

MAP CODE
VIBR

VIBRATION REDUCTION

USE
Dust
Air Quality
Noise

What

- The reduction of minor ground movements generated by production blasts, crushers and haul trucks driving over rough ground.

Purpose

- To reduce minor ground vibrations that may annoy neighbours and negatively affect the community's acceptance of the operation.



Where

YES: Blasting, drilling, screening, crushing, grading processed material, transporting of processed material.

Plans & Specs

- The main cause of vibration during transport is uneven road surfaces. The level of vibration depends upon the vehicle speed and weight, type of soil and the size of road surface irregularities.
- Consult with a drilling and blasting specialist regarding blast pattern and procedures.
- Remove significant road surface irregularities.
- Reduce speeds.
- Re-route dump trucks to less sensitive roads.
- introduce a weight limit on sensitive roads.
- Monitor vibrations at the nearest receptor during blasting. Considerations include the charge weight per delay, length of delay, blast hole spacing and firing sequence.

Maintenance

- Monitor for potholes.

Sources

Cole, L., Smith, P., Wright, J. and Clough, R. (1999): **Controlling the Environmental Effects of Recycled and Secondary Production Good Practice Guidance**; *United Kingdom Department of the Environment, Transportation and the Regions*, URL <http://www.planning.detr.gov.uk/recycled/practice/index.htm>, June 2001.