

PRODUCTION FACILITY MAINTENANCE

Document No.
10-DP-P602

Revision : 4

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REVISION HISTORY

Rev.	Description of Change	Approved by	Effective Date
0	Initial release, supersedes 10-02-P602	Abdul Razak	06/16/2008
1	Improvement refers to DCR No. AE/08/0039	Abdul Razak	12/15/2008
2	Rewrite 10-AE-P602 & 10-AI-P602, Refer to #DCR 0115/DM9000/13	Yustiono DA	Feb.28, 2014
3	Refer to DCR No. 0284/DM9000/17	Nefota FL	Dec. 8, 2017
4	Refer to DCR No.0182/DM8000/19	Nefota FL	Nov. 18, 2019

REFERENCE DOCUMENTS

Document Number	Document Title
10-DP-00	Quality Manual

Documents referenced in this procedure are applicable at extent specified herein.

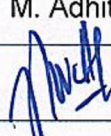
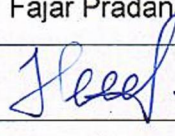
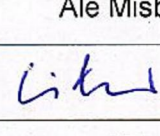
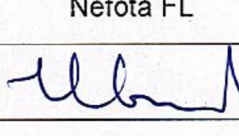
Affected Function:	Prod. Facility Maintenance	Production Shops
	Quality Control	Logistics
	Prod. Planning & Control	
	Mfg. Engineering	

1 Purpose

This procedure is to define the maintenance of production facilities to achieve conformity to product requirements.

2 Scope

This procedure applies to FM functions that perform preventive and corrective maintenance of production facilities

	Author	Originator	Checked	Approve
Organization	Q. Engineering	Prod. Facility Maintenance	Prod. Facility Maintenance	Detail Part Manufacturing
Name	M. Adhitya	Fajar Pradana P	Ale Misbah	Nefota FL
Signature				
Date	Nov. 14, 2019	Nov. 15, 2019	Nov. 15, 2019	Nov. 18, 2019

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This procedure addresses clause 7.1.3 in AS9100D:2016[D], section 7.1 in Quality Manual and CASR Part 21.

3 Definitions and Acronyms

Production Facility	Machines and equipment used for production (e.g. special process facilities, laboratory facilities, process equipment, handling equipment, etc.).
Controlled Area	Condition needed to support quality of product (e.g. temperature, humidity, lighting, cleanliness, protection from electrostatic discharge and etc.).
Maintenance	The term maintenance covers all activities undertaken to keep equipment in a particular condition or to return it to such condition
Preventive Maintenance (PM)	Preventive maintenance covers all programmed maintenance which is carried out in order to prevent the occurrence of failure or to detect failures before they develop to a breakdown or interruptions in production.
Corrective Maintenance (CM)	Maintenance activity performed after sudden broken down facility.
CMMS	<p>Computerized Maintenance Management System is a software that informs about the entire maintenance activities, e.g.:</p> <ul style="list-style-type: none"> <input type="checkbox"/> PMS <input type="checkbox"/> When the MWO issued and record MWO completed <input type="checkbox"/> Historical record of the facilities <input type="checkbox"/> Inventory system <input type="checkbox"/> Maintenance budget <input type="checkbox"/> Reporting and Analysis

4 Flowchart

Refer to the flowchart at the end of this document

5 Responsibilities

5.1 User (Production Shop, Logistics, and Quality Control) shall:

- Issue RFM (Request for Maintenance) form for the malfunction of machine or facility that require maintenance to FM refer to 10-DP-W602.01.
- Approve and sign on the RFM form when the malfunction of machine or equipment have been rectified by maintenance function
- Approve and sign on the MWO (Maintenance Work Order) form when the preventive maintenance of machine or equipment has been done by maintenance function.

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5.2 Production Planning & Control shall:

- Receive the draft of PMS (Preventive Maintenance Schedule) proposed by FM.
- Review draft of PMS and arrange the load plan to avoid the crash schedule
- Approve definite PMS together with FM.
- Synchronize Production Schedule to approve PMS and request to FM in case the maintenance schedule has to be shifted due to rush order.

5.3 Production Facility Maintenance (FM) shall:

- Periodically review status of production facilities with user.
- Maintain all production facility data in CMMS.
- Define maintenance programs for all facilities and equipment included preventive, corrective and predictive maintenance (PdM). And also define improvement maintenance for increasing the maintainability and reliability of production facility.

Note 1: Predictive maintenance will be defined based on monitoring of facility condition to minimize corrective maintenance frequency.

- Plan and provide all requirements of consumable material and spare part needed for maintenance activity.
- Establish a maintenance cycle for each production facility.
- Create draft of PMS for the facilities and equipment, send to Production Planning (PP) function for review and integration of production schedule.
- Create definite PMS and get approval from PP.
- Distribute the hard copies of PMS to area managers and obtain their signatures.
- Perform preventive maintenance to the facilities & equipment in accordance with PMS (Refer to 10-DP-W602.02).
- Analyze and justify if the facilities and equipment not available for preventive maintenance because of production occupation.
- Receive the report of malfunction machine or facility by using RFM from user (Refer to 10-DP-W602.01).
- Assign designated maintenance personnel to perform the maintenance.
- Perform trouble shooting to rectify the malfunction machine or facility (Refer to 10-DP-W602.01).
- Record all maintenance activities and resources usage into CMMS (e.g. action taken, man hours, consumable material, spare part usage etc.)
- Provide reports (e.g. MTTF [mean time to failure], etc.) and analyze periodically to improve production facility performance and resources usage (e.g. Material cost, man power utilization etc.).
- Report to user when the work of maintenance to the machine or facility has been completed, obtain signature from user on both RFM form and MWO (maintenance work order) form included Machine Calibration Test Sheet required.
- Inform Maintenance schedule to PC in case planned maintenance cannot be executed as PMS.

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6 Procedure

- 6.1 FM & user periodically review the status of production facilities.
- 6.2 FM maintains the production facility data in CMMS and defines the maintenance program (PM, CM, PdM & improvement).
- 6.3 FM categories the facilities which affecting quality of product.
- 6.4 FM establishes a maintenance cycle and schedule (PMS) for key production facility.
- 6.5 FM proposes the PMS to PP&C for synchronization and integration into production schedule and approval.
- 6.6 FM distributes the approved PMS to the all area managers.
 - 6.6.1 If the related facilities and / or equipment are not available for maintenance because of production occupation, FM will evaluate and perform the “on-line” check instead to assure that the facilities are remain reliable for production.
 - 6.6.2 If the related facilities and/or equipment are available for maintenance, then proceed to 6.7.
- 6.7 In case of facilities malfunction occurrence, user shall issue RFM to FM for facilities rectification (ref. 10-DP-W602.01).
- 6.8 FM personnel locks out and posts REPAIR (if RFM is issued) and SERVICE (if MWO is issued) and performs the maintenance activities.
- 6.9 The maintenance personnel perform preventive maintenance to the facilities & equipment in accordance with PMS (Refer to 10-DP-W602.02).
- 6.10 The maintenance personnel performs corrective maintenance to the facilities & equipment (Refer to 10-DP-W602.01)
- 6.11 The Manager of Facility Maintenance (or Designee) reviews the maintenance results to verify that the facilities and equipment meet the production facility requirements.
 - 6.11.1 If the maintenance result does not meet the production facility requirement, repeat step 6.8 and/or 6.9.
- 6.12 User approves the maintenance result by putting a signature on either MWO or RFM form.
- 6.13 The maintenance personnel remove the UNDER SERVICE or REPAIR Sign and release the equipment for use.
- 6.14 FM records all maintenance activities and resources usage into CMMS (e.g. action taken, man hours, consumable material, spare part usage etc.)

7 Other Documentation(s)

Instructions or form related to this document:

Number	Title
10-DP-W602.01	Corrective Maintenance
10-DP-W602.02	Preventive Maintenance

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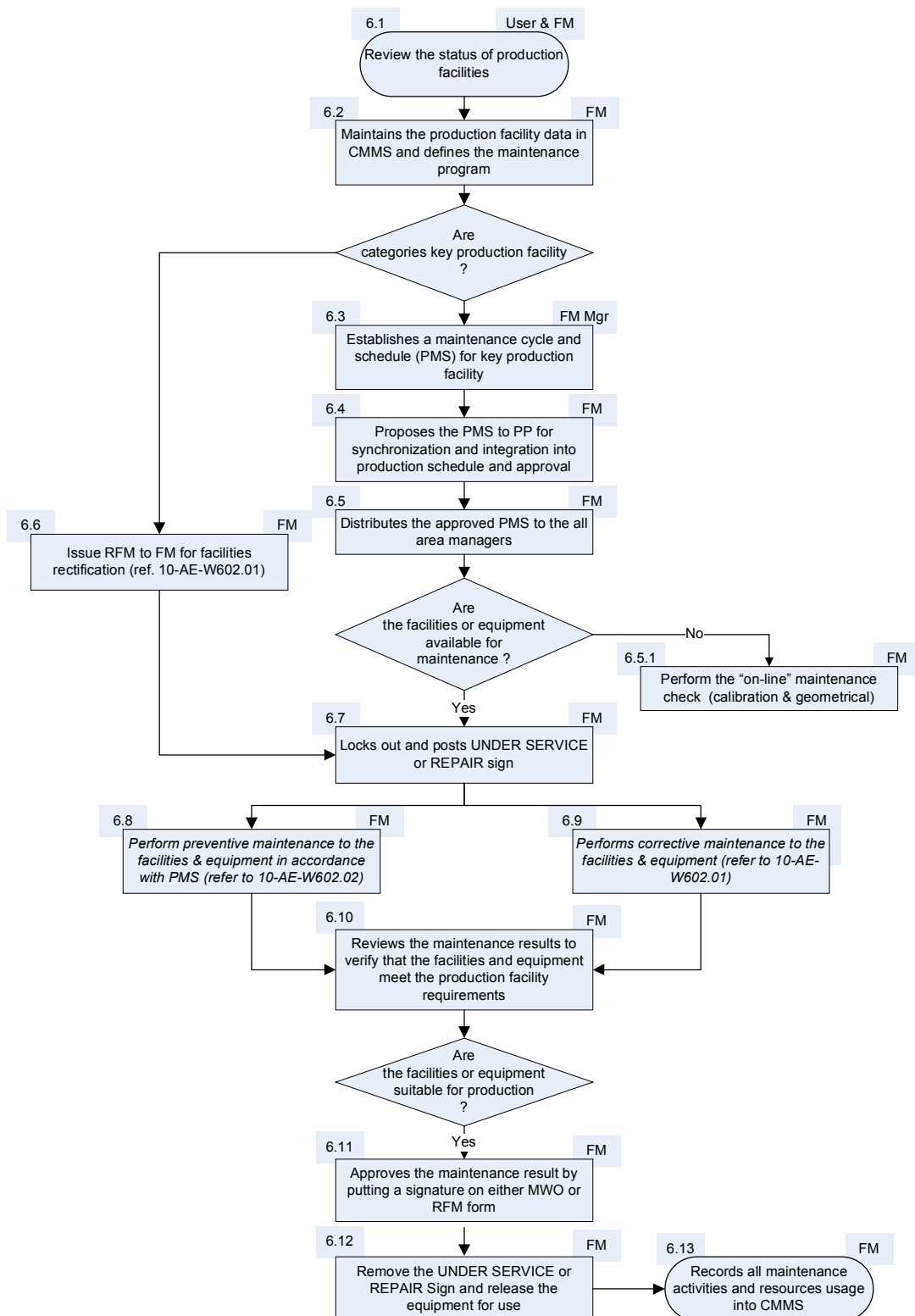
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Flowchart



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