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**INTERIM-SURTECH TEST -Gabe testing**

**INTERNAL AUDIT REPORT**

**AUDIT**

**October 2023**

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# **Executive Summary**

# **Introduction**

As part of the Surtech independent review process, Internal Audit and Risk Function conducted a Test Audit. This is included in the Approved 20232024 Annual Internal Audit Plan.Internal Audit and Risk Functions work predominantly uses the risk-based approach. That is, the team obtains an understanding of the work that the auditable section does, areas that expose the Company to risks are identified and then audit responses are developed to test if the controls put in place are operating effectively in mitigating the identified risks.

# **Background/Context**

Surtech, as an organisation that

**Objective**

The objective of this engagement was to provide assurance over the operating effectiveness of controls put in place to maintain critical services and to ensure integrity of operations at Surtech HQ and Satellite offices.

# **Scope**

In general, this Engagement involved testing the appropriateness of the design and operating effectiveness of controls designed to mitigate the risks identified during the planning phase as shown in 6 below.

# **Overall Audit Opinion**

**Improvement Required**

**Basis of Opinion**: Surtechs Preventive Maintenance System for its assets is still in the early stages if we are to use a Capability maturity model. Processes to improve the maintenance system are on-going as seen in the recent development of some job cards. As a result, there are some improvement areas that have been highlighted that need a coordinated cross functional effort to ensure an effective maintenance program is implemented at the Company.

**Key to Overall Audit Opinion**

|  |  |
| --- | --- |
| **Unsatisfactory** | Audit results indicate that assurance cannot be placed on the adequacy and effectiveness of internal controls to mitigate and/or manage one or more of the inherent risks evaluated within the environment under review. |
| **Improvement Required** | Audit results indicate that limited assurance can be placed on the adequacy and effectiveness of internal controls to mitigate and/or manage one or more of the inherent risks evaluated within the environment under review. |
| **Satisfactory** | Audit results indicate that reasonable assurance can be placed on the adequacy and effectiveness of internal controls to mitigate and/or manage all the inherent risks evaluated within the environment under review. |

# **Opinion per Risk:**

|  |  |
| --- | --- |
| **Red** | Key controls assessed are generally inadequate, ineffective or both to properly mitigate the risk for which they were intended. |
| **Amber** | Some but not all key controls assessed are inadequate, ineffective or both to sufficiently mitigate the risk for which they were intended. |
| **Green** | Key controls assessed are adequate and effective to properly mitigate the risk for which they were intended. |

# **Acknowledgement**

We would like to thank the Director of Operations and the entire team in Operations including the Technical Services Manager and all Depot Managers, Supervisors and Technicians for the assistance rendered to us during the audit.

Yours Faithfully,

**Internal Audit and Risk Manager**

# **Summary of Audit Results**

Risk IdRisk DescriptionRatingSiteFindingRefOpinion Per RiskR1Non-adherence to approved Preventive Maintenance Plan PMP of critical assets that might compromise the safety of the operationsVH(16)NairobiLack of user manual or reference documents for some critical equipment1Inadequate designFailure to adhere to contractual terms Mchinji Concession Agreement7Designed AppropriatelyJohannessburgAbsence of test plan for satellites depots6Designed AppropriatelyAll SitesNo preventive maintenance or condition monitoring of some equipment8Designed AppropriatelyR2Incompleteness of the PMP may result in rejected claims by the Insurance company in case of breakdowns.VH(16)All OfficesAbsence of job cards for some critical assets2Designed AppropriatelyAll SitesMissing job cards for preventive maintenance3Designed AppropriatelyR4Delays in purchase and delivery of maintenance related services, spares and equipment which results in loss of time and money, and compromise safety and security in case of CCTV of operationsVH(20i)All SiteUn-updated job cards and PMP4Inadequate designPoor Structural condition on Foam tank and Diesel Cooling ring5Inadequate designT.Un-updated job cards and PMP03Inadequate designAll SitesT.Missing job cards for preventive maintenance02Inadequate designNo preventive maintenance or condition monitoring of some equipment06Inadequate designJoburgT.Absence of job cards for some critical assets01Inadequate designJohannessburgT. Absence of test plan for satellites depots04Inadequate designNairobiT.Failure to adhere to contractual terms Mchinji Concession Agreement04Inadequate design

# **Detailed Audit Findings**

RefFindingSiteObservationImpactOther Existing MitigationRecommendationAggreed Action PlanResponsible Personnel/due Date01T.Absence of job cards for some critical assetsJoburgJob cards for implementing support of some critical assets are yet to be developed. This is due to the maturity level of Preventive Maintenance management system as this process has just been initiated. Examples include Foam tank operating valves Pressure Vacuum vents Thermal relief valves Offloading metering system Tank valves inlet, outlet, drain and Water tanks.This may affect effective implementation of PMP and eventually affecting the overall equipment integrityIntroduction of condition monitoring checklists for some of the equipment by bundling related equipment and accessories in one checklist or job card for example checklist for waterfoam fire suppression system and accessoriesManager02T.Missing job cards for preventive maintenanceAll SitesMissing job cards for preventive maintenance which may be due to poor filing and non-adherence to the PMP which indicates lower adherence rate than the 100 targetNon-adherence to PMP may affect the overall equipment integrityCondition monitoring inspections and checklistsImprovement on the filing Ensuring 100 adherence to PMP Monthly reports on maintenance from DTs to TSM and DMsManager IT03T.Un-updated job cards and PMPAll SiteMismatch between job cards and PMP in terms of frequency of preventive maintenance, for example fuel line strainer job card indicates a 2-weekly frequency while all the PMPs for all the depots show a monthly frequency for the same. This is mainly due to oversight,Different PMP schedules for the same equipment may affect the overall equipment integrity and optimal utilisation of resourcesCondition monitoring inspections and checklistsReview of the existing job cards with reference to the PMPs so that all are aligned in terms of frequency.IT manager04T. Absence of test plan for satellites depotsJohannessburgSatellite depots equipment not on PMP Mchinji, Chipoka and Condrill sites-Kanengo Kapichira due oversightNo guarantee can be placed on the integrity of the equipment in these sitesA PMP for these sites should be developed and adhered to.Manager IT04T.Failure to adhere to contractual terms Mchinji Concession AgreementNairobiNonadherence to contractual obligations on performance and monitoring of equipment for Mchinji depot due to oversight. This include, regular inspections and performance reviews.Enforcement of the contractual obligations to help in the equipment and asset managementIT Manager06No preventive maintenance or condition monitoring of some equipmentAll SitesNo preventive maintenance or condition monitoring of equipment that are not are not included in the PMP but are available in the equipment registers such assubmersible water tanksubmersible water pump Water tank Lawn mower Breathalyzer Metal detector Thermoprobe Transfer pumpThis will affect the overall equipment integrityDeveloping condition monitoring checklist for related equipment to ensure their integrity is not compromised.Manager IT1Lack of user manual or reference documents for some critical equipmentNairobiLack of user manuals or reference documents for some critical assets which provide guidance into their preventive maintenance. Examples of such equipment includeWindward system for Impact repot mappingThis was mainly due to oversight.Not referencing preventive maintenance to userfactory manual may compromise the overall assets integrity.Training and experience of support is pivotal for the asstst that dont have manuals or reference documents to an extent that when referenced, there was not significant deviation in some casesTechnicians Support should keep user manuals and or reference documents in the absence of the manual such as international standards for equipment after installation for reference when developing and implementing PMP.The missing manuals reference documents are to be sourced and used in coming up with job cards for PM then shared with all depot technicians and depot supervisorsManager Support 2023-11-302Absence of job cards for some critical assetsAll OfficesJob cards for implementing support of some critical assets are yet to be developed. This is due to the maturity level of Preventive Maintenance management system as this process has just been initiated. Examples include Foam tank operating valves Pressure Vacuum vents Thermal relief valves Offloading metering system Tank valves inlet, outlet, drain and Water tanks.This may affect effective implementation of PMP and eventually affecting the overall equipment integrityAll sites have condition monitoring checklists for some of the equipmentIntroduction of condition monitoring checklists for some of the equipment by bundling related equipment and accessories in one checklist or job card for example checklist for waterfoam fire suppression system and accessoriesManager3Missing job cards for preventive maintenanceAll SitesMissing job cards for preventive maintenance which may be due to poor filing and non-adherence to the PMP which indicates lower adherence rate than the 100 targeNon-adherence to PMP may affect the overall equipment integrityExternal contractors carry out annual preventive maintenance on some of the equipment like firefighting equipment,Improvement on the filing Ensuring 100 adherence to PMP Monthly reports on maintenance from DTs to TSM and DMsManager IT4Un-updated job cards and PMPAll SiteMismatch between job cards and PMP in terms of frequency of preventive maintenance, for example fuel line strainer job card indicates a 2-weekly frequency while all the PMPs for all the depots show a monthly frequency for the same. This is mainly due to oversight,Different PMP schedules for the same equipment may affect the overall equipment integrity and optimal utilisation of resourcesReview of job cards by Manager SupervisorReview of the existing job cards with reference to the PMPs so that all are aligned in terms of frequency.IT manager5Poor Structural condition on Foam tank and Diesel Cooling ringAll Siteoor structural condition for some critical equipment due to non-adherence to preventive maintenance i.e., aggressive rust development on the foam tank and diesel tank cooling ringIneffective response to an emergency because the integrity of the equipment is compromisedCondition monitoring inspections and checklistsCorrective maintenance should be done on the affected equipment rust treatment and repainting Repositioning of the sprinkler nozzle to reduce water dripping to curb future rust developmentManager IT6Absence of test plan for satellites depotsJohannessburgSatellite depots equipment not on PMP Mchinji, Chipoka and Condrill sites-Kanengo Kapichira due oversightNo guarantee can be placed on the integrity of the equipment in these sitesRandom inconsistent scheduled visits to these sites for preventive maintenance and condition monitoringA PMP for these sites should be developed and adhered to.Manager IT7Failure to adhere to contractual terms Mchinji Concession AgreementNairobiNonadherence to contractual obligations on performance and monitoring of equipment for Mchinji depot due to oversight. This include, regular inspections and performance reviews.This will affect the overall equipment integrityContractual AgreementEnforcement of the contractual obligations to help in the equipment and asset managementIT Manager8No preventive maintenance or condition monitoring of some equipmentAll SitesNo preventive maintenance or condition monitoring of equipment that are not are not included in the PMP but are available in the equipment registers such assubmersible water tanksubmersible water pump Water tank Lawn mower Breathalyzer Metal detector Thermoprobe Transfer pumpThis will affect the overall equipment integrityContractual AgreementDeveloping condition monitoring checklist for related equipment to ensure their integrity is not compromised.Manager IT

# **Detailed Exception Records**

CustnoAmountCountCount percentageField percentage0000006455.7613.04.634.620010006972.6312.04.274.990020005653.1610.03.564.050030001655.515.01.781.190040001343.583.01.070.960050005063.829.03.23.630060001322.992.00.710.950070001732.713.01.071.240080002832.016.02.142.030090003087.028.02.852.210515753116.748.02.852.230515935393.1812.04.273.86151583306.951.00.360.222020287646.2211.03.915.472030183167.966.02.142.272504022564.944.01.421.842843548245.9821.07.475.92902023807.626.02.142.733098214197.018.02.853.03593103167.229.03.22.273597011633.994.01.421.1744441311014.1926.09.257.885034587543.716.05.695.47780886802.7213.04.634.8781246512767.626.09.259.148780357080.811.03.915.079250074053.0910.03.562.99623539909.0115.05.347.099809181151.243.01.070.82

## **Appendix 1: Risk Assessment Criteria Matrix (RACM)**

