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| **QUESTION** | **Application** |
| **SS3.1** | Is Hydraulic Mulch applied as required? |
| **CGP, Attachment C.D.2, D.D.2, E.D.2** | Risk Level 1, 2 and 3 dischargers shall provide effective soil cover for inactive1 areas and all finished slopes, open space, utility backfill, and completed lots.  1 Inactive areas of construction are areas of construction activity that have been disturbed and are not scheduled to be re-disturbed for at least 14 days. |
| **CGP, Attachment D.E.3, E.E.3** | Risk Level 2 and 3 dischargers shall implement appropriate erosion control BMPs (runoff control and soil stabilization) in conjunction with sediment control BMPs for areas under active2 construction.  2 Active areas of construction are areas undergoing land surface disturbance. This includes construction activity during the preliminary stage, mass grading stage, streets and utilities stage and the vertical construction stage. |
| **13-1.03A General** | Install soil stabilization materials for water pollution control practices in all work areas that are inactive or before storm events. |
| **SPECs, 13-5.03A General** | Apply temporary soil stabilization materials within 24 hours after an area is ready to receive temporary soil stabilization or before a forecasted storm event. |

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|  | **Installation** |
| **SS3.2** | Is Hydraulic Mulch installed properly? |
| **SPECs, 13-5.03A General** | Do not use hydraulically-applied materials under the following conditions:  1. During precipitation  2. Whenever water is standing on or moving across the soil surface  3. Soil is frozen  4. Air temperature is below 40 degrees F during the tackifier's curing period unless allowed by the tackifier manufacturer and authorized |
| **SPECs, 13-5.03D Temporary Hydraulic Mulch** | If rates are not shown, apply temporary hydraulic mulch at the following rate:  1. Fiber at 2,000 lb/acre 2. Tackifier under the manufacturer's instructions for the slope, soil, and wind conditions |
| **SPECs, 13-5.03E Temporary Hydraulic Mulch (Bonded Fiber Matrix)** | If rates are not shown, apply temporary hydraulic mulch (bonded fiber matrix) at the rate of 3,500 lb/acre. |
| **SPECs, 13-5.03F Temporary Hydraulic Mulch (Polymer-Stabilized Fiber Matrix)** | If rates are not shown, apply temporary hydraulic mulch (polymer-stabilize fiber matrix) at the following rate:  1. Fiber at 2,000 lb/acre  2. Tackifier at 8 gallons/acre |
| **SPECs, 13-5.03G Temporary Hydraulic Mulch (Cementitious Binder)** | If rates are not shown, apply temporary hydraulic mulch (cementitious binder) at the following rate:  1. Fiber at 2,000 lb/acre  2. Cementitious binder at 4,000 lb/acre  Fiber for temporary hydraulic mulch (cementitious binder) must be at least 50 percent wood fiber. The remaining percentage must be cellulose fiber, alternate fiber, or a combination. |
| **SPECs, 21-1.03E Hydromulch and Hydroseed** | Apply hydromuch with hydraulic spray equipment that mixes fiber, tackifier, fertilizer, and other erosion control materials specified. If applying hydroseed, add seed to hydromulch. Seed may be dry applied to small areas not accessible by hydroseeding equipment if authorized.  Add water to hydromulch and hydroseed materials as recommended by the manufacturer and mix sufficiently to ensure an even application. A dispersing agent may be added to the mixture if authorized.  Equipment must utilize a built-in continuous agitation and discharge system capable of producing a homogeneous mixture and a uniform application rate. The tank must have a minimum capacity of 1,000 gallons. You may use a smaller tank if authorized.  Apply materials in locations, rates, and number of applications shown and as follows:  1. Begin application within 60 minutes after adding seed to the tank.  2. Apply in successive passes as necessary to achieve the required application rate.  3. Apply all hydromulch or hydroseed materials indicated for a single area within 72 hours.  When hydromulch or hydroseed materials are applied to areas covered by RECP, apply hydromulch and hydroseed materials to the rolled product as follows:  1. Verify the RECP is in uniform contact with the slope surface.  2. Spray materials into the RECP perpendicular to the slope and integrate well.  3. Do not displace or damage the RECP.  After the final application, do not allow pedestrians or equipment onto the treated areas. |
| **SPECs, 21-1.03J Bonded Fiber Matrix** | Apply bonded fiber matrix materials in the locations, rates, and number of applications shown and as follows:  1. Apply in successive passes as necessary to achieve the required application rate.  2. Form a continuous uniform mat with no gaps between the mat and the soil surface as follows:  2.1. Apply in 2 or more directions if necessary.  2.2. Apply in layers as necessary to avoid slumping and aid drying. |

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|  | **Materials** |
| **SS3.3** | Does Hydraulic Mulch consist of the proper materials? |
| **SPECs, 13-5.02D Cementitious Binder** | Cementitious binder must be:  1. Calcium sulfate hemihydrate  2. At least 85 percent pure  3. Functional for at least 365 days  4. Able to easily mix with water and fiber  5. Nontoxic to aquatic organisms  6. Free from growth or germination-inhibiting factors  7. Nonflammable |
| **SPECs, 21-1.02E Fiber** | Fiber must be wood fiber, cellulose fiber, alternate fiber, or a combination of these fibers.  Wood fiber must be a long strand, whole wood fiber thermos-mechanically processed from clean whole wood chips.  Celullose fiber must be made from natural or recycled pulp fiber, such as wood chips, sawdust, newsprint, chipboard, corrugated cardboard, or a combination of these materials.  Alternate fiber must be a long strand, whole natural fiber made from clean straw, cotton, corn, or other natural feed stock.  Fiber must:  1. Disperse into a uniform slurry when mixed with water.  2. Contain 3/4-inch fiber strands for at least 25 percent by total volume.  3. Have at least 40 percent retained when passed through a no. 25 sieve.  4. Have an initial moisture content of no more than 15 percent of its dry weight when tested under CA Test 226. The moisture content must be marked on the packaging.  5. Have a water holding capacity, by weight, of at least 1,200 percent when tested under the procedure designated in the Department's Final Report, CA-DOT-TL-2176-1-76-36, Water Holding Capacity for Hydromulch, available from METS.  6. Be nontoxic to plants and animal life.  7. Be free of synthetic or plastic materials, lead paint, printing ink, varnish, petroleum products, seed germination inhibitors, and chlorine bleach.  8. Contain less than 250 ppm of boron.  9. Contain less than 7 percent ash when tested under Technical Association of the Pulp and Paper Industry, TAPPI Standard T 413.  10. Be colored to contrast with the area on which the fiber is to be applied. The coloring agent must be biodegradable, nontoxic, and free from copper, mercury and arsenic and must not stain concrete or painted surfaces.  Fiber for temporary hydraulic mulch must be at least 50 percent wood fiber. The remaining percentage must be cellulose fiber, alternate fiber, or a combination.  Fiber for temporary bonded fiber matrix and bonded fiber matrix must be 100 percent wood fiber and comply with the requirements for fiber except the sieve requirement must be at least 50 percent retained on a no. 25 sieve.  Fiber for polymer stabilized fiber matrix must be at least 50 percent wood fiber. The remaining percentage must be cellulose fiber, alternate fiber, or a combination. |
| **SPECs, 21-1.02F(1) Tackifier, General** | Tackifier must be (1) free from growth or germination inhibiting factors, (2) nonflammable, (3) nontoxic to aquatic organisms, and (4) functional for a minimum of 180 days.  General purpose tackifier may be either a plant based product or a polymeric emulsion blend as follows:  1. Plant based tackifier must be a natural high molecular weight polysaccharide, a high viscosity hydrocolloid that is miscible in water, and labeled as either guar, psyllium, or starch, as follows:  1.1. Guar gum based product must be derived from the ground endosperm of the guar plant, Cyanmopsis tetragonolobus. It must be treated with dispersing agents for easy mixing. It must be able to be diluted at the rate of 1 to 5 pounds per 100 gallons of water.  1.2. Psyllium based product must be manufactured from the finely ground, mucilloid coating of Plantago ovata or Plantago ispaghula seeds and able to dry and form a firm but rewettable membrane.  1.3. Starch based product must be a nonionic, water-soluble, granular material derived from corn, potato, or other plant-based source.  2. Polymeric emulsion blend tackifier must be a prepackaged liquid or dry powder, anionic formulation with a residual monomer content not exceeding 0.05 percent by weight. The tackifier must contain and be labeled with one of the following as the primary active ingredients:  2.1. Acrylic copolymers and polymers.  2.2. Polymers of methacrylates and acrylates.  2.3. Copolymers of sodium acrylates and acrylamides.  2.4. Polyacrylamide and copolymer of acrylamide.  2.5. Hydrocolloid polymers. |
| **SPECs, 21-1.02F(2) Polymer Stabilized Fiber Matrix Tackifier** | Tackifier for polymer stabilized fiber matrix must be:  1. A liquid formulation with polyacrylamide as the primary active ingredient with the following requirements:  1.1. Linear, anionic copolymer of acrylamide and sodium acrylate.  1.2. Anionic with a residual monomer content that is at most 0.05 percent by weight.  2. Formulated and labeled as one of the following:  2.1. Water-in-oil emulsion containing at least 2.6 pounds of pure polyacrylamide per gallon. Pure polyacrylamide must be at least 30 percent active.  2.2. Liquid dispersed polyacrylamide containing at least 4.4 pounds pure polyacrylamide per gallon. Pure polyacrylamide must be at least 35 percent active. |
| **SPECs, 21-1.02F(3) Bonded Fiber Matrix Tackifier** | Tackifier for bonded fiber matrix must:  1. Be bonded to the fiber or prepackaged with the fiber by the manufacturer  2. Contain a minimum of 10 percent of the combined weight of the dry fiber, activating agents, and additives  3. Be an organic, high viscosity colloidal polysaccharide with activating agents or a blended hydrocolloid-based binder |
| **SPECs, 21-1.02J Polymer Stabilized Fiber Matrix** | Polymer stabilized fiber matrix must be hydraulically-applied material composed of fiber and tackifier and may also include seed and fertilizer as shown. |
| **SPECs, 21-1.02K Bonded Fiber Matrix** | Bonded fiber matrix must be hydraulically-applied material composed of fiber and tackifier and may also include seed and fertilizer as shown. |

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|  | **Maintenance** |
| **SS3.4** | Is Hydraulic Mulch maintained properly? |
| **CGP, Order IV.E Proper Operations 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. |

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| **QUESTION** | **Application** |
| **SS4.1** | Is Hydroseeding applied as required? |
| **CGP, Attachment C.E.2, D.D.2, E.D.2** | Risk Level 1, 2 and 3 dischargers shall provide effective soil cover for \*inactive areas and all finished slopes, open space, utility backfill, and completed lots.  \*Inactive areas of construction are areas of construction activity that have been disturbed and are not scheduled to be re-disturbed for at least 14 days. |
| **CGP, Attachment D.E.3, E.E.3** | Risk Level 2 and 3 dischargers shall implement appropriate erosion control BMPs (runoff control and soil stabilization) in conjunction with sediment control BMPs for areas under \*active construction.  \*Active areas of construction are areas undergoing land surface disturbance. This includes construction activity during the preliminary stage, mass grading stage, streets and utilities stage and the vertical construction stage. |
| **13-1.03A General** | Install soil stabilization materials for water pollution control practices in all work areas that are inactive or before storm events. |
| **SPECs, 13-5.03A General** | Apply temporary soil stabilization materials within 24 hours after an area is ready to receive temporary soil stabilization or before a forecasted storm event. |

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|  | **Installation** |
| **SS4.2** | Is Hydroseeding installed properly? |
| **SPECs, 13-5.03A General** | Do not use hydraulically-applied materials under the following conditions:  1. During precipitation  2. Whenever water is standing on or moving across the soil surface  3. Soil is frozen  4. Air temperature is below 40 degrees F during the tackifier's curing period unless allowed by the tackifier manufacturer and authorized |
| **SPECs, 13-5.03I Temporary Hydroseed** | If rates are not shown for fiber and tackifier, apply temporary hydroseed at the following rate:  1. Seed as shown  2. Fiber at 2,000 lb/acre  3. Tackifier under the manufacturer's instructions for the slope, soil, and wind conditions  Fiber for temporary hydroseed must be at least 50 percent wood fiber. The remaining percentage must be cellulose fiber, alternate fiber, or a combination. |
| **SPECs, 21-1.03E Hydromulch and Hydroseed** | Apply hydromuch with hydraulic spray equipment that mixes fiber, tackifier, fertilizer, and other erosion control materials specified. If applying hydroseed, add seed to hydromulch. Seed may be dry applied to small areas not accessible by hydroseeding equipment if authorized.  Add water to hydromulch and hydroseed materials as recommended by the manufacturer and mix sufficiently to ensure an even application. A dispersing agent may be added to the mixture if authorized.  Equipment must utilize a built-in continuous agitation and discharge system capable of producing a homogeneous mixture and a uniform application rate. The tank must have a minimum capacity of 1,000 gallons. You may use a smaller tank if authorized.  Apply materials in locations, rates, and number of applications shown and as follows:  1. Begin application within 60 minutes after adding seed to the tank.  2. Apply in successive passes as necessary to achieve the required application rate.  3. Apply all hydromulch or hydroseed materials indicated for a single area within 72 hours.  When hydromulch or hydroseed materials are applied to areas covered by RECP, apply hydromulch and hydroseed materials to the rolled product as follows:  1. Verify the RECP is in uniform contact with the slope surface.  2. Spray materials into the RECP perpendicular to the slope and integrate well.  3. Do not displace or damage the RECP.  After the final application, do not allow pedestrians or equipment onto the treated areas. |

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|  | **Materials** |
| **SS4.3** | Does Hydroseeding consist of the proper materials? |
| **SPECs, 21-1.02E Fiber** | Fiber must be wood fiber, cellulose fiber, alternate fiber, or a combination of these fibers.  Wood fiber must be a long strand, whole wood fiber thermos-mechanically processed from clean whole wood chips.  Celullose fiber must be made from natural or recycled pulp fiber, such as wood chips, sawdust, newsprint, chipboard, corrugated cardboard, or a combination of these materials.  Alternate fiber must be a long strand, whole natural fiber made from clean straw, cotton, corn, or other natural feed stock.  Fiber must:  1. Disperse into a uniform slurry when mixed with water.  2. Contain 3/4-inch fiber strands for at least 25 percent by total volume.  3. Have at least 40 percent retained when passed through a no. 25 sieve.  4. Have an initial moisture content of no more than 15 percent of its dry weight when tested under CA Test 226. The moisture content must be marked on the packaging.  5. Have a water holding capacity, by weight, of at least 1,200 percent when tested under the procedure designated in the Department's Final Report, CA-DOT-TL-2176-1-76-36, Water Holding Capacity for Hydromulch, available from METS.  6. Be nontoxic to plants and animal life.  7. Be free of synthetic or plastic materials, lead paint, printing ink, varnish, petroleum products, seed germination inhibitors, and chlorine bleach.  8. Contain less than 250 ppm of boron.  9. Contain less than 7 percent ash when tested under Technical Association of the Pulp and Paper Industry, TAPPI Standard T 413.  10. Be colored to contrast with the area on which the fiber is to be applied. The coloring agent must be biodegradable, nontoxic, and free from copper, mercury and arsenic and must not stain concrete or painted surfaces.  Fiber for temporary hydraulic mulch must be at least 50 percent wood fiber. The remaining percentage must be cellulose fiber, alternate fiber, or a combination.  Fiber for temporary bonded fiber matrix and bonded fiber matrix must be 100 percent wood fiber and comply with the requirements for fiber except the sieve requirement must be at least 50 percent retained on a no. 25 sieve.  Fiber for polymer stabilized fiber matrix must be at least 50 percent wood fiber. The remaining percentage must be cellulose fiber, alternate fiber, or a combination. |
| **SPECs, 21-1.02F(1) Tackifier, General** | Tackifier must be (1) free from growth or germination inhibiting factors, (2) nonflammable, (3) nontoxic to aquatic organisms, and (4) functional for a minimum of 180 days.  General purpose tackifier may be either a plant based product or a polymeric emulsion blend as follows:  1. Plant based tackifier must be a natural high molecular weight polysaccharide, a high viscosity hydrocolloid that is miscible in water, and labeled as either guar, psyllium, or starch, as follows:  1.1. Guar gum based product must be derived from the ground endosperm of the guar plant, Cyanmopsis tetragonolobus. It must be treated with dispersing agents for easy mixing. It must be able to be diluted at the rate of 1 to 5 pounds per 100 gallons of water.  1.2. Psyllium based product must be manufactured from the finely ground, mucilloid coating of Plantago ovata or Plantago ispaghula seeds and able to dry and form a firm but rewettable membrane.  1.3. Starch based product must be a nonionic, water-soluble, granular material derived from corn, potato, or other plant-based source.  2. Polymeric emulsion blend tackifier must be a prepackaged liquid or dry powder, anionic formulation with a residual monomer content not exceeding 0.05 percent by weight. The tackifier must contain and be labeled with one of the following as the primary active ingredients:  2.1. Acrylic copolymers and polymers.  2.2. Polymers of methacrylates and acrylates.  2.3. Copolymers of sodium acrylates and acrylamides.  2.4. Polyacrylamide and copolymer of acrylamide.  2.5. Hydrocolloid polymers. |
| **SPECs, 21-1.02G Seed** | Seed with a germination rate lower than the minimum rate shown may be used if authorized.  Measure and mix individual seed species in the presence of the Engineer before applying seed. |

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|  | **Maintenance** |
| **SS4.4** | Is Hydroseeding maintained properly? |
| **CGP, Order IV.E Proper Operations 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. |

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| **QUESTION** | **Application** |
| **SS5.1** | Are the Soil Binders applied as required? |
| **CGP, Attachment C.D.2, D.D.2, E.D.2** | Risk Level 1, 2 and 3 dischargers shall provide effective soil cover for \*inactive areas and all finished slopes, open space, utility backfill, and completed lots.  \*Inactive areas of construction are areas of construction activity that have been disturbed and are not scheduled to be re-disturbed for at least 14 days. |
| **CGP, Attachment D.E.3, E.E.3** | Risk Level 2 and 3 dischargers shall implement appropriate erosion control BMPs (runoff control and soil stabilization) in conjunction with sediment control BMPs for areas under \*active construction.  \*Active areas of construction are areas undergoing land surface disturbance. This includes construction activity during the preliminary stage, mass grading stage, streets and utilities stage and the vertical construction stage. |
| **13-1.03A General** | Install soil stabilization materials for water pollution control practices in all work areas that are inactive or before storm events. |
| **SPECs, 13-5.03A General** | Apply temporary soil stabilization materials within 24 hours after an area is ready to receive temporary soil stabilization or before a forecasted storm event. |

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|  | **Installation** |
| **SS5.2** | Are the Soil Binders installed properly? |
| **SPECs, 13-5.03A General** | Do not use hydraulically-applied materials under the following conditions:  1. During precipitation  2. Whenever water is standing on or moving across the soil surface  3. Soil is frozen  4. Air temperature is below 40 degrees F during the tackifier's curing period unless allowed by the tackifier manufacturer and authorized |
| **SPECs, 13-5.03J Temporary Soil Binder** | If rates are not shown, apply temporary soil binder under the manufacturer’s instructions for the slope, soil, and wind conditions. |

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|  | **Materials** |
| **SS5.3** | Do soil binders consist of the proper materials? |
| **SPECs, 21-1.02F(1) Tackifier, General** | Tackifier must be (1) free from growth or germination inhibiting factors, (2) nonflammable, (3) nontoxic to aquatic organisms, and (4) functional for a minimum of 180 days.  General purpose tackifier may be either a plant based product or a polymeric emulsion blend as follows:  1. Plant based tackifier must be a natural high molecular weight polysaccharide, a high viscosity hydrocolloid that is miscible in water, and labeled as either guar, psyllium, or starch, as follows:  1.1. Guar gum based product must be derived from the ground endosperm of the guar plant, Cyanmopsis tetragonolobus. It must be treated with dispersing agents for easy mixing. It must be able to be diluted at the rate of 1 to 5 pounds per 100 gallons of water.  1.2. Psyllium based product must be manufactured from the finely ground, mucilloid coating of Plantago ovata or Plantago ispaghula seeds and able to dry and form a firm but rewettable membrane.  1.3. Starch based product must be a nonionic, water-soluble, granular material derived from corn, potato, or other plant-based source.  2. Polymeric emulsion blend tackifier must be a prepackaged liquid or dry powder, anionic formulation with a residual monomer content not exceeding 0.05 percent by weight. The tackifier must contain and be labeled with one of the following as the primary active ingredients:  2.1. Acrylic copolymers and polymers.  2.2. Polymers of methacrylates and acrylates.  2.3. Copolymers of sodium acrylates and acrylamides.  2.4. Polyacrylamide and copolymer of acrylamide.  2.5. Hydrocolloid polymers. |

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|  | **Maintenance** |
| **SS5.4** | Are the soil binders maintained properly? |
| **CGP, Order IV.E Proper Operations 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. |

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| **QUESTION** | **Application** |
| **SS6.1** | Is Straw Mulch applied as required? |
| **CGP, Attachment C.D.2, D.D.2, E.D.2** | Risk Level 1, 2 and 3 dischargers shall provide effective soil cover for \*inactive areas and all finished slopes, open space, utility backfill, and completed lots.  \*Inactive areas of construction are areas of construction activity that have been disturbed and are not scheduled to be re-disturbed for at least 14 days. |
| **CGP, Attachment D.E.3, E.E.3** | Risk Level 2 and 3 dischargers shall implement appropriate erosion control BMPs (runoff control and soil stabilization) in conjunction with sediment control BMPs for areas under \*active construction.  \*Active areas of construction are areas undergoing land surface disturbance. This includes construction activity during the preliminary stage, mass grading stage, streets and utilities stage and the vertical construction stage. |
| **13-1.03A General** | Install soil stabilization materials for water pollution control practices in all work areas that are inactive or before storm events. |
| **SPECs, 13-5.03A General** | Apply temporary soil stabilization materials within 24 hours after an area is ready to receive temporary soil stabilization or before a forecasted storm event. |

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|  | **Installation** |
| **SS6.2** | Is Straw Mulch installed properly? |
| **SPECs, 13-5.03A General** | Do not use hydraulically-applied materials under the following conditions:  1. During precipitation  2. Whenever water is standing on or moving across the soil surface  3. Soil is frozen  4. Air temperature is below 40 degrees F during the tackifier's curing period unless allowed by the tackifier manufacturer and authorized |
| **SPECs, 21-1.03H Straw** | Apply straw by spreading it uniformly without clumping or piling at the rates shown, based upon slope measurements. Once straw work is started in an area, apply all materials for that area in the same working day. |
| **SPECs, 13-5.03H Temporary Tacked Straw** | If rates are not shown, apply temporary tacked straw at the following rate:  1. Straw at 2.0 tons/acre  2. Fiber at 2,000 lb/acre  3. Tackifier under the manufacturer's instructions for the slope, soil, and wind conditions |

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|  | **Materials** |
| **SS6.3** | Does Straw Mulch consist of the proper materials? |
| **SPECs, 13-5.03H Temporary Tacked Straw** | Fiber for temporary tacked straw must be at least 50 percent wood fiber. The remaining percentage must be cellulose fiber, alternate fiber, or a combination. |
| **SPECs, 21-1.02I Straw** | Straw must be stalks from wheat, rice, or barley furnished in air-dry condition with a consistency compatible for application with commercial straw-blowing equipment. Wheat and barley straw must be derived from irrigated crops.  Straw must be free of plastic, glass, metal, rocks, and refuse or other deleterious material.  Straw must have not have been used for stable bedding. |
| **SPECs, 21-1.02F(1) Tackifier, General** | Tackifier must be (1) free from growth or germination inhibiting factors, (2) nonflammable, (3) nontoxic to aquatic organisms, and (4) functional for a minimum of 180 days.  General purpose tackifier may be either a plant based product or a polymeric emulsion blend as follows:  1. Plant based tackifier must be a natural high molecular weight polysaccharide, a high viscosity hydrocolloid that is miscible in water, and labeled as either guar, psyllium, or starch, as follows:  1.1. Guar gum based product must be derived from the ground endosperm of the guar plant, Cyanmopsis tetragonolobus. It must be treated with dispersing agents for easy mixing. It must be able to be diluted at the rate of 1 to 5 pounds per 100 gallons of water.  1.2. Psyllium based product must be manufactured from the finely ground, mucilloid coating of Plantago ovata or Plantago ispaghula seeds and able to dry and form a firm but rewettable membrane.  1.3. Starch based product must be a nonionic, water-soluble, granular material derived from corn, potato, or other plant-based source.  2. Polymeric emulsion blend tackifier must be a prepackaged liquid or dry powder, anionic formulation with a residual monomer content not exceeding 0.05 percent by weight. The tackifier must contain and be labeled with one of the following as the primary active ingredients:  2.1. Acrylic copolymers and polymers.  2.2. Polymers of methacrylates and acrylates.  2.3. Copolymers of sodium acrylates and acrylamides.  2.4. Polyacrylamide and copolymer of acrylamide.  2.5. Hydrocolloid polymers. |

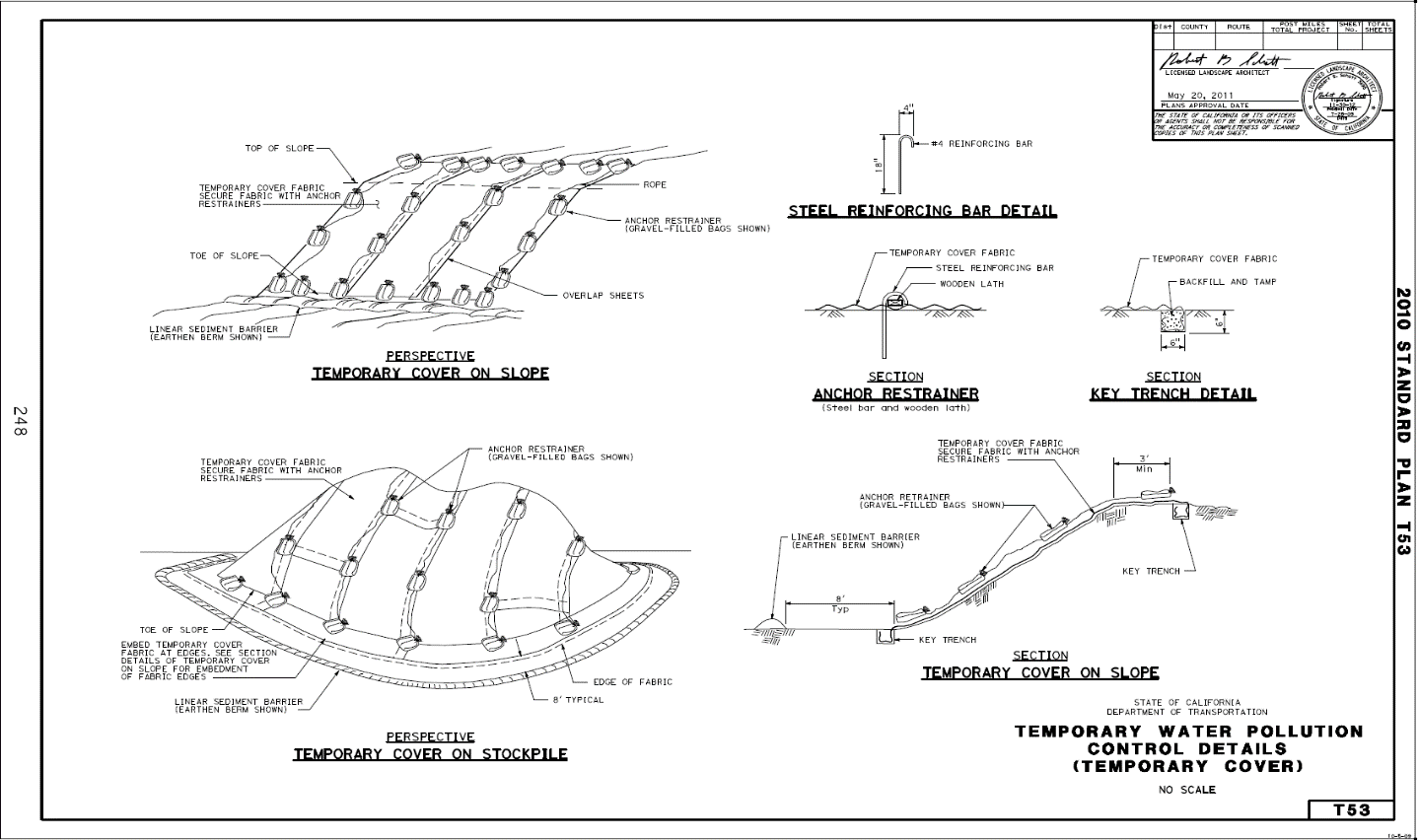
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|  | **Maintenance** | |
| **SS6.4** | Is Straw Mulch maintained properly? | |
| **CGP, Order IV.E Proper Operations and Maintenance** | The discharger shall at all times properly operate and maintain any facilities and systems of treatment and control (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. |

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| **QUESTION** | **Application** |
| **SS7.1** | Are the Geotextile, Plastic, or Erosion Control Blanket/Mats applied as required? |
| **CGP, Attachment C.D.2, D.D.2, E.D.2** | Risk Level 1, 2 and 3 dischargers shall provide effective soil cover for \*inactive areas and all finished slopes, open space, utility backfill, and completed lots.  \*Inactive areas of construction are areas of construction activity that have been disturbed and are not scheduled to be re-disturbed for at least 14 days. |
| **CGP, Attachment D.E.3, E.E.3** | Risk Level 2 and 3 dischargers shall implement appropriate erosion control BMPs (runoff control and soil stabilization) in conjunction with sediment control BMPs for areas under \*active construction.  \*Active areas of construction are areas undergoing land surface disturbance. This includes construction activity during the preliminary stage, mass grading stage, streets and utilities stage and the vertical construction stage. |
| **13-1.03A General** | Install soil stabilization materials for water pollution control practices in all work areas that are inactive or before storm events. |
| **SPECs, 13-5.03A General** | Apply temporary soil stabilization materials within 24 hours after an area is ready to receive temporary soil stabilization or before a forecasted storm event. |

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|  | **Installation** |
| **SS7.2** | Are the Geotextile, Plastic or Erosion Control Blankets/Mats installed correctly? |
| **SPECs, 13-5.02F Temporary Covers** | Use restrainers to secure the cover fabric or plastic sheeting to the surface of the slope.  Restrainers must be one of the following:  1. Gravel-filled bags roped together and spaced not more than 6 feet apart.  2. Wooden lath and anchor restrainers as shown. Wooden lath must be 2 by 4 inches by 8 feet made from fir or pine. Anchor restrainers must be made from steel reinforcing bars and spaced not more than 4 feet apart along the wooden lath.  3. Another authorized method. |
| **SPECs, 13-5.03K Temporary Covers** | Install temporary cover fabric as follows:  1. Place fabric loosely on the slope or stockpile with the longitudinal edges perpendicular to the slope contours.  2. Place fabric on the upper portion of the slope to overlap the fabric on the lower portion of the slope.  3. Place fabric on the side facing the prevailing wind to overlap the fabric on the downwind side of the slope.  4. Anchor the perimeter edge of the fabric in key trenches.  5. Overlap edges of the fabric by at least 2 feet.  6. Place restrainers at the overlap area and along the toe of the slope. Space the restrainers a maximum of 8 feet on center between the overlaps.  7. If anchor restraints are used, ensure that the leg of the steel reinforcing bar pierces the fabric and holds the wooden lath firmly against the surface of the slope or stockpile.  Whenever you remove a temporary cover to perform other work, replace and resecure it within 1 hour of stopping work. |
| **SPECs, 21-1.03O Rolled Erosion Control Products** | Before placing RECP, ensure the subgrade has been graded smooth and has no depressed voids. The subgrade must be free from obstructions, such as tree roots, projecting stones, or foreign matter greater than 1 inch in diameter.  Fasten RECP to the surface with staples and anchor as shown.  Do not drive vehicles upon RECP following placement. |
| **See Standard Plan Sheet T53** | Temporary Cover |
| **See Standard Plan Sheet T54** | Temporary Erosion Control Blanket |

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|  | **Materials** |
| **SS7.3** | Do the Geotextile, Plastic or Erosion Control Blankets/Mats consist of the proper materials? |
| **SPECs, 13-5.02B Erosion Control Blankets** | An erosion control blanket classified as long-term and non-degradable must be rock slope protection fabric, Class 8. |
| **SPECs, 13-5.02F Temporary Covers** | Temporary cover must be geosynthetic fabric, plastic sheeting, or a combination.  Plastic sheeting must be single-ply geomembrane material, 10 mils thick, complying with ASTM D2103.  Rope must be at least 3/8 inch in diameter and be biodegradable or nondegradable. Biodegradable rope must be made from sisal, manila, or other natural fiber. Nondegradable rope must be made from nylon, polypropylene, or other geosynthetic fiber. |
| **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, 21-1.02O(1) Rolled Erosion Control Products**  **General** | RECP must be a long-term, degradable, open-weave textile manufactured or fabricated into rolls designed to reduce soil erosion and assist in the growth, establishment, and protection of vegetation. RECP must conform to the classification system established by the Erosion Control Technology Council. |
| **SPECs, 21-1.02O(2) Jute Mesh** | Jute mesh must be made of processed natural jute yarns woven into a matrix. |
| **SPECs, 21-1.02O(3) Netting** | Netting must be made of coconut fiber woven into a matrix. |
| **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. |
| **SPECs, 21-1.02O(5) Turf Reinforcement Mats** | Turf reinforcement mat must be a nondegradable, open-weave textile made of synthetic fibers, filaments, nets, wire mesh or other elements, processed into a permanent, three-dimensional matrix. Turf reinforcement mat must comply with requirements shown in the following table: |
| **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** |
| **SS7.4** | Are the Geotextile, Plastic or Erosion Control Blankets/Mats maintained correctly? |
| **SPECs, 13-5.03K Temporary Covers** | Maintain a temporary cover to minimize exposure of slopes and stockpiles and prevent material movement beyond the linear sediment barrier.  Relocate and secure restrainers to keep erosion control blankets in place. Whenever a temporary cover breaks free, re-secure it immediately.  Repair or replace a temporary cover whenever any of the following occur:  1. Covered area becomes exposed or exhibits visible erosion  2. Washouts occur between the joints or beneath the linear sediment barrier  3. Temporary cover becomes detached, torn, or unraveled |
| **CGP, Order IV.E Proper Operations 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. |



Diagram

Description automatically generated

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| **QUESTION** | **Application** |
| **SS8.1** | Is Wood Mulching applied as required? |
| **CGP, Attachment C.D.2, D.D.2, E.D.2** | Risk Level 1, 2 and 3 dischargers shall provide effective soil cover for \*inactive areas and all finished slopes, open space, utility backfill, and completed lots.  \*Inactive areas of construction are areas of construction activity that have been disturbed and are not scheduled to be re-disturbed for at least 14 days. |
| **CGP, Attachment D.E.3, E.E.3** | Risk Level 2 and 3 dischargers shall implement appropriate erosion control BMPs (runoff control and soil stabilization) in conjunction with sediment control BMPs for areas under \*active construction.  \*Active areas of construction are areas undergoing land surface disturbance. This includes construction activity during the preliminary stage, mass grading stage, streets and utilities stage and the vertical construction stage. |
| **13-1.03A General** | Install soil stabilization materials for water pollution control practices in all work areas that are inactive or before storm events. |
| **SPECs, 13-5.03A General** | Apply temporary soil stabilization materials within 24 hours after an area is ready to receive temporary soil stabilization or before a forecasted storm event. |

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|  | **Installation** |
| **SS8.2** | Is Wood Mulching installed properly? |
| **SPECs, 13-5.03C Temporary Mulch** | If rates are not shown, spread mulch to a uniform thickness to form a 2-inch thick blanket. |
| **SPECs, 20-7.03I(10) Mulch** | Spread mulch placed in areas outside of plant basins to a uniform thickness as shown.  Mulch must be placed at the rate described and placed in the plant basins or spread in areas as shown after the plants have been planted. Mulch placed in plant basins must not come in contact with the plant crown and stem.  Spread mulch from the outside edge of the proposed plant basin or plant without basin to the adjacent edges of shoulders, paving, retaining walls, dikes, curbs, sidewalks, walls, fences, and existing plantings. If the proposed plant or plant without basin is 12 feet or more from the adjacent edges of shoulders, paving, retaining walls, dikes, curbs, sidewalks, walls, fences, and existing plantings, spread the mulch 6 feet beyond the outside edge of the proposed plant basin or plant without basin.  Do not place mulch within 4 feet of the (1) flow line of earthen drainage ditches, (2) edge of paved ditches, or (3) drainage flow lines. |

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|  | **Materials** |
| **SS8.3** | Does Wood Mulching consist of the proper materials? |
| **SPECs, 20-7.02D(6) Mulch**  **20-7.02D(6)(a) General** | Mulch must not contain more than 0.1 percent of deleterious materials such as rocks, glass, plastics, metals, clods, weeds, weed seeds, coarse objects, sticks larger than the specified particle size, salts, paint, petroleum products, pesticides or other chemical residues harmful to plant or animal life. |
| **SPECs, 20-7.02D(6)(b) Tree Bark Mulch** | Tree bark mulch must be derived from cedar, Douglas fir, or redwood species.  Tree bark mulch must be ground so that a minimum of 95 percent of the material by volume is less than 2 inches and no more than 30 percent by volume is less than 1 inch. |
| **SPECs, 20-7.02D(6)(c) Wood Chip Mulch** | Wood chip mulch must be derived from clean wood and not contain leaves or small twigs.  Wood chip mulch must have an average thickness of 1/16 inch, length between 1/2 inch and 3 inches, and a width 3/8 inch or greater. At least 95 percent of wood chips, by volume, must conform to these dimensions. |
| **SPECs, 20-7.02D(6)(d) Shredded Bark Mulch** | Shredded bark mulch must be a blend of loose, long, thin wood or bark pieces derived from trees with a high length-to-width ratio. A minimum of 95 percent of the wood strands must have lengths from 2 to 8 inches, with a width and thickness from 1/8 to 1-1/2 inches. |
| **SPECs, 20-7.02D(6)(e) Tree Trimming Mulch** | Tree trimming mulch must be derived from chipped trees and may contain leaves and small twigs.  Tree trimming mulch must have a particle size such that a minimum of 95 percent of the material by volume is less than 3 inches and no more than 30 percent by volume is less than 1 inch. |

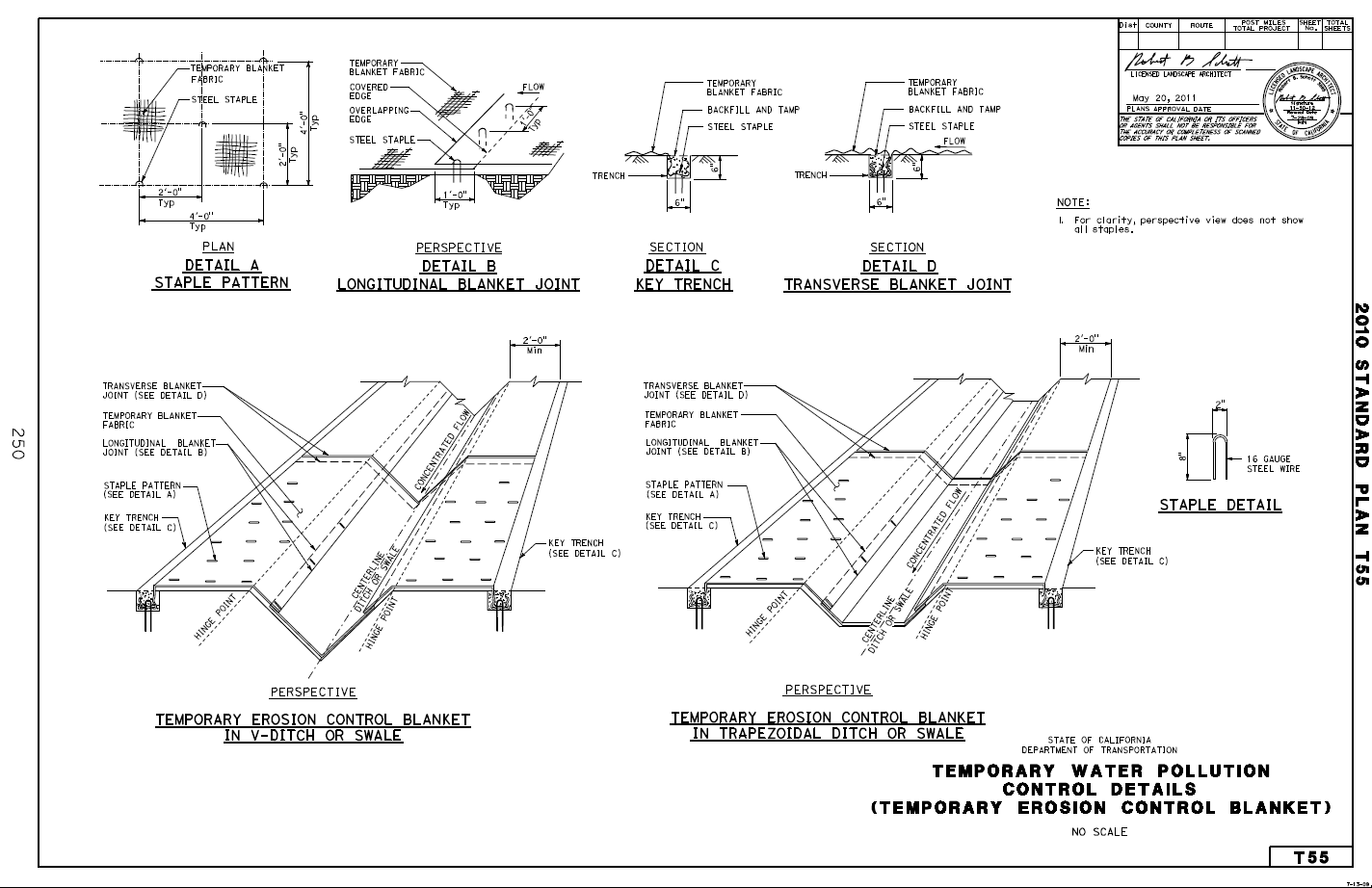
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|  | **Maintenance** | |
| **SS8.4** | Is Wood Mulching maintained properly? | |
| **CGP, Order IV.E Proper Operations and Maintenance** | The discharger shall at all times properly operate and maintain any facilities and systems of treatment and control (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. |

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| **QUESTION** | **Application** |
| **SS9.1** | Is the Earth Dike/Drainage Swale or Lined Swale applied as required? |
| **CGP, Attachment C.F, D.F, E.F** | Risk Level 1, 2, 1nd 3 dischargers shall effectively manage all run-on, all runoff within the site and all runoff that discharges off the site. Run-on from off site shall be directed away from all disturbed areas or shall collectively be in compliance with the effluent limitations in this General Permit. |
| **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:  **2**. Install temporary gravel bag dikes, fiber rolls, filter fabric fence, or other equivalent measures as necessary to control erosion and runoff.  **8**. Control storm water volume and velocity within the site to minimize soil erosion and offsite discharges.  **9**. Direct all run-on surface flows from offsite, to the maximum extent possible, away from all disturbed areas.  **10.** Surface flows from the project site shall be controlled to prevent downstream erosion at any point. |

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|  | **Installation** |
| **SS9.2** | Is the Earth Dike/Drainage Swale or Lined Swale installed properly? |
| **SPECs, 13-10.03I Temporary Earthen Berms** | Construct a temporary earthen berm with native soil or selected material at least 8 inches high by 36 inches wide. Compacter by hand or mechanical methods.  For other devices - See individual device requirement, but note the finding as SS-9. |
| **SPECs, 21-1.03O Rolled Erosion Control Products** | Before placing RECP, ensure the subgrade has been graded smooth and has no depressed voids. The subgrade must be free from obstructions, such as tree roots, projecting stones, or foreign matter greater than 1 inch in diameter.  Fasten RECP to the surface with staples and anchor as shown.  Do not drive vehicles upon RECP following placement |
| **See Standard Plan Sheet T55** | Temporary Erosion Control Blanket |

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|  | **Materials** |
| **SS9.3** | Does the Earth Dike/Drainage Swale or Lined Swale consist of the proper materials? |
| **SPECs, 13-5.02B Erosion Control Blankets** | An erosion control blanket classified as long-term and non-degradable must be rock slope protection fabric, Class 8. |
| **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, 21-1.02O(1) Rolled Erosion Control Products**  **General** | RECP must be a long-term, degradable, open-weave textile manufactured or fabricated into rolls designed to reduce soil erosion and assist in the growth, establishment, and protection of vegetation. RECP must conform to the classification system established by the Erosion Control Technology Council. |
| **SPECs, 21-1.02O(2) Jute Mesh** | Jute mesh must be made of processed natural jute yarns woven into a matrix. |
| **SPECs, 21-1.02O(3) Netting** | Netting must be made of coconut fiber woven into a matrix. |
| **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. |
| **SPECs, 21-1.02O(5) Turf Reinforcement Mats** | Turf reinforcement mat must be a nondegradable, open-weave textile made of synthetic fibers, filaments, nets, wire mesh or other elements, processed into a permanent, three-dimensional matrix. Turf reinforcement mat must comply with requirements shown in the following table: |
| **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** |
| **SS9.4** | Is the Earth Dike/Drainage Swale or Lined Swale maintained properly? |
| **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 Operations 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. |



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| **QUESTION** | **Application** |
| **SS10.1** | Is the Outlet Protection/Velocity Dissipation Device applied as required? |
| **CGP, Attachment C.F, D.F, E.F** | Risk Level 1, 2, and 3 dischargers shall effectively manage all run-on, all runoff within the site and all runoff that discharges off the site. Run-on from off site shall be directed away from all disturbed areas or shall collectively be in compliance with the effluent limitations in this General Permit. |

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|  | **Installation** |
| **SS10.2** | Is the Outlet Protection/Velocity Dissipation Device installed properly? |
| **None** | Note - If the installation of the Outlet Protection / Velocity Dissipation Device, SS-10 is not appropriate, the finding shall be noted under checklist question 10.2, not for the installation of the other BMP. |

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|  | **Materials** |
| **SS10.3** | Does the Outlet Protection/Velocity Dissipation Device consist of the proper materials? |
| **None** | Note - If the material used to construct the Outlet Protection / Velocity Dissipation Device, SS-10 is not appropriate, the finding shall be noted under checklist question 10.3, not for the material for the other BMP. |

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|  | **Maintenance** |
| **SS10.4** | Is the Outlet Protection/Velocity Dissipation Device maintained properly? |
| **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 Operations 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. |

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| **QUESTION** | **Application** |
| **SS11.1** | Is the Slope Drain applied as required? |
| **CGP, Attachment C.F, D.F, E.F** | Risk Level 1, 2, 1nd 3 dischargers shall effectively manage all run-on, all runoff within the site and all runoff that discharges off the site. Run-on from offsite shall be directed away from all disturbed areas or shall collectively be in compliance with the effluent limitations in this General Permit. |

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|  | **Installation** |
| **SS11.2** | Is the Slope Drain installed properly? |
| **None** | Note - If the installation of the Slope Drain, SS-11 is not appropriate, the finding shall be noted under checklist question 11.2, not for the installation of the other BMP. |

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|  | **Materials** |
| **SS11.3** | Does the Slope Drain consist of the proper materials? |
| **None** | Note - If the material of the Slope Drain, SS-11 is not appropriate, the finding shall be noted under checklist question 11.3, not for the installation of the other BMP. |

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|  | **Maintenance** |
| **SS11.4** | Is the Slope Drain maintained properly? |
| **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 Operations 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. |