



Key achievements

- **Comprehensive long-term monitoring from demolition phase to project completion**
- **Real time reporting of site emissions and monitoring of Rail assets**

The Project

Part of the main Battersea Power Station redevelopment in South London. This residential housing scheme consists of 7 blocks, comprising 386no. apartments. The redevelopment will involve demolition of existing structures before piling and excavation activities take place.

The Challenge

The site is located within a busy area surrounded by a market, existing residential apartments and 6 Network Rail train lines. Noise, vibration and dust produced by demolition and construction works must be monitored for impact on neighbouring assets. Uncontrolled, these factors may pose risks to structures as well as the health and comfort of people.

Monitoring systems would need to be in place for several years and will require regular routine maintenance.

The Solution

GEO-Instruments commissioned systems to monitor the long-term effect of environmental impacts by installing noise, dust and vibration monitors at four points around the boundary close to sensitive receptors likely to be affected by construction activities.

Two additional triaxial geophone vibration monitors were deployed as stand-alone sensors in positions where only vibration monitoring was required. Each monitoring location was equipped with an external back up battery to prevent measurement downtime during site power disturbances.

Collection, transfer and reporting of monitoring data was fully automated. Alert triggers were set at the specified limits so the site team would receive instant alarm emails if thresholds were breached.

Application

Environmental Monitoring

Technique

Noise, Dust & Vibration Monitoring

Market

Residential Development

Client

Ardmore Group

Project Duration

4 Years

Instrumentation

4no. Dust Monitor stations

4no. Sound Sensors

6no. Triaxial Geophones

Keller companies

GEO-Instruments