

- f. Remove accumulated sediment to maintain at least one-half of the design capacity and conduct all other appropriate maintenance to ensure the basin or impoundment remains in effective operating condition.

#### 2.2.13 If using treatment chemicals (e.g., polymers, flocculants, coagulants):

- a. **Use conventional erosion and sediment controls before and after the application of treatment chemicals.** Chemicals may only be applied where treated stormwater is directed to a sediment control (e.g., *sediment basin, perimeter control*) before discharge.
- b. **Select appropriate treatment chemicals.** Chemicals must be appropriately suited to the types of soils likely to be exposed during construction and present in the discharges being treated (i.e., *the expected turbidity, pH, and flow rate of stormwater flowing into the chemical treatment system or area*).
- c. **Minimize discharge risk from stored chemicals.** Store all treatment chemicals in leak-proof containers that are kept under storm-resistant cover and surrounded by secondary containment structures (e.g., *spill berms, dikes, spill containment pallets*), or provide equivalent measures designed and maintained to minimize the potential discharge of treatment chemicals in stormwater or by any other means (e.g., *storing chemicals in a covered area, having a spill kit available on site and ensuring personnel are available to respond expeditiously in the event of a leak or spill*).
- d. **Comply with State/local requirements.** Comply with applicable State and local requirements regarding the use of treatment chemicals.
- e. **Use chemicals in accordance with good engineering practices and specifications of the chemical provider/supplier.** Use treatment chemicals and chemical treatment systems in accordance with good engineering practices, and with dosing specifications and sediment removal design specifications provided by the provider/supplier of the applicable chemicals, or document in your SWPPP specific departures from these specifications and how they reflect good engineering practice.
- f. **Ensure proper training.** Ensure all persons who handle and use treatment chemicals at the construction site are provided with appropriate, product-specific training prior to beginning application of treatment chemicals. Among other things, the training must cover proper dosing requirements.
- g. **Perform additional measures specified by the EPA Regional Office for the authorized use of cationic chemicals.** If you have been authorized to use cationic chemicals at your site pursuant to Part 1.1.9, you must perform all additional measures as conditioned by your authorization to ensure the use of such chemicals will not result in discharges that do not meet water quality standards.

#### 2.2.14 Stabilize exposed portions of the site.

Implement and maintain stabilization measures (e.g., *seeding protected by erosion controls until vegetation is established*,<sup>35</sup> *sodding, mulching, erosion control blankets, hydromulch, gravel*) that minimize erosion from any areas of exposed soil on the site in accordance with Part.

<sup>35</sup> If you will be evaluating the use of some type of erosion control netting to the site as part of your site stabilization, EPA encourages you to consider employing products that have been shown to minimize

**a. Stabilization Deadlines:**<sup>36</sup>**Table 2 Deadlines for Initiating and Completing Site Stabilization.**

Total Amount of Land Disturbance Occurring At Any One Time <sup>37</sup>	Deadline
<b>i. Five acres or less (<math>\leq 5.0</math>)</b>  <b>Note: this includes sites disturbing more than five acres (<math>&gt;5.0</math>) total over the course of a project, but that limit disturbance at any one time (i.e., phase the disturbance) to five acres or less (<math>\leq 5.0</math>)</b>	<ul style="list-style-type: none"> <li>Initiate the installation of stabilization measures immediately<sup>38</sup> in any areas of exposed soil where construction activities have permanently ceased or will be temporarily inactive for 14 or more calendar days;<sup>39</sup> and</li> <li>Complete the installation of stabilization measures as soon as practicable, but no later than 14 calendar days</li> </ul>

impacts on wildlife. For instance, the U.S. Fish & Wildlife Service provides recommendations on the type of netting practices that are considered "wildlife friendly," including those that use natural fiber or 100 percent biodegradable materials and that use a loose weave with a non-welded, movable jointed netting, as well as those products that are not wildlife friendly including square plastic netting that are degradable (e.g., photodegradable, UV-degradable, oxo-degradable), netting made from polypropylene, nylon, polyethylene, or polyester. Other recommendations include removing the netting product when it is no longer needed. See [https://www.fws.gov/midwest/eastlansing/library/pdf/WildlifeFriendlyErosionControlProducts\\_revised.pdf](https://www.fws.gov/midwest/eastlansing/library/pdf/WildlifeFriendlyErosionControlProducts_revised.pdf) for further information. There also may be State, Tribal, or local requirements about using wildlife friendly erosion control products.

<sup>36</sup> EPA may determine, based on an inspection carried out under Part 4.8 and corrective actions required under Part 5.3, that the level of sediment discharge on the site makes it necessary to require a faster schedule for completing stabilization. For instance, if sediment discharges from an area of exposed soil that is required to be stabilized are compromising the performance of existing stormwater controls, EPA may require stabilization to correct this problem.

<sup>37</sup> Limiting disturbances to five (5) acres or less at any one time means that at no time during the project do the cumulative earth disturbances exceed five (5) acres. The following examples would qualify as limiting disturbances at any one time to five (5) acres or less:

1. The total area of disturbance for a project is five (5) acres or less.
2. The total area of disturbance for a project will exceed five (5) acres, but the operator ensures that no more than five (5) acres will be disturbed at any one time through implementation of stabilization measures. In this way, site stabilization can be used to "free up" land that can be disturbed without exceeding the five (5)-acre cap to qualify for the 14-day stabilization deadline. For instance, if an operator completes stabilization of two (2) acres of land on a five (5)-acre disturbance, then two (2) additional acres could be disturbed while still qualifying for the longer 14-day stabilization deadline.

<sup>38</sup> The following are examples of activities that would constitute the immediate initiation of stabilization:

1. Prepping the soil for vegetative or non-vegetative stabilization as long as seeding, planting, and/or installation of non-vegetative stabilization products takes place as soon as practicable, but no later than one (1) calendar day of completing soil preparation;
2. Applying mulch or other non-vegetative product to the exposed area;
3. Seeding or planting the exposed area;
4. Starting any of the activities in # 1 – 3 on a portion of the entire area that will be stabilized; and
5. Finalizing arrangements to have stabilization product fully installed in compliance with the deadlines for completing stabilization.

<sup>39</sup> The requirement to initiate stabilization immediately is triggered as soon as you know that construction work on a portion of the site is temporarily ceased and will not resume for 14 or more days, or as soon as you know that construction work is permanently ceased. In the context of this provision, "immediately" means as soon as practicable, but no later than the end of the next business day, following the day when the construction activities have temporarily or permanently ceased.

Total Amount of Land Disturbance Occurring At Any One Time <sup>37</sup>	Deadline
	after stabilization has been initiated. <sup>40</sup>
ii. More than five acres (>5.0)	<ul style="list-style-type: none"> <li>Initiate the installation of stabilization measures immediately<sup>41</sup> in any areas of exposed soil where construction activities have permanently ceased or will be temporarily inactive for 14 or more calendar days;<sup>42</sup> and</li> <li>Complete the installation of stabilization measures as soon as practicable, but no later than seven (7) calendar days after stabilization has been initiated.<sup>43</sup></li> </ul>

**b. Exceptions:**

- i. **Arid, semi-arid, and drought-stricken areas** (as defined in Appendix A). If it is the seasonally dry period (as defined in Appendix A)<sup>44</sup> or a period in which drought is occurring, and vegetative stabilization measures are being used:
  - (a) Immediately initiate and, within 14 calendar days of temporary or permanent cessation of work in any portion of your site, complete the installation of temporary non-vegetative stabilization measures to the extent necessary to prevent erosion;
  - (b) As soon as practicable, given conditions or circumstances on the site, complete all activities necessary to seed or plant the area to be stabilized; and
  - (c) If construction is occurring during the seasonally dry period, indicate in your SWPPP the beginning and ending dates of the seasonally dry period and your site conditions. Also include the schedule you will follow for initiating and completing vegetative stabilization.
- ii. **Unforeseen circumstances.** Operators that are affected by unforeseen circumstances<sup>45</sup> that delay the initiation and/or completion of vegetative stabilization:

<sup>40</sup> If vegetative stabilization measures are being implemented, stabilization is considered "installed" when all activities necessary to seed or plant the area are completed, including the application of any non-vegetative protective cover (e.g., mulch, erosion control blanket), if applicable. If non-vegetative stabilization measures are being implemented, stabilization is considered "installed" when all such measures are implemented or applied.

<sup>41</sup> See footnote 38.

<sup>42</sup> See footnote 39.

<sup>43</sup> See footnote 40.

<sup>44</sup> The term "seasonally dry period" as defined in Appendix A refers to a month in which the long-term average total precipitation is less than or equal to 0.5 inches. Refer to EPA's Seasonally Dry Period Locator Tool at <https://www.epa.gov/npdes/construction-general-permit-resources-tools-and-templates> and supporting maps for assistance in determining whether a site is operating during a seasonally dry period for the area.

<sup>45</sup> Examples include problems with the supply of seed stock or with the availability of specialized equipment and unsuitability of soil conditions due to excessive precipitation and/or flooding.

- (a) Immediately initiate and, within 14 calendar days, complete the installation of temporary non-vegetative stabilization measures to prevent erosion;
- (b) Complete all soil conditioning, seeding, watering or irrigation installation, mulching, and other required activities related to the planting and initial establishment of vegetation as soon as conditions or circumstances allow it on your site; and
- (c) Document in the SWPPP the circumstances that prevent you from meeting the deadlines in Part 2.2.14a and the schedule you will follow for initiating and completing stabilization.

**iii. Discharges to a sediment- or nutrient-impaired water or to a water that is identified by your State, Tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 for antidegradation purposes.** Complete stabilization as soon as practicable, but no later than seven (7) calendar days after stabilization has been initiated.

**c. Final Stabilization Criteria** (for any areas not covered by permanent structures):

- i. Establish uniform, perennial vegetation (i.e., evenly distributed, without large bare areas) to provide 70 percent or more of the vegetative cover native to local undisturbed areas; and/or
- ii. Implement permanent non-vegetative stabilization measures<sup>46</sup> to provide effective cover of any areas of exposed soil.

**iii. Exceptions:**

- (a) **Arid, semi-arid, and drought-stricken areas** (as defined in Appendix A). Final stabilization is met if the area has been seeded or planted to establish vegetation that provides 70 percent or more of the vegetative cover native to local undisturbed areas within three (3) years and, to the extent necessary to prevent erosion on the seeded or planted area, non-vegetative erosion controls have been applied to provide cover for at least three years without active maintenance.
- (b) **Disturbed areas on agricultural land that are restored to their preconstruction agricultural use.** The Part 2.2.14c final stabilization criteria do not apply.
- (c) **Areas that need to remain disturbed.** In limited circumstances, stabilization may not be required if the intended function of a specific area of the site necessitates that it remain disturbed, and only the minimum area needed remains disturbed (e.g., dirt access roads, utility pole pads, areas being used for storage of vehicles, equipment, materials).

## 2.3 POLLUTION PREVENTION REQUIREMENTS<sup>47</sup>

You must implement pollution prevention controls in accordance with the following requirements to minimize the discharge of pollutants in stormwater and to prevent the discharge of pollutants from spilled or leaked materials from construction activities.

<sup>46</sup> Examples of permanent non-vegetative stabilization measures include riprap, gravel, gabions, and geotextiles.

<sup>47</sup> Under this permit, you are not required to minimize exposure for any products or materials where the exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use).