

## ABSTRACT

### **An Assessment of the Noise Level from a Compressor Station**

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The noise source of Petrotrin's Compressor Station at #1 Barrackpore, South Trinidad has definite directional properties towards the north. Correspondingly, the sound energy radiated towards the south is much less than in any other direction.

The sound power level of the noise source has been calculated to be about 127dB, while the directivity factor varies from a high of 3.63 to the north with a low of 0.26 towards the south.

The potential danger zone with respect to human hearing sensitivity exists within an area of approximately 32,000 sq. feet, around the noise source. This implies that the potential danger zone extends for about 100 feet from the acoustic centre of the noise source, in all directions. Any person who must enter this area for official reasons, must either:

- (i) Wear protective gears to minimize hearing loss from excessive noise levels;
- or (ii) Limit their exposure time within the potential danger zone.

It is recommended that employees who must work at noisy Compressor Stations should undergo audiogram tests at least twice per year, in order to determine any hearing loss due to continual exposure to excessive noise levels.