

Common Site Violations

Before and during constructions, ESC practices are implemented around construction sites to trap and keep sediment from leaving the site and discharging. If proper controls are not taken seriously, activities may contribute to storm water pollution.

Here are some common site violations:

- Sandbags are not maintained. Sandbags are out of place when stabilizing temporary practices.



- No erosion controls provided, allowing sediment to enter culverts and track onto active roadway.

- Sediment tracking and buildup at the entrance of the construction sites.



- Silt fences are not maintained. Fences are seen sagging and/or bulging due to sediment buildup.

- Excessive sediment entering inlet due to improper installation of protection devices. (Storm water socks offer good protection at inlets.)



For more information on other ESC problems and how to correct them, see the *Guam Erosion & Sediment Control Field Guide*.

Important Contact Numbers

To report a questionable discharge into a Navy storm drain system or nearby waters, please take the following action:

- Residents of Naval Base Guam (NBG) Apra Heights Housing/Community—contact the Area Housing Manager
- All other Base Personnel—contact:

NBG Storm Water Program,
NBG Environmental Office
(671) 339-3711

For additional information, visit Naval Base Guam Storm Water web page at https://www.cnic.navy.mil/regions/jrm/installations/navbase_guam.html

References:

Guam Erosion & Sediment Control Field Guide Handbook. For electronic copy, visit https://data.nodc.noaa.gov/coris/library/NOAA/CRCP/other/grants/NA11NOS4820007/Guam_ErosionSedimentControl_FieldGuide.pdf

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Importance of Erosion and Sediment Control on Construction Sites



Photo: USEPA

Why should we practice Erosion & Sediment Control?

Guam's vegetation absorbs rainfall, prevents soil erosion, and allows for infiltration into the ground. When land gets cleared for new development, valuable soil is exposed causing surface runoff and reducing water quality.



When it rains on construction sites, unprotected slopes and exposed soils can erode causing sediment buildup. This buildup can clog drainage systems, leading to flooding of roadways and properties.

To mitigate this problem, contractors are required to implement Erosion and Sediment Control (ESC) practices. If these practices are not properly maintained on site, sediment runoff can wash into our roads, adjacent properties and waterways such as wetlands, streams and the ocean.



Practicing Erosion and Sediment Control is very important to keep our island clean! Soil erosion and sediment are major contributors to Guam's water quality. What happens on land affects our fresh and marine waters.

Here are some examples of environmental and economic effects of not maintaining ESC practices:

Environmental Impacts

- Increases coral bleaching
- Clogs fish gills
- Destroys marine habitats
- Reduces oxygen levels for aquatic animals
- Nutrients picked up by sediment runoff can result in algae growth



Economic Impacts

- Costs more to filter drinking water
- Causes sedimentation of reservoirs
- Less fish, hard on fishermen and seafood lovers
- Swimming areas closed, reduced recreation
- Unpleasant to look at, fewer tourists
- Loose sediments entering storm drains will clog up drains pathways eventually leading to flooding

What are the ESC Regulations?

The U.S Environmental Protection Agency (USEPA) has issued Naval Base Guam (NBG) a National Pollutant Discharge Elimination (NPDES) Permit to address discharge of storm water runoff to its outfalls from construction sites and other sources.

NGB projects, whether newly developed or redeveloped, must design and implement storm water control measures that are consistent with:

- 2006 CNMI and Guam Stormwater Management Manual; and
- 2010 Guam Transportation Stormwater Drainage Manual.

All public and private construction sites that result in a total land disturbance of one or more acres or that result in a total land disturbance of less than one acre (if part of a larger common plan or development) must:

- Submit Notice of Intent to USEPA and Guam EPA
- Implement a Stormwater Pollution Prevention Plan (SWPPP)

Once ESC Regulations are met, all projects will need to comply with the 11 ESC Standards by following the Proper Construction Sequencing steps. For more information about the ESC regulations and the 11 ESC Standards, see the *Guam Erosion & Sediment Control Field Guide*.

Contractor/Inspector Roles

Contractors and inspectors hired by NBG are expected to comply with ESC regulations and be responsible in performing their duties to reduce the discharge of pollutants in storm water runoff at construction sites.

Here are some duties that contractors and inspectors are required to perform:

Contractor Responsibilities:

- Must be trained in ESC standards, practice installation, and maintenance procedures.
- Educate operators and site workers on the importance of proper ESC practices.
- Protect waterways, trees, and other natural areas from construction activities.
- Inspect ESC practices routinely, especially after rainfall events.

Inspector Responsibilities

- Inspect site weekly, within 24 hours of major rainfall event, and at critical points during the construction process.
- Maintain detailed records of inspections with reports, photos, and rainfall records.
- Establish clear time frames for corrective actions to be completed. Follow up.

For more information about the duties of contractors/inspectors, see the *Guam Erosion & Sediment Control Field Guide*.