

Turbidity Curtain Install and Removal

In rivers or in other moving water (Type II and Type III installations); it is important to set all the curtain anchor points. Care must be taken, prior to putting the furled curtain into the water, to ensure that anchor points are of sufficient holding power to retain the curtain under the existing current conditions. Again, anchor buoys should be employed on all anchors to prevent the current from submerging the flotation at the anchor points. If the moving water into which the curtain is being installed is tidal and will subject the curtain to currents in both directions as the tide changes, it is important to provide anchors on both sides of the curtain for two reasons:

- a) Curtain movements will be minimized during tidal current reversals.
- b) The curtain will not overrun the anchors and pull them out when the tide reverses.

Once the anchors are secure, the furled curtain should be secured first to the anchor point that is farthest upstream, then attached sequentially to each downstream anchor point in turn until the entire curtain is in position. At this point, and before unfurling, the "lay" of the curtain should be assessed and any necessary adjustments made to the anchors. Finally, when the location is ascertained to be as desired, the furling lines should be loosened to allow the skirt to drop.

3. Always attach anchor lines to the flotation device, not to the bottom of the curtain. The anchoring line attached to the downstream side of the flotation device will provide support for the curtain. Attaching the anchors to the bottom of the curtain could cause premature failure of the curtain due to stresses imparted on its middle section.

4. There is an exception to the rule that turbidity curtains should not be installed across channel flows; it occurs when there is a danger of creating a silt build-up in the middle of a watercourse, thereby blocking access or creating a sand bar. Curtains have been used effectively in large areas of moving water by forming a very long sided, sharp "V" to deflect clean water around a work site, confine a large part of the silt-laden water to the work area inside the "V" and direct much of the silt toward the shoreline. Care must be taken, however, not to install the curtain perpendicular to the water current.

REMOVAL

1. Care should be taken to protect the turbidity curtain skirt from damage by furling the curtain before it is removed from the water.

2. The site selected to bring the curtain ashore should be free of sharp rocks, broken cement, debris, etc., so as to minimize damage when hauling the curtain over the area.

3. If the curtain has a deep skirt and no furling system, it can further be protected by running a small boat with a crew installing furling lines along its length before attempting to remove the curtain from the water.

MAINTENANCE

1. The developer / owner are responsible for maintenance of the filter curtain for the duration of the project in order to ensure the continuous protection of the watercourse.
2. Should repairs to the geotextile fabric become necessary, there are repair kits available from Parker Systems, and their instructions must be followed to ensure the adequacy of the repair.
3. When the curtain is no longer required, as determined by the inspector, the curtain and related components must be removed in such a manner as to minimize turbidity. Remaining sediment must be sufficiently settled before removing the curtain. Sediment may be removed and the original depth (or plan elevation) restored. Any spoils must be taken to an upland area and be stabilized.

