transfer to surroundings, the forces, torques, critical speed frequencies, resonance, etc. caused by this equipment.

F. Transfer of vibration and noise from the rotating/oscillating equipment to the connected pipe work, cabling, etc. and vice versa shall be avoided by adequately designed measures.

G. The pump design shall be such that the natural vibration frequency of the pump/motor set is at least 25% higher or lower than the operation vibration frequency when finally installed in the field.

1.1.29.3 Noise Control

A. As all plants are located within residential areas, special emphasis shall be paid to avoid nuisance to public by noise and odour released by the plant under full and partial operation as well as under shut-down conditions at all weather situations.

B. The maximum noise emission of the plant shall not exceed a sound pressure level of 45 dB(A) during the day and 35 dB(A) during the night (from 22h to 6h) measured outside the plant at a distance of 15 m to the boundary wall or fence surrounding the installations provided the ambient sound-pressure level is at minimum 3 dB(A) lower than the above limit levels at complete plant shut down.

1.1.29.4 Lubrication

A. The type of lubrication for all components of the Plant shall be in every way suited to the operating conditions encountered on Site. The Contractor shall provide, for the approval of the Engineer, a lubrication schedule. The Plant shall be designed as to keep the number and type of lubricants to the absolute minimum required. When preparing his schedule the Contractor shall provide cross-reference to ADNOC - equivalents.

B The Contractor shall provide at his expenses the first fill of lubricants for all plant and equipment, any further lubricant required prior to take-over of the Plant and all lubricants required for a trouble free operation during the three years warrantee/ defect notification period of the equipment/ plant.

C. Provisions shall be made for the efficient lubrication of all bearings and of all mechanism and moving parts by means of separate oil caps, transparent oil storage container or self-sealing grease nipples. Grease nipples shall be, as far as practicable, of uniform type and size and the Contractor shall provide grease guns for each type of nipples used at the Plant.