

OP06 – Mineral Processing (Washing)

What is this?

The purpose of this document is to prepare procedures covering the control of mineral washing operations.

What does the responsible manager need to do?

The responsible manager must ensure that:

- All parts of the processing plant are suitably inspected and maintained as per Regulation 12(1)(a)(iii) Quarries Regulations 1999
- All measuring and monitoring equipment is calibrated according to manufacturers' recommendations and company policy
- Site hazard plan is on display
- The site is compliant with all conditions within the planning consent
- All external and internal personnel are aware of plant operating hours
- Relevant valid Environment Agency discharge and abstraction licenses are in place
- Ensure volumes of water are recorded
- Check quality of discharge water regularly (there may be a condition to continuously monitor)
- Fuel tanks comply with Environment Agency regulations
- Fuel level/overflow protection is serviceable
- Correct grades/source of fuel are used
- Regular environmental incident drills are undertaken and the results are recorded
- Environmental incidents and complaints are recorded
- The site is compliant with permit conditions
- Site emergency procedures are clearly displayed and understood by the workforce
- Correct signage is in place to warn the workforce and visitors of any danger
- Minimise light pollution by the use of appropriate lighting/downlighting and timers during the night
- Surface run off from site complies with the discharge consent limits
- All operatives are adequately trained and either hold, or are working towards, an NVQ level 2 in plant operation to demonstrate competence
- Daily inspections are undertaken by a competent person
- A buffer stock of suppressant chemical is available and is stored in the appropriate container (dependent on the particular site)



- HV transformers are within the scheme of maintenance and inspection with particular regard to oil leaks/oil changes
- Wheel wash facilities are serviceable
- All mineral processing activities are undertaken in accordance with any conditions in the planning permission
- Flocculant is stored in a secure container/area (if applicable)
- Adequate 'freeboard' is available in silt/freshwater lagoon
- Adequate volume of water is available in freshwater lagoon
- Lagoon overflow pipes and emergency overflow pipes are clear of obstruction
- Regulation 30 Quarries Regulations 1999 (General duty to ensure safety of excavation and tips) – lagoons must be designed constructed and maintained to ensure their safety. A regime must be in place to cover inspection, appraisal and assessment
- Specific rules must be in place to cover lagoons (and must cover emergency overflow, minimum freeboard, operation or maintenance of pumps, procedures to allow material to be recovered safely etc).

What do employees have to do?

All employees must ensure that:

- Any operational defect with the plant is reported immediately to the relevant supervisor after the plant has been shut down and isolated
- All rules and procedures are understood
- Daily inspection sheet is completed by the operator
- They report spillages to a superior (good housekeeping)
- All doors and inspection hatches are secure
- Shutdown redundant items of plant when required
- Any missing or damaged cladding is reported for repairs
- Plant area to be kept clean and clear of obstructions
- Control room to be kept clean and tidy
- Air conditioning/filtration to be kept serviceable
- They record relevant information from the measuring/monitoring equipment
- Basic maintenance is undertaken
- They report any failure of environmental controls to the appropriate person immediately.



Associated documentation

EMS Section

- Operational Control

Forms

- EF03 – Internal Communication
- EF14a – Daily Static Plant Inspection Checklist
- EF15 – Incident Investigation

