

3.16.1 Lubricants and Materials

- Lubricants from a reputable manufacturer/supplier approved by the Engineer.
- The appropriate grade or type of lubricants recommended by the equipment manufacturer.
- Storage of lubricants as recommended by the manufacturer bearing the name and the grade or type of the lubricant.
- Lubricants that have become contaminated by dust, sand, grit, water or in any other way shall not be used in the Works.
- All materials and spare parts used shall be approved by the DMAT and shall generally be as specified by the manufacturer of the plant on which they are to be used, provided they comply with the specification and environmental conditions.

3.16.2 Types of Spares

All spare parts and equipment shall be classified into one of the following categories:

- a) Bin stock items – free issue (materials that have little individual value with high volume usage, i.e. small bolts, nuts, washers etc. These items can be stored in a two bin system in a non- controlled area)
- b) Bin stock – controlled issue (Similar to free issue items, except their access is limited. The stores clerk will issue the items but not require a service order)
- c) Critical spares – (Items that do not have much usage but still need to immediately available). These items are controlled and shall be issued by service order.
- d) Re-buildable spares (includes items like pumps, motors, gear cases or other items that the repair cost (material and labor) is less that the cost to rebuild or replace. These items are controlled and shall be issued by service order.
- e) Consumables (Items that are taken form the stores and used up or thrown away after a given time period (oils, grease, chemicals, lab supplies, etc.). These items are controlled and shall be issued by service order.
- f) Tools and Equipment (items that are issued like inventory items with the difference that the tools are returned to the stores after a service order is completed.

3.16.3 Procurement of Spare Parts

A computerized spare parts inventory system shall be set up to maintain and control the spare parts and stores facility. Purchasing and stock control play an important part in effective project management and coordination. All efforts are wasted if necessary supplies are unavailable. Therefore, good logistics management of stores spares and procurement requires a holistic approach.

The most efficient approach requires analysis of the supply chain to ensure ‘value added’ is maximized at each step. It is not necessary to hold large numbers of spares, however, it is important to decide what spares are required. Value is through skilled personnel applying sound maintenance practices to ensure existing equipment function correctly.

The following list will help to identify which spare parts are already held and which extra items may need to be ordered and kept available in the store:

- a) Routine consumables
- b) Specialist items
- c) Spare parts for routine equipment needing regular and frequent maintenance

Needs should be discussed with O&M staff members who know exactly what is required and clear explanations given regarding what they hope to achieve through good stock