GEP – MAINTENANCE

Introductory Notes:
Maintenance takes a back seat in many emerging markets. This is a false economy in every case and failures stemming from poor or no maintenance can often lead to highly risky outcomes, often disastrous or catastrophic outcomes. Good maintenance practices are thus sound management in any organization.

1. Basic maintenance is essential. To extend machine lives - lubrication, early parts replacement or repair, realignment of key components and basic services must be done at regular planned intervals.

2. Imbalances, seen as vibration, shuddering, intermittent operation or other such indications must be attended to immediately after observation thereof. Catastrophic failure may result in certain cases and lead on to dangerous outcomes. Even simple fault assessments must be attended to promptly.

3. Unusual, sometimes coarse or harsh noises are an indication of looming failure or damage. They must be attended to promptly.

4. Lubrication and grease application must be applied only as specified and particularly the correct grade. High temperature greases are essential to avoid seizure where high temperature conditions arise even if from modest rotary friction. Oil changes and grease re-packs must be done at the specified intervals.

5. Lubrication of PTFE (Teflon) bushes is not required. Lubrication will lead to rapid wash away of the PTFE's own lubricating layer of ultrafine powder and destroy all lubrication with serious failure outcomes.

6. Realignment and resurfacing must be attended to on identification of mal-performance and assessment of wear or disrepair.

7. Leaks frequently grow rapidly and are best attended to very promptly. Flammable and explosive products need urgent containment while leak repair is addressed. Assistance of competent persons is essential for safe leak repair action.

8. Filters, screens and vents must be cleaned and replaced at regular intervals determined by the rate of blockage in ongoing service.

9. Brackets, lugs, covers and especially braces and other safety or steady parts must be kept in good condition and promptly renewed or repaired when the need or condition is observed.

10. Paint protects equipment and poor paint condition can lead to rust and failure of key parts in most plants. Well applied paint or repaint and roper surface preparation is essential.

11. Maintenance of abrasion and corrosion sacrificial parts by regular renewal or replacement is vital for proper plant operations and ongoing high efficiency. Wear parts extend to blades on mixers, compressor piston rings, pump pistons or diaphragms and many other key components.

12. Proper scheduling and planning of maintenance work is essential. Most maintenance work requires specific dates when it must be done to keep the plant running at optimum efficiency. A basic spreadsheet with data columns and machine listings can be usefully adapted. Such minimal approach should be prepared and implemented.