4.1.8 Plastic Sheeting

Provides immediate protection to slopes and stockpiles. Plastic sheeting has been known to transfer erosion problems because water will sheet flow off the plastic at high velocity. This is usually attributable to poor application, installation and maintenance. Use alternatives to plastic covering whenever possible.

<u>Advantages</u>

- Provides immediate, short-term erosion protection to slopes that are prone to erosion and stockpiles.
- Fairly quick and easy to install.

Disadvantages

- Plastic sheeting may concentrate sunrays and burn the vegetation beneath it.
- Material generates high velocity runoff.
- Plastic breaks down quickly when exposed to ultraviolet radiation.
- Plastic, when it is not completely removed, can clog drainage system inlets and outlets.
- If not properly anchored, wind may transport plastic onto roadways and create traffic hazard.
- Not effective for preventing illegal discharge

Design Criteria

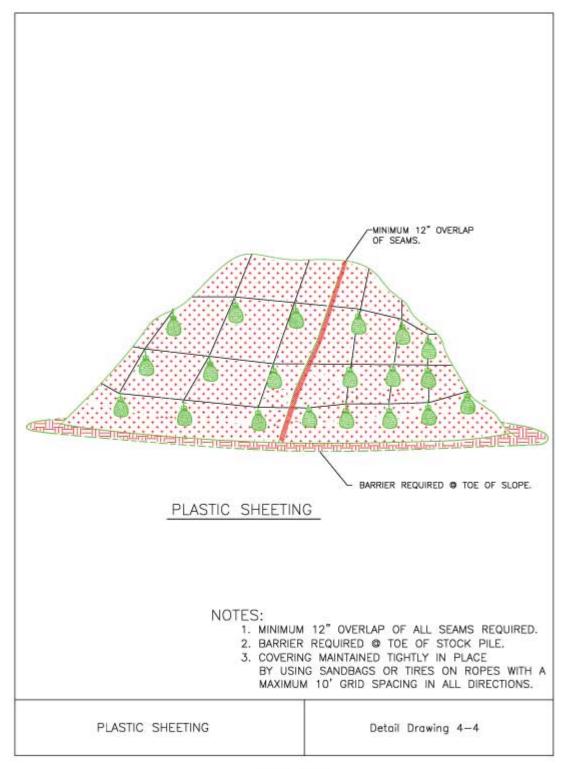
- Do not use plastic covering upslope of areas such as steep and/or unstable slopes that might be adversely affected by concentrated runoff.
- When possible, install an interceptor dike at the top of the plastic to divert flows away from the plastic.
- Toe-in the top of the sheeting in a 6 inch X 6 inch trench backfilled with compacted native material.
- Install a gravel berm, riprap, or other suitable protection at the toe of slope in order to dissipate runoff velocity.
- Anchor the plastic using sandbags or other suitable tethered anchoring system spaced on a 10 foot grid spacing.
- Overlap seams 1-2 feet, tape, roll and stake the seams and then weigh down the entire length.

Inspection & Maintenance

• Inspect once per week on active sites, once every two weeks on in-active sites, and within 24 hours following a .5 inch rain event

CHAPTER 4: EROSION AND SEDIMENT CONTROL MEASURES AND BMP'S

- Replace torn sheets and repair open seams.
- Completely remove and replace plastic when it begins to deteriorate.
- Completely remove all plastic once it is no longer needed.
- Check anchoring system and repair or add anchors.



Page 4-35