From the previous ideas the innovative

Solution for the noise pollution monitoring

system is explained below,

- The system makes use of a set of microphones to accurately measure noise levels in 3 directions. We here use an Arduino based controller to develop this system. The arduino processes noise levels from all microphone sensors constantly.

- The user may use the display and buttons on the device to set the max allowed noise levels for the area. The system status is green as long as noise levels are below set mark. As soon as noise levels cross the set level the system sounds a buzzer alert and waits for noise level to go down.

Sensors:

- All sensors such as
    1. Sound sensor
    2. Temperature sensor
    3. Gas sensor are connected to it .
- Sound sensor or mic sensor provides digital output and it detects sound from atmosphere

Connectivity:

- Bluetooth
- Zigbee
- Wifi

The primary source of noise include:

- Water (piezeometer),slope movement barehole
- Other geotechnical monitoring instruments ,tools and engineering equipment suppliers
- Hosted data solutions to keep your data moving wireless from the filed to your fingertips for geotechnical analysis

Protocols:

- Http protocol used in NPM

Types of monitoring:

- The two types are instantaneous monitoring (handheld) and continuous monitoring (unattended):

- Instantaneous Monitoring: uses a handheld SLM to take readings for short periods of time. This may be useful to get an idea of what the typical sound level from a source may be, or to check what noise is produced during worst case conditions (i.e. all machinery operating at the same time).

- Continuous Monitoring: uses a SLM positioned at a fixed location to measure sound levels. This type of monitoring is used to alert a site when noise levels are above a compliance limit