World Health Organization

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WHO Prequalification Team - Inspection services

WHO PUBLIC INSPECTION REPORT (WHOPIR)

In vitro Diagnostic product

Inspected site	
Name of Manufacturer	*EIKEN CHEMICAL CO., LTD.*
Address of inspected manufacturing site	Headquarter: EIKEN CHEMICAL CO.,LTD. Address : 4-19-9 Taito, Taito-ku, Tokyo, 110-8408, Japan Manufacturing Facility: EIKEN CHEMICAL CO., LTD. Nasu Plant Address: 1381-3 Shimoishigami, Otawara-shi, Tochigi, 324-0036 Japan Latitude: 36.858732424028595 Longitude: 139.95327229999998
Inspection details	
Dates of inspection	18-20 March 2025
Type of inspection	Initial - Desk Assessment
Introduction	
Brief description of manufacturing activities	Eiken Chemical Co., Ltd., established in 1939, has been committed to advancing public health and combating communicable diseases in Japan. The company has made significant contributions through the development of bacterial examination reagents (culture media) for infectious diseases, along with a comprehensive range of products in urinalysis, clinical chemistry, immunology, serology, and molecular diagnostics.
General information about the manufacturer	Eiken Chemical Co., Ltd. has developed clinical examination reagents, medical equipment, and diagnostic systems to meet the evolving needs of medical care in each era. Major products include OC Sensor series, fecal immunochemical test (FIT) reagents and analyzers for colorectal cancer screening, as well as TB-LAMP and Malaria-LAMP, molecular diagnostic tools for the detection of tuberculosis and malaria, respectively.
History	This was the initial WHO Desk Assessment of this site.
Brief report of inspection activities undertaken – Scope and limitations	
Areas inspected	Design and Development Quality management system Management responsibility Purchasing Production and Service Controls

	Measurement, analysis and improvement Adverse Events and Advisory Notices Reporting WHO pre-qualification-specific requirements
Scope	PQDx 10307-04545-00 - Loopamp MTBC Detection Kit
Criteria	ISO 13485:2016 and WHO Prequalification specific requirements
Objective(s)	To assess the manufacturers compliant with the inspection criteria
Limitations	None
Abbreviations	**Meaning**
CoA	Certificate of analysis
IQ	Installation qualification
IVD	In vitro device
MR	Management review
MSDS	Material safety data sheet
NC	Non-conformity
PPE	Personal protective equipment
OOS	Out-of-specifications test result
OQ	Operational qualification
PM	Preventive maintenance
PQ	Performance qualification
PW	Purified water
QA	Quality assurance
QC	Quality control
QCL	Quality control laboratory
QMS	Quality management system
QRM	Quality risk management
RA	Risk assessment
RCA	Root cause analysis
SOP	Standard operating procedure

Summary of the findings and comments

The inspection findings are listed below, following the numbering of the clauses of the ISO 13485:2016 standard for easy reference.

4. Quality management system

4.1 General requirements

The organization and management structure of the facility was documented and defined within the organisational chart. Roles and responsibilities were available with the overall reporting structure available with clear delineation for release of product.

4.2 Documentation requirements

4.2.1 General

There was an established quality policy and quality objectives available. Procedures and records were available as per the requirements of the standard.

4.2.2. Quality manual

The organization's Quality Manual was updated regularly and continued to reflect the intended practices of the manufacturer. The quality manual described the interaction between the processes of the Quality Management System (QMS), it defined the structure of the documentation system and listed/excluded non-applicable clauses of ISO13485:2016 with appropriate justification. The nonconformities identified were addressed through a CAPA plan.

4.2.3. Medical device file

The organization had established and maintained documents demonstrating conformity to the requirements of the standard. These included descriptions of the labelling requirements.

4.2.4. Control of documents

The procedures for document control were available that met the requirements of the standard. The nonconformities identified were addressed through a CAPA plan.

4.2.5. Control of records

The procedures for document control of records were available that met the requirements of the standard. All records reviewed were legible and readily identifiable. Record retention was confirmed as being longer than the lifetime of the device.

5. Management responsibility

5.1. Management commitment

There was sufficient evidence to support claims that Top management were commitment to the development and implementation of the quality management system and maintenance of its effectiveness by communicating to the organization the importance of meeting customer as well as applicable regulatory requirements. There was an established quality policy with measurable quality objectives, with evidence of regular management review meetings.

5.3. Quality policy

The quality policy was applicable to the purpose of the organization with clear commitment from top management in ensuring effectiveness was maintained with regular review of the quality objectives and continued review for suitability.

5.4. Planning

5.4.1. Quality objectives

Quality objectives were available that included those needed to meet applicable regulatory requirements and requirements for product. Quality objectives were measurable and consistent with the quality policy.

5.4.2 Quality management system planning

There was evidence that the planning of the QMS was carried out to meet the requirements of the standard as well as the quality objectives.

5.5. Responsibility, authority, and communication

5.5.1. Responsibility and authority

Responsibilities and authorities were defined, documented, and communicated within the organization. The interrelation of all personnel who managed, performed, and verified work affecting quality were documented and ensured the independence and authority necessary to perform these tasks.

5.5.2. Management representative

The appointed management representative had clear roles and responsibilities defined within the quality manual and corresponding job description including reporting to top management on the effectiveness of the quality management system and any need for improvement and ensuring the promotion of awareness of applicable regulatory requirements and quality management system requirements throughout the organization.

5.6. Management review

5.6.1. General

The organization had an established process for regular management reviews that met the requirements of the standard. Records from management reviews were maintained. The review included assessing opportunities for improvement and the need for changes to the quality management system, including the quality policy and quality objectives.

7. Product realization

7.1. Planning of product realization

The organization's approach to the planning of production and service provision was adequately documented in the QMS and met the requirements of the standard. There was evidence of procedures for document management, risk management, product production, material verification, process validation, monitoring, inspection, and test activities.

7.2. Customer-related processes

7.2.1. Determination of requirements related to product

The organization had documented customer requirements that included applicable regulatory requirements that were related to the product.

7.3. Design and development

7.3.1. General

Design and development were not reviewed in detail at the time of this desk assessment.

7.3.9. Control of design and development changes

The organization had an established and well documented procedure for the control of design and development changes that incorporated a determination of any necessary regulatory affairs actions as well as WHO requirements for reporting such changes.

7.4. Purchasing

7.4.1. Purchasing process

The organization had an established and documented process for the purchasing of materials and services, that included verification of critical incoming material. Supplier management and qualification procedures were available and implemented. Criteria for selection, evaluation, approval, and re-evaluation of suppliers were available.

7.4.2. Purchasing information

Supplier management and qualification procedures were available and implemented with supplier agreements for critical suppliers. Criteria for selection, evaluation, approval, and re-evaluation of suppliers was available.

7.4.3. Verification of purchased product

The organization had implemented processes for the verification of purchased products to ensure that they met specified purchasing requirements. The extent of verification activities was proportionate to the risks associated with the purchased product. Records of these activities were maintained.

7.5. Production and service provision

7.5.1. Control of production and service provision

Production and service provision was planned, carried out, monitored, and controlled to ensure that product conformed to documented specifications. The organization had a documented process for the control of production that included, but was not limited to, qualification of infrastructure and monitoring and measuring equipment.

7.5.6. Validation of processes for production and service provision

The organization had validated processes for production and service provision that followed procedures that included equipment and personnel qualification, the use of specific methods, procedures, and acceptance criteria, the criteria for revalidation and the approval of changes to the processes.

7.5.8. Identification

There was a documented procedure for product identification and segregation for the life cycle of the product including released and nonconforming products within the facility.

7.5.9. Traceability

7.5.9.1. General

The organization had procedures available that supported full traceability of components, materials, work environments used that were in accordance with applicable regulatory requirements.

7.5.11. Preservation of product

There were adequate and suitable processes available to ensure the preservation of product to requirements during processing, storage, handling, and distribution.

7.6. Control of monitoring and measuring equipment

The organization had implemented procedures for the control of monitoring and measuring equipment.

8. Measurement, analysis and improvement

8.2. Monitoring and measurement

8.2.1. Feedback

The organization had procedures in place to gather and monitor information relating to whether the organization has met customer requirements. Data were gathered from production as well as post-production activities and served as input into the risk management for monitoring and maintaining the product requirements as well as the product realization or improvement processes.

8.2.2. Complaint handling

The organization had implemented a procedure for the timely handling of customer complaints. The procedures included requirements and responsibilities for investigating complaints, determining the need to report the information to the appropriate regulatory authorities, handling of complaint-related products and determining the need to initiate corrections or corrective actions. Corrections and corrective actions were documented.

8.2.3. Reporting to regulatory authorities

There was a procedure available for reporting and providing the necessary notifications to the appropriate regulatory authorities.

8.2.5. Monitoring and measurement of processes

The organization had implemented procedures to monitor and measure the characteristics of the QMS processes. Achievement of planned results were available and when not met, corrections and corrective actions were taken.

8.2.6. Monitoring and measurement of product

The organization had implemented procedures to monitor and measure the characteristics of the product to verify that product requirements had been met. This was carried out at applicable stages of the product realization process. Evidence of conformity to the acceptance criteria was maintained. The identity of the person authorizing release of product and the test equipment used to perform measurement activities were recorded.

8.3. Control of nonconforming product

8.3.1. General

The organization had a process in place for the segregation of nonconforming product.

8.3.2. Actions in response to nonconforming product detected before delivery

The organization had procedures available for taking action to eliminate nonconforming property before delivery.

8.3.3. Actions in response to nonconforming product detected after delivery

The organization had implemented a procedure to deal with nonconforming product detected after delivery by taking appropriate action to the effects, or potential effects, of the nonconformity. A procedure for issuing advisory notices was in place.

8.5.2. Corrective action

The organization had procedures in place to take action to eliminate the cause of nonconformities to prevent recurrence. The procedures defined the requirements for reviewing nonconformities (including complaints), determining the causes of nonconformities, evaluating the need for corrective action, planning and documenting actions needed and implementing such actions, including, as appropriate, updating documentation and reviewing the effectiveness of corrective actions taken.

Conclusion – Inspection outcome

Based on the areas inspected, the people met, and the documents reviewed, and considering the findings of the inspection, including the observations listed in the Inspection Report the company, **Eiken Chemical Co., Ltd** located at ***4-19-9 Taito, Taito-ku, Tokyo, 110-8408, Japan***was considered to be operating at an acceptable level of compliance with ISO 13485:2016 and WHO Information for Manufacturers on Pre-qualification Inspection Procedures for the Sites of Manufacture of Diagnostics (PQDx_014).

This WHOPIR will remain valid for 3 year (until February 2027), provided the outcome of any WHO pre-qualification inspection or other audit from regulatory authorities that WHO relies on conducted during this period provides evidence of current compliance with the audit criteria.

List of WHO Guidelines referenced in the inspection report

1. Inspection Services – In Vitro Diagnostics and Male Circumcision Devices (https://extranet.who.int/prequal/inspection-services/vitro-diagnostics-and-male-circumcision-devices)
2. Information for Manufacturers on Pre-qualification Inspection Procedures for the Sites of Manufacture of Diagnostics (PQDx_014).
3. ISO 13485:2016 Medical devices - Quality management systems - Requirements for regulatory purposes
4. ISO 9001:2015 Quality management systems – Requirements
5. WHO Post-market surveillance of in vitro diagnostics 2020 (ISBN 978 92 4 001532 6)
6. Medical devices - Application of risk management to medical devices - ISO14971:2019
7. GHTF/SG3/N19:2012 “Quality management system – Medical devices - Nonconformity Grading System for Regulatory Purposes and Information Exchange”
8. GHTF/SG4/(99)28 'Guidelines for Regulatory Auditing of Quality Systems of Medical Device Manufacturers - Part 1: General Requirements

9. GHTF/SG4/N30R20:2006 'Guidelines for Regulatory Auditing of Quality Systems of Medical Device Manufacturers - Part 2: Regulatory Auditing Strategy
10. GHTF/SG4(pd1)/N33R16:2007 'Guidelines for Regulatory Auditing of Quality Systems of Medical Device Manufacturers - Part 3: Regulatory Audit Reports ISO 13485:2016, Commitments to WHO PQ.