

BEG Group LLC.

STANDARD OPERATING PROCEDURE

Subject: The Big Switch® Installation Procedure

Note: Use this same procedure for Phalanx Bio Switch™ Installation

1. PURPOSE

The purpose of this procedure is to establish the details for installing The Big Switch® Erosion Filtration Medium and to ensure its proper fit, form and function according The Big Switch® 's application design.

2. SCOPE

This procedure applies to anyone who is installing The Big Switch® Erosion Filtration Medium and specially to those installers that have been Certified though BEG Group's training program.

3. REFERENCES

- Switchgrass -MSDS
- E-tube Sock - MSDS
- The Big Switch® Design Specification

4. DEFINITIONS

- N/A

5. RESPONSIBILITIES

It is the responsibility of anyone installing The Big Switch® products to follow this procedure including all applicable safety procedures.

6. PROCEDURE

6.1 Safety

- General (PPE)
At a minimum, it is suggested that you wear safety glass's, steal toe boots, long sleeve shirts, gloves, and long pants.
- Qualified Sub-Contract Installers
It is the qualified Installers responsibility to follow at a minimum their own companies approved Safety Program and when required by the Customer you must follow their safety program with no exceptions.

6.2 Loading and unloading The Big Switch® Product

- When loading or unloading pallets of The Big Switch® on and off trucks and trailers you must ensure you are on a level surface. The product can easily shift, and it is difficult to re-palletize.
- Store the product on a level surface and keep it protected from the weather if possible as the product gets heavier as it gets wet.

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6.3 Preparing the Ground surface

- Familiarize yourself with the area where The Big Switch® will be placed by conducting a site walk noting any conditions that require additional safety measures by completing a required Job Safety Analyst (JSA) and planning the method that will be required to ensure the proper ground preparation has been completed prior to the install.
- The area where The Big Switch® products are to be installed must be cleared of vegetation by using a weed eater to ensure The Big Switch® Product can make complete contact with the ground surface.
- Ground surfaces that are new construction must be free from pre-erosion crevasses or back filled to ensure complete contact with The Big Switch® Sock.
- On steep slopes using extreme safety measures, it is suggested to trench the surface contact area 2" to 3".

6.4 Pre- Installation

- Carefully move the appropriately sized The Big Switch® into the area to be installed.
- Remove any wrap, labels and banding and properly dispose of it to eliminate any trip hazards and ensuring no litter in the area.
- Verify that stakes are included with the pallet or if they have been delivered separately.
- Verify that the wood stakes provided meet the requirements in table 1. The stake size requirements below in table 1 are Department of transportation approved in many States and will require written approval to use anything other than the stakes listed.

| Table 1 | |
|---|---------------|
| Minimum Required Wood Stakes Sizes for Each The Big Switch® Sock Size | |
| 8" Diameter | 1" x 1" x 24" |
| 12" Diameter | 2" x 2" x 27" |
| 18" Diameter | 2" x 2" x 33" |
| 24" Diameter | 2" x 2" x 39" |

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6.5 Installation

- Verify that the ground surface has been prepared for the installation.
- Place The Big Switch® on the ground surface and move it in to the prepared area.
- Fluff the sock up as it will be flat from the packaging. Ensure the sock looks uniform in diameter and is not twisted.
- Verify that the sock has complete surface contact to the ground.
- Install the appropriately approved stakes at a maximum of every 10 feet and closer if needed to ensure contact to the ground.
- Pre-cut the location for each stake and press the stake through the sock until it contacts the ground. This will reduce the amount on bounce back on the stake while driving the stake.
- Drive the stake into the ground leaving approximately 3" above the top of the sock.
- Ensure ground contact and repeat this process for each section of The Big Switch® sock.

6.6 Final Inspection

- Walk along the installed product and verify that the sock has proper contact with the ground. If not acceptable: back fill or stake the areas to achieve complete contact.
- Verify that all the stake's height is approximately 3" above the top of the sock and spacing is correct. If not acceptable: ensure corrections are made before moving to the next section.
- Note on the work order inspected by and initial.

7. ATTACHMENTS

- N/A

8. SAFETY RECORDS

- JSA

9. REVISION HISTORY AND APROVAL

| Revision Level | Revision Description | Owner |
|----------------|---|------------|
| | | Manager |
| 0 | Initial Release | Jay Elkin |
| | | Perry Burt |
| 1 | General Paragraph spacing and grammar Changes | Jay Elkin |
| | | Perry Burt |

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