World Health Organization

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Prequalification Unit Inspection Services
WHO PUBLIC INSPECTION REPORT
(WHOPIR)
Vector Control Product Manufacturer

Part 1	**General information**
Company information	
Name of manufacturer	Yorkool Chemicals (Cangzhou) Co., Ltd.
Corporate address of manufacturer	West of Jing 4th Road, South of Chemical Avenue, Coastal-Port Economic and Technological Development Zone Cangzhou, Hebei Province, People's Republic of China
Manufacturing site(s) under assessment	
Address of manufacturing site if different from that given above	West of Jing 4th Road, South of Chemical Avenue, Coastal-Port Economic and Technological Development Zone Cangzhou, Hebei Province People's Republic of China
Desk assessment details	
Date of review	27 – 31 March 2026
Type of inspection	Desk Assessment This inspection was to establish that the applicable requirements to ISO 9001:2015 and WHO specific requirements were met.
Last WHO inspection	Onsite inspection: • 19-23 May 2023. Compliant.
Introduction	
History of the site	Yorkool Chemicals (Cangzhou) Co. Ltd was established in 2017 and produces long-lasting insecticidal mosquito nets.
WHO Product(s) to be covered by this desk assessment	• P-11664 – Yorkool G1 LN – Accepted – Vector Control Product • P-12507 - Yorkool G5 LN – Prequalified - Vector Control Product • P-13227 - UNET G1 LN - Prequalified - Vector Control Product • P-13229 – UNET G5 LN – Prequalified - Vector Control Product • P-13409 - Yorkool G1 Recycled LN - Prequalified - Vector Control Product
Abbreviations	**Meaning**
NC	Non-conformity
NCR	Non conformity Report
OOS	Out-of-specification
QC	Quality control
QMS	Quality management system

SCAR	Supplier Corrective Action Request/Report	
Part 2	**Summary of the assessment of ISO evidence submitted**	
Inspection Report 1		
Competent authority names	BAC Certificate Beijing Navigation Standard Times Testing and Certification Co., Ltd	
Dates of inspection	14-17 September 2025	
Type of inspection	Recertification audit	
	Products:	Not listed
	Scope:	Recertification audit against GB/T 19001/ISO 9001:2015
Description of CAPAs	A copy of the translated non-conformity report was provided. Root cause analysis was available, along with verification of the effectiveness of the corrective action.	
Final conclusion of the inspection report	The audit report summarized the various clauses of the standard that were audited. The site was found to meet the requirements of the standard and were operating under an adequately implemented QMS.	
Comments / observations on the scope and comprehensiveness of the report and appropriateness of the CAPAs	The shared audit report addressed the main clauses of the standard. There were no identified obstacles or issues during the audit. The site was found to meet the requirements of the standard. The site was found to be operating under an effective and well implemented QMS.	

Part 3	**Review of additional documents**

1. Certification and audit reports:
The manufacturer provided a copy of the BAC Certificate, Certificate of Conformity of Quality Management System Certification -GB/T 19001-2016/ISO 9001:2015.

All four listed sites below were included in the certification.

The scope of certification was as follows:
Manufacture of Long-Lasting Insecticidal Net.

2. Quality Manual:
The manufacturer provided a copy of the Quality Manual. The manufacturer had documented the quality policy with supporting quality objectives within the quality manual with the role of the general manager to communicate the policy to all staff.

The quality manual was set out according to the requirements of ISO 9001:2015 with endorsement from top management on the effectiveness and maintenance of the QMS. Top management was committed to the development and continual improvement of the quality management system. Roles and responsibilities were clearly defined for the different departments within the organisation.

The manufacturer provided a copy of the organogram with clear separation of roles and reporting responsibilities between production and the quality department.

A process flowchart was available that identified the inspection or QC points for both the coated and the incorporated LLIN products.

3. Site Master File:

A copy of the site master file was provided.

Four sites were included within the site master file:

Name of site	Address	Factory Production Building	Products
Yorkool Chemicals (Cangzhou) Co., Ltd.	West of Jing 4th Road, South of Chemical Avenue, Coastal-Port Economic and Technological Development Zone, Cangzhou, Hebei Province, China	Working Liquid Workshop, Insecticide Treatment Workshop, Warehouse.	Yorkool G1 LN (Yorkool LN), Yorkool G5 LN, Yorkool G1 Recycled LN
Yorkool Chemicals (Cangzhou) Co., Ltd.-Lixian subfactory	Yangnan Village, Sangyuan Town, Lixian County, Baoding City, Hebei Province, China	Working Liquid Workshop, Insecticide Treatment Workshop, Master Batch Preparation Workshop, Extrude fibers and Warp beaming workshop, Warp knitting, Warehouse	Yorkool G3 LN, Yorkool G1 LN (Yorkool LN), Yorkool G5 LN, YorkoolG1 Recycled LN
Yorkool Chemicals (Cangzhou) Co., Ltd.-Gaotang subfactory	No.558 Shifeng West Road, Economic Development Zone, Gaotang County, Liaocheng City, Shandong Province, China	Sewing and Packaging Workshop, Warehouse.	Yorkool G3 LN, Yorkool G1 LN (Yorkool LN), Yorkool G5 LN, Yorkool G1 Recycled LN

Yorkool Chemicals (Cangzhou) Co., Ltd.-Bazhou subfactory	No.306, Kuoda Village, Nanmeng Township, Bazhou City, Langfang City, Hebei Province, China	Sewing and Packaging, Workshop, Warehouse.	Yorkool G3 LN, Yorkool G1 LN (Yorkool LN), Yorkool G5 LN, Yorkool G1Recycled LN

4. List of current quality management procedures:

A list of the relevant quality documents was available with document name, unique identifier, department, and version number available.

5. Standard operating procedures for:

i. Document control:

A copy of the Document Control procedure was reviewed. There was a process for controlling external documents. All documents underwent an annual review. All obsolete documents were destroyed after approval by the general manager.

ii. Control of nonconforming goods/processes:

The manufacturer provided a copy of the Nonconforming Product Control procedure. There was a defined process classifying the nonconforming product into minor, general or major, with clear definitions and descriptions of each category. There was a process for the identification and segregation of nonconforming product when detected. It was the responsibility of the production department for identifying unqualified product. For rework, an approval process was required before commencement with final approval by the quality department before final release. The Substandard Product Disposal Application form would be completed for customers, regulatory agencies and WHO when product had been sold and was found to be nonconforming. All forms were to be kept for 4 years.

iii. Change control/change notifications (product and processes):

A copy of the Change Management System procedure was provided. The procedure described roles and responsibilities and types of changes, including but not limited to changes in raw material, process parameters and production equipment.

iv. Management of equipment:

The manufacturer had a calibration schedule for critical equipment. Equipment number, certificate number and calibration dates were available. Measuring devices were all calibrated annually by an external company.

v. Quality Control and Batch release:

The quality control process was reviewed at the last WHO inspection and was found compliant. The manufacturer provided a copy of the batch manufacturing records. Acceptance criteria were

available in the process flowcharts provided. All batch records provided were signed and dated by staff completing and others checking. The different batches were clearly documented with batch number, batch size and production dates.

vi. Risk management:

The manufacturer provided a copy of the Risk and Opportunity Control Procedure. Roles and responsibilities were clearly defined, with Top Management taking full responsibility for the approval and planning of risk management. Types of risks were defined including quality, environmental, operational, financial and market risks. All identified risks were assessed and given a risk level. This was then used to review against the frequency and acceptance criteria. The aim was to assess if the identified risks either were acceptable, could be reduced or eliminated. The aim was to eliminate the risk where possible, with clear instructions of the process when this was not possible, and reduction was required. It was the responsibility of the Technical Quality Department to review the effectiveness of the risks and opportunities and to report problems.

vii. Supplier evaluation and control, verification of purchased product:

The manufacturer provided a copy of the Procurement Control Procedure. The management representative was responsible for the final approval of the qualified supplier list. All approved suppliers were categorized according to their impact on the product quality. All qualified suppliers were subject to annual re-evaluation that included review of their supply performance, quality, and service satisfaction.

The procedure described the process for verification of purchased product to include routine incoming inspection, verification of product appearance and quality documents provided by the supplier (certificates of conformity etc) and on-site verification. For category A suppliers (critical) an annual on-site inspection would be performed. For category B raw material suppliers, sampling inspection would be performed on a batch-by-batch basis.

viii. Internal Audits:

There was evidence within the Management review meeting minutes that regular internal audits were conducted regularly.

ix. Management Review:

The manufacturer provided a copy of the Management Review report. The management review meeting minutes were detailed and included internal audits and the findings, resources including training, risks and opportunities, quality objectives and performance, customer satisfaction, results of monitoring and measurement and supplier performance were reviewed and discussed. A summary of all corrective actions raised for the review period were available with planned completion times.

6. Site floor plan:

The manufacturer provided a copy of the floor plan with process flow.

7. Manufacturing flowchart including in-process control points:
The manufacturer provided the process flowchart for the treated mosquito netting fabric that included inspection points. The sampling plan and acceptance criteria was available.

8. List of critical raw materials (including details of the supplier of each material):
The manufacturer provided a list of critical suppliers.

9. List of outsourced processes with direct product impact (e.g. outsourced manufacturing of components, outsourced laboratory testing, packaging, printing, etc.) including details of the supplier for each process:
The manufacturer provided a list of suppliers of outsourced processes.

Part 4	**Desk assessment conclusion**

Based on the QMS evidence received and reviewed, it is considered that a desk assessment is acceptable in lieu of a WHO onsite inspection. The site ***Yorkool Chemicals (Cangzhou) Co., Ltd.*** located at ***West of Jing 4th Road, South of Chemical Avenue, Coastal-Port Economic and Technological Development Zone, Cangzhou, Hebei Province, People's Republic of China*** is considered to be operating at an acceptable level of compliance with ISO 9001:2015 and WHO requirements.

This WHOPIR will remain valid for 3 years, provided that the outcome of any inspection conducted during this period is positive.

Part 5	**List of guidelines referenced in this inspection report**

1. ISO 9001:2015 Quality management systems – Requirements

2. WHO guideline for the prequalification assessment of insecticide-treated nets (ISBN 978-92-4-008647-0)

3. Inspection Services Procedures (https://extranet.who.int/prequal/inspection-services/inspection-services-procedures)