

Environmental Guidance Note – Excavation and Machine Work

HSE DOCUMENT

Activities using mobile plant that removes vegetation or disturbs soil may require site specific environmental controls to mitigate potential erosion and reduce the risk of sediment discharge off work sites and/or into waterways/ drainage.

Machine Work is any action that involves the use of mobile plant such as excavators, graders, bulldozers, backhoes and similar large equipment for the following activities:

1. Excavation using mobile plant,
2. Vegetation removal and/or maintenance works for the purpose of removing vegetation/ground cover down to mineral earth, and
3. Construction/maintenance of access tracks, safe work platforms or construction benches.

NOTE: mulching/trittoring and slashing of vegetation is NOT considered to be *Machine Work* so long as ground cover is retained and vegetation is not removed down to mineral earth.

The following controls are mandatory for all *Excavation and Machine Work*:

Mandatory Control Measures

- Work in accordance with Environmental Guidance Note: Minor Civil Works – Erosion and Sediment Control (attach to Work Pack).
- Erosion and Sediment Controls must be implemented in accordance with Managing Urban Stormwater, Soil and Construction Volume 1, 2A Installation of Services and Volume 2C Unsealed Roads (Blue Books).
- All disturbed soils (i.e. stockpiles, graded material, ripped road surfaces) to be consolidated or protected from erosion prior to daily shutdown or prior to any predicted rainfall.
- Install sediment controls where there is a risk of sediment entering waterways, stormwater or drainage channels, prior to works commencing and in accordance with the approved ESCP (if required).
- Additional sediment controls must be considered for all drainage outlets where site water is not discharged as sheet flow into stable vegetation.
- Locate stockpiles away from drainage lines and high hazard areas (>10% slope) and protect from erosion and loss of sediment.
- All plant and equipment must be clean, i.e. free of soil, mud and vegetative matter, prior to delivery to and removal from site.
- Once works are finished, all disturbed areas must be rehabilitated prior to leaving the site, i.e. gravel replaced or top soil replaced, compacted (where necessary) protected from erosion and rehabilitated using mulch, brush matting and/or seeding or other suitable stabilisation method. Sediment controls should not be removed until the site is stable, i.e. either hard surfaces reinstated or 70% vegetative groundcover is achieved.



Additional Controls for Machine Work

- E5 review and approval required,
- *Machine Work* should not be undertaken on land mapped as Vulnerable Land (generally where slopes exceeding 18° or where there is a risk of land slip or erosion), without advice from an Environmental Business Partner
- Avoid clearing large areas of vegetation on steep slopes
- >12°, leave some vegetation other than just ground cover to assist soil stability,
- Machinery should avoid sharp turns to minimise soil disturbance,
- Minimise damage to ground covers e.g. grasses and very low growing plants/ground covers, and
- An ESCP may be required where soil disturbance >250m²

