

# Opencast Coaling



I&H Brown commissioned an environmental impact assessment for an open cast coal side at Begg Farm near Kirkcaldy in Fife.

The nearest community was within 500m of the excavation, with isolated dwellings between 200 - 400m.

Uncontrolled emissions from opencast coal sites and associated activities have the potential to cause nuisance and significant loss of amenity to neighbouring communities. The emissions also need to be assessed in terms of their significance in terms of human health. The local Council had previously refused an application for a similar site due to public concern about health impacts from dust.

Dust from coal extraction and vehicle exhaust emissions tend to be minor sources of emissions. Most of the dust arises from the transport of material within the site from the entrainment of dusts on internal haul roads. Haul road estimates were based on locally obtained samples.

Air quality impacts were predicted using advanced dispersion modelling. Emissions of dust and PM10 were estimated using USEPA AP-42 procedures and the dispersion predicted using ADMS 3.1.

The impacts were assessed in terms of air quality objectives and dust deposition guidelines.

The results from the assessment identified potential significant impacts on some receptors nearby requiring the re-routing of the internal haul road.

The dust impacts from the haul road to the adjacent rail terminal were further reduced by running a conveyor system, avoiding the generation of dust from coal haul trucks on an un-surfaced road.

The application was granted planning permission and subsequently operated without giving rise to complaints.

