean and free of clay balls, organic matter, and other deleterious materials. |
| **SPECs, 13-6.02B Rigid Plastic Barriers** | A rigid plastic barrier must:  1. Have an integrated filter  2. Have a formed outer jacket of perforated HDPE or polyethylene terephthalate  3. Have a flattened tubular-shaped cross section  4. Be made from virgin or recycled materials  5. Be free from biodegradable filler materials that degrade the physical or chemical characteristics of the completed filter core or outer jacket  6. Have a length of at least 4 feet per unit  7. Have the ability to interlock separate units into a long barrier so that water does not flow between the units  8. Be secured to:  8.1. Pavement with 1-inch concrete nails with 1-inch washers and solvent-free adhesive, gravel-filled bags, or a combination  8.2. Soil with 6-inch nails with 1-inch washers and wood stakes |
| **SPECs, 13-6.02C Sediment Filter Bags** | Each sediment filter bag must be sized to fit the catch basin or drainage inlet and have a high-flow bypass.  Sediment filter bags may include a metal frame. If the sediment filter bag does not have a metal frame and is deeper than 18 inches, it must include lifting loops, dump straps, and a restraint cord to keep the sides of the bag away from the walls of the catch basin. |
| **SPECs, 13-10.02I Foam Barriers** | Foam barriers must have:  1. Urethane foam-filled core 2. Geosynthetic fabric cover and flap 3. Triangular, circular, or square cross section  4. Vertical height of at least 5 inches after installation 5. Horizontal flap at least 8 inches in width 6. A length of at least 4 feet per unit  7. Ability to interlock separate units into a long barrier so that water will not flow between units |
| **SPECs, 21-1.02O(4) Erosion Control Blankets** | Erosion control blanket must be made of processed natural fibers that are mechanically, structurally, or chemically bound together to form a continuous matrix that is surrounded by 2 natural nets. The erosion control blanket must comply with the requirements shown in the following table:   |  |  |  |  | | --- | --- | --- | --- | | **Erosion Control Blanket** | | | | | **Property** | **Type** | **Requirements** | **Test Method** | | Classification | -- | ECTC Type 2D | -- | | Net type | A, B, C | Natural | -- | | Number of nets | A, B, C | Double | -- | | Minimum roll width | A, B, C | 72 inches | -- | | Matrix | A | 70/30% (straw/coconut fiber) | -- | | B | 100% woven coir (coconut fiber) | | C | Wood excelsior (80 percent of the fiber 6 inches or longer) | | Functional longevity | A, B, C | 12 months | -- | |
| **SPECs, 21-1.02R Fasteners** | Steel staples must be a minimum of 11-gauge, 6-inch, U-shaped staples with a 1-inch crown. Provide heavier gauge and greater length if required by the site conditions. You may use an alternative CGP, Attachment device such as a 100 percent biodegradable fastener to install RECP instead of staples. |

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|  | **Maintenance** |
| **SC10.4** | **Is the Drain Inlet Protection maintained properly?** |
| **SPECs, 13-6.03A General** | Remove sediment deposits whenever the sediment exceeds 1 inch in depth from the surface of an erosion control blanket.  Remove sediment from a Type 2 sediment trap of a temporary inlet whenever the volume has been reduced by approximately 1/2.  Remove sediment from a sediment filter bag whenever it becomes full or whenever the restraint cords are no longer visible. Empty a sediment filter bag without a metal frame by placing 1-inch steel reinforcing bars through the lifting loops and lifting the filled bag from the drainage inlet. Empty a sediment filter bag with a metal frame by lifting the metal frame from the drainage inlet. Rinse the sediment filter bag before replacing it at the drainage inlet. Whenever rinsing a sediment filter bag, do not allow the rinse water to enter a drainage inlet or waterway.  Whenever you place the removed sediment within the job site, stabilize the sediment deposits to prevent erosion. |
| **CGP, Attachment D.E.6; E.E.6** | Risk Level 2 and 3 dischargers shall ensure that all storm drain inlets and perimeter controls, runoff control BMPs, and pollutant controls at entrances and exits (e.g. tire washoff locations) are maintained and protected from activities that reduce their effectiveness. |
| **CGP, Order IV.E Proper Operation and Maintenance** | The discharger shall at all times properly operate and maintain any facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with the conditions of this General Permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance may require the operation of backup or auxiliary facilities or similar systems installed by a discharger when necessary to achieve compliance with the conditions of this General Permit. |







