

LOCATION: UNITED ARAB EMIRATES

# Assisting the Emirate of Fujairah in vibration control



## Biggest port in United Arab Emirates

Fujairah Port is the second largest bunkering port in the world. Its strategic location on the eastern seaboard of the United Arab Emirates, approximately 70 nautical miles from the Strait of Hormuz, has helped it gain international importance as a trade link between the Indian sub-continent, the Far East, the Middle East and Europe. The Fujairah Port will undergo a major overhaul of its existing infrastructure as well as extending its facilities. The main share of the 200 mill Euro investment will be used for a complete new harbour built using rocks from a nearby mountain.

## Blasting for 2 million loaded trucks

For a period of 30 months, 30 million m<sup>3</sup> of rock will be converted into stones and placed into the sea, 500 -1000 meters

from the existing mountain. The stone material will make up the new 5 km long port for tankers and other vessels.

The volume corresponds to 50 times the Stockholm Globe Arena or a mountain 4 km high with the base of a football arena. About 3-400 truck loads a day will be required to move the blasted rock to the sea.

## Hot mission for Nitro Consult

INitro Consult has been entrusted the responsibility of securing the surrounding buildings. During four weeks, 2 blasting control specialists working in + 40°C inspected all nearby buildings and installed INFRA systems with a set of sensors for vibration measurements. By use of NCVIB, supervision in real-time can be

made from Nitro Consults Stockholm office. The purpose is to monitor and control any damage to surrounding structures and obtain information regarding other blasting effects.

## Autonomous measurements – solar driven

The INFRA installation in Fujairah measures unattended and autonomously. In addition, necessary power is generated by solar panels. A lead battery is charged from the solar panels providing reliable power at all times. The battery voltage is continuously measured and supervised via Internet. If local services are required, technicians from Orica Mining Services in the UAE will assist.