



Key achievements

- Custom developed software feature to meet unique project requirements
- Versatile instrumentation setup to accommodate change work locations

The Project

The Environment Agency are undertaking coastal defence improvement works between Pevensey and Eastbourne. The regeneration and maintenance works involve moving 5,000m³ of shingle which naturally moves along the coast and accumulates at Eastbourne due to longshore drift.

The Challenge

Large trucks are being used to relocate the shingle four miles northeast along the coast to Pevensey beach. A bulldozer is then used to distribute the material across the beach. The operation has the potential to generate significant, noise, dust and vibration. A versatile monitoring solution was required to measure the potential impact the works might have on local residents and businesses.

The Solution

Owing to the widespread work area and day-to-day migration of the work it was most efficient to design a single monitoring setup that could be easily moved where needed, depending on the location of the works.

GEO-Instruments supplied a modular battery-powered monitoring setup comprised of a noise sensor, a vibration sensor and an air quality station assembled on a movable tripod to enable setup in regularly changing locations.

Sensors were chosen for their reliability in automatically collecting and transmitting data with no for on-site maintenance or expertise. This system allows site teams to simply place and power-on the setup.

Using QuickView to manage the monitoring data means alerts, graphs and daily reports can all be distributed automatically and modified remotely.

A key consideration when interpreting data is keeping detailed records of sensor locations at the time measurements are taken. To address this issue, a new QuickView feature was developed that allows site teams to easily track and update sensor locations using a timeline and an intuitive map.

Application

Coastal Monitoring

Technique

Environmental Monitoring
QuickView Monitoring Software

Market

Construction

Project Duration

1 year

Instrumentation

Noise, Dust and Vibration sensors

Keller companies

GEO-Instruments

