When designing planned lubrication tasks the organization should:

a. Include safety of personnel, cost justification, and the risk management of machine assets.
b. Ensure that the tasks are aligned with the organization's physical asset management plan.
c. Optimize the development of routine lubrication tasks to assure the reasonable control of lubricant health and to preserve its condition.

When setting task intervals, the following should be considered:

a. Personnel safety to include appropriate permits or risk assessments and associated requirements.
b. The estimated P-F interval for the lubricant and/or machine for common failure modes.
c. The failure risk profile for the lubricant and/or lubricated component or machine **[2]**
d. The availability of data to support runtime/miles-kilometers/cycles and/or condition-based task interval decisions.
e. The plant machinery operating history.
f. Production constraints.

Task design and selection should consider internal/external expert opinion and operating experience. Additional attributes or processes to consider include:

a. Component or machine supplier recommendations.
b. Vendor warranty requirements.
c. Inductive engineering analysis methods utilizing Failure Mode and Effects Analysis (FMEA), which may include a reliability-centered maintenance (RCM) initiative or other engineering analysis methods that, when applied, will drive equipment reliability improvements as appropriate.
d. Engineering analysis methods utilizing Failure Reporting, Analysis and Corrective Action System (FRACAS), which may include application apparent cause analysis (ACA) and/or root cause analysis (RCA).
e. Required access and/or accessibility to the task location point and the required operating state (runtime or downtime).
f. Required operating state (runtime or downtime).

NOTE 2: Factors used to set performance intervals may include operation severity and run-time (miles-kilometers, cycles, etc.) This applies to either the lubricant or the machine. Advanced engineering reliability tools such as Mean Time to Failure (MTTF), Mean Time Between Failure (MTBF), Weibull Analysis, etc., may be used to provide additional information in making these assessments.

Clearly worded and documented procedures created for planned lubrication tasks should provide sufficient detail and clarity to assure that the tasks are completed correctly and consistently, and with an appropriate degree of precision. Documented lubrication procedures for these tasks should include:

a. Task description and summary.
b. Task purpose and objectives.
c. Required knowledge, skill(s) and/or qualifications to implement the task.
d. Estimated or actual time to complete the task.
e. Tools, parts, and consumables required for working the task.
f. Pre-work/job preparation to include safety or other organization briefing requirements.
g. Requirements to meet site safety measures. This may include a summary of standard Task Safety and Environmental Analysis (TSEA) for the task and required jobsite observations or inspections to assure safety and environmental compliance.
h. A mandatory sequence of activities (as appropriate).
i. Unique attributes of the task including lubricant type, max/min lubricant final volume, and max/min dispensing rates during addition, etc.
j. Required documentation entry fields for use during or after task completion to include worker observations/experience provided for continuous improvement program use.
k. Post-work cleanup requirements.
l. Post-work inspection and follow-up reporting requirements.

5.4.3 CORRECTIVE MAINTENANCE TASK ELEMENTS

Appropriately qualified (lubrication) technicians, maintenance mechanics, or operators shall execute periodic (nonrecurring) lubrication tasks. These are tasks that are completed on an emergent or non-scheduled, time-based interval. These tasks are identified by condition assessments that may range from issues identified through Predictive Maintenance or discovery of a machine failure. Corrective maintenance tasks may be triggered by inspection or operator alerts. Corrective maintenance lubrication tasks are intended to achieve one or more of the following objectives:

a. Preserve the reliability of the machine/lubricated machine component, or remediate the fault or failure condition (failure mode).
b. Preserve or restore the integrity of the lubricant that is providing service to the lubricated component or machine.
c. Address the ingress of dust, moisture, chemical, and/or other contaminants to avoid damage to the lubricated component or machine. This is commonly accomplished through filtration and similar methods.
d. Address the ingress of dust, moisture, chemical, and/or other contaminants to avoid compromising the performance of the lubricant. This may be accomplished through methods such as filtration, dehydration, or replacement of the lubricant.
e. Collect data or information pertinent to assessing the condition of the lubricant or machine. The information obtained may identify the presence of dust, moisture, chemical, and/or other contaminants or help establish the condition and health of lubricated components within a machine.