4.1 Food Quality and Safety 3-3

Hon Chuan delivers non-toxic, safe, and environmentally friendly food packaging in full compliance with regulatory standards, ensuring product quality and safety through cutting-edge aseptic filling technology.

Food Safety Policy

"Discreetness / Carefulness / Responsibility", "Awareness of Food Safety, Quality Consciousness, Environmental Awareness"

Our guiding principle is "'Hon Chuan Excellence, Assurance of Quality,'" and we uphold the management philosophy of Honesty, Innovation, Quality, Service, Positive, and Responsible. We actively promote a Food Safety Management System (FSMS) aligned with Hazard Analysis and Critical Control Point (HACCP) principles.

We are committed to:

- Establishing a robust and comprehensive food safety management system
- Fulfilling our responsibility as a manufacturer within the supply chain
- Complying with food safety regulations and customer requirements

Quality Policy

Hon Chuan operates a food safety and quality management system focused on continuous improvement and preventive action, adhering to the "Three No's" principle—**no acceptance, no production**, and **no delivery of defective products.**

We implement ISO 9001 standards and comply with all applicable regulations to enhance overall quality performance.

4.1.1 Food Quality/Safety Verification 416-1

Hon Chuan produces products that comply with regulations, identifies food safety hazards, enhances food safety control capabilities, and effectively manages risks. Since 1996, we have established cross-departmental teams to implement, promote, execute, and maintain the food quality/safety management system. We continuously verify and maintain the effectiveness of the system through relevant validations.

The current status of the management system verification in 2024.

	Policy Requirements	Voluntary Verification		
Plant	TFDA Certification	ISO 9001	FSSC 22000	TQF
Taichung 1st Plant	Non-disclosed Industry	V	V	-
Taichung 2nd Plant	Non-disclosed Industry	V	V	-
Aseptic 1st Beverage-filling Plant	V	V	V	V
Aseptic 2nd Beverage-filling Plant	V	V	V	V
Aseptic 3rd Beverage-filling Plant	V	V	V	V

Verification Certificate

All Hon Chuan products undergo phased evaluations before market launch to ensure safety, consistent quality, and sustainability.

Phase	Evaluation	Description	Example
Product-design phase	Raw-material selection risk analysis	Avoid any harmful additives	Food-grade rpet
Pre-pilot-run phase	HACCP analysis and manage-ment	Control hygiene risks in packaging	Preventative measures for microbi-ological and chemical hazards
Verification & testing phase	In-house tests and third-party testing	Carry out sst seal-strength tests and heavy-metal leach-out safety checks	Send samples to the plastics industry development center every quarter and obtain test reports
Launch / mid-market phase	Analysis of complaints and market feedback	Make formula or process adjustments based on customer complaints and market response	When negative pressure appears in bottled water during cold-chain transport, adjust by light-weighting or changing the bottle material
Innovation & R&D feedback phase	ESG impact assessment and PDCA continu-ous improve-ment	Factor product carbon footprint and environmental impact into r&d refinements	Develop lightweight containers, add food-grade recycled resin, and reduce plastic and carbon emissions

4.1.2 Food Safety Laboratory 416-2

In September 2021, Hon Chuan's Packaging R&D Laboratory at headquarters became the first Taiwan-based third-party lab approved by PepsiCo's U.S. headquarters, significantly strengthening the company's quality control, credibility, and market presence.


PEPSICO

PEPSICO LABORATORY CERTIFICATION PROGRAM

This is to confirm that:

Hon Chuan Enterprises, Taiwan

Having met the requirements of the PepsiCo Lab Certification Program, is now certified to test and evaluate

PET Bottles and Plastic Closures (CSD and NCB including Hot-Fill)

This certification is effective for a period of 3 years beginning

September 18th 2021

【Certificate of PepsiCo Third-Party Laboratory Accreditation】

Validity: 3 years (Sep. 2021 – Sep. 2024)

All packaging materials comply with food utensil container packaging test standards. We regularly commission third-party inspection organizations such as SGS, the Plastics Industry Development Center, TÜV Rheinland, and National Accreditation Authority for Laboratories (CNAL) for dissolution tests. In 2024, the pass rate was 100%

SGS

intertek
Total Quality. Assured.

Annual Packaging Material Inspection Pass Rate

100%

Annual Packaging Testing Expenses

(NT Dollars)

Year 2022 : 1,288,000
Year 2023 : 919,576
Year 2024 : 1,062,888

PIDC
財團法人塑膠工業技術發展中心
PLASTICS INDUSTRY DEVELOPMENT CENTER

TÜVRheinland®

❖ Compliance with domestic and international food packaging safety regulations for new product development

Hon Chuan's products meet regulatory standards, including Taiwan Food Utensils and Packaging Standards, European Union (EU) food packaging regulations, U.S. Food and Drug Administration (FDA) requirements, and China National Standards (GB). Hon Chuan continues to integrate these standards into green supply chain initiatives and R&D efforts, driving innovation in sustainable packaging.

Beverage Division

The quality control laboratory of the beverage business unit inspects raw materials and finished products. Instruments are calibrated annually by third-party organizations, and the lab participates in proficiency testing. Third-party tests cover plasticizers, caffeine, heavy metals, and microorganisms, achieving a 100% pass rate in 2024.

Laboratory Proficiency Testing

Ensure that laboratory testing capabilities comply with national standards to safeguard product quality and safety.

Organizing Units	Organizing Units
Taiwan-America Inspection Technology	International Brand Clients
Testing Items	**Testing Items**
Tests for total plate count, Escherichia coli/coliforms, Enterobacteriaceae, yeast and mold, and Salmonella all received a “satisfactory” rating.	Tests for food acidity, soluble solids, yeast and mold, coliforms and total plate count, as well as seal integrity testing, all received a “satisfactory” rating.

Compulsory Inspection

According to Article 7 of the Food Safety and Sanitation Management Act, mandatory inspection of key items in raw materials, semi-finished products, and finished products should be conducted either internally or outsourced.

Product Categories	Focus Test Items	Results of the Inspection in 2024
Non-alcoholic beverage products	Microbiological Testing	100% passed
Packaged tea beverages	Pesticide Residue in Tea Leaves	100% passed

Note 1: Microbiological inspection items: total plate count, Escherichia coli / coliform group, Enterobacteriaceae, mold/yeast

Note 2: Pesticide residue in tea raw materials: "Test Method for Pesticide Residues in Food – Multi-residue Analysis Method" (MOHWP0055.05)

R&D Investment Amount and Revenue Percentage (Headquarters) in the Last Three Years

In 2024, the total investment in laboratory equipment procurement (including standards, reagents, laboratory consumables, etc.), laboratory personnel costs, and third-party laboratory testing commissioned amounted to NT$163,340 thousand, accounting for 16.62‰ of Hon Chuan's net operating revenue.

Unit: Thousand NTD

Year	2022	2023	2024
Laboratory Personnel Costs	103,661	109,103	121,175
Laboratory Renovation and Equipment	1,621	1,240	3,949
Other Laboratory Expenditures	33,304	34,702	38,216
Total	138,586	145,044	163,340
Operating Revenue	8,647,895	9,185,867	9,825,218
Ratio	16.03‰	15.79‰	16.62‰

4.1.3 Food Safety and Hygiene Management 3-3 416-2

Food Safety Team (HACCP Team)

Hon Chuan established a cross-departmental Food Safety Team to oversee HACCP training, implementation, and audits. Each review assesses improvement effectiveness, changes, and stakeholder needs, determining follow-up actions and system updates to ensure effective operation.

Beverage Division-Food Safety and Quality Objectives

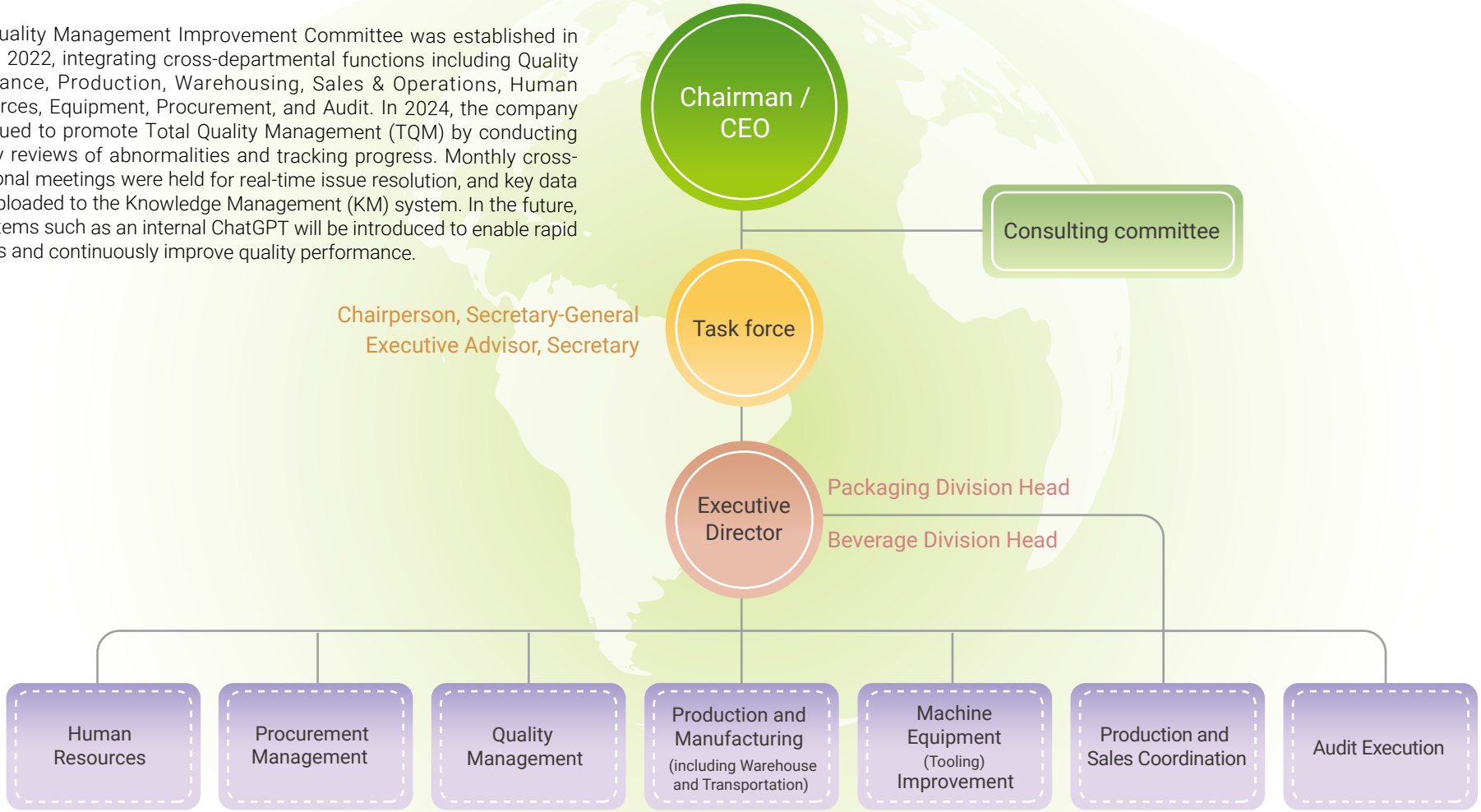
Item	2022 Target	2022 Actual	2023 Target	2023 Actual	2024 Target	2024 Actual	Performance Explanation
Incidents of Poisoning (cases)	0	0	0	0	0	0	Achieved
Major abnormal events (cases)	0	0	0	0	0	0	Achieved
Customer satisfaction (score)	≧ 85	87	≧ 85	91	≧ 85	88	Achieved
Number of complaints (cases)	23	34	20	23	15	23 (Note 1, incl. 1 project-specific)	Not achieved (Note 2)

Note 1 : In 2024, due to color deviation in a product, a complaint was triggered. The issue was jointly resolved with the client by adjusting the formula and production equipment. The number of abnormal events was reduced to zero. A follow-up project is expected in 2025.

Note 2 : The 2024 complaint target was not met due to abnormal raw material quality. The supplier has been required to investigate and improve, and continuous monitoring has been implemented to ensure effectiveness.

Quality Management Improvement Committee (QMIC)

The Quality Management Improvement Committee was established in March 2022, integrating cross-departmental functions including Quality Assurance, Production, Warehousing, Sales & Operations, Human Resources, Equipment, Procurement, and Audit. In 2024, the company continued to promote Total Quality Management (TQM) by conducting weekly reviews of abnormalities and tracking progress. Monthly cross-functional meetings were held for real-time issue resolution, and key data was uploaded to the Knowledge Management (KM) system. In the future, AI systems such as an internal ChatGPT will be introduced to enable rapid queries and continuously improve quality performance.



Annual Quality Improvement Presentation

Held on-site quality improvement presentation sessions to summarize achievements in innovation, energy conservation, risk control, and process optimization, aiming to enhance overall production efficiency and reduce costs. These sessions also promoted horizontal communication through employee sharing and interdepartmental exchange.

Promotion of "Food Safety Culture"

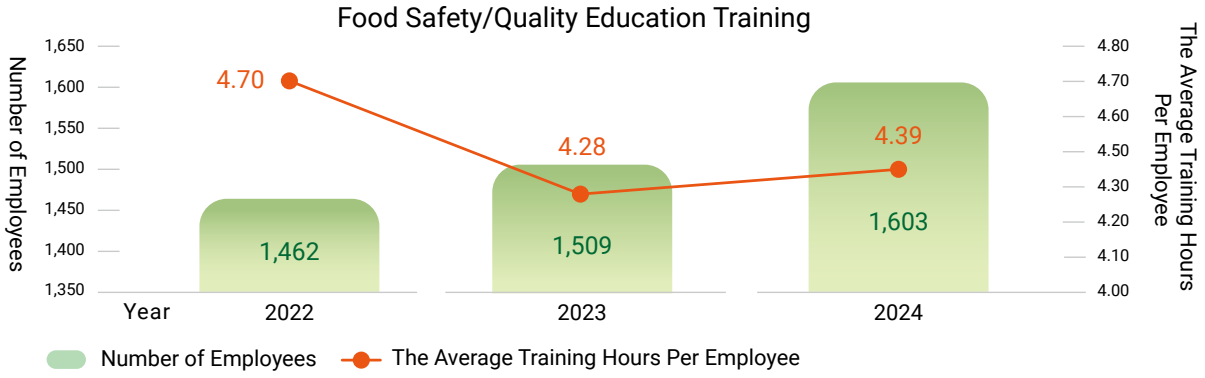
Foster a food safety culture as a shared value and behavioral guideline for all employees.

The Packaging Division trained seed personnel in response to the FSSC 22000 Version 6 revision.

The Beverage Division conducted four company-wide food safety culture training sessions in 2024.

Food Safety Information 416-2

The R&D and Quality Control teams regularly review food safety regulations, identify gaps, and develop countermeasures to ensure compliance. They closely monitor international food safety incidents to maintain a zero-violation record. Ongoing investment is made in education and training: The Packaging Division adopts a mentorship system and e-learning, offering both basic (e.g., equipment calibration, quality auditing) and advanced (e.g., project management, anomaly analysis) courses. The Beverage Division regularly conducts food safety and quality training sessions to strengthen professional capabilities.



Environmental Monitoring

Comprehensive control is implemented over on-site personnel, workplaces, equipment, and production processes to ensure compliance with regulations and quality standards.

Packaging Division: Conducts regular microbiological testing on export products and cooperates with customer monitoring at overseas factories to enhance process control and traceability.

Beverage Division: Conducts long-term monitoring of potential contamination sources. For high-risk areas, it establishes early warning and exclusion mechanisms with quantifiable monitoring.

Inspection Items:

- **Microbiological :** Total plate count, mold/yeast, Enterobacteriaceae, Salmonella spp., Listeria monocytogenes.
- **Allergens :** Gluten, milk, fish, soy, mango, coconut

2022–2024 Environmental Monitoring Compliance Rate for Beverage Division: 100%

Year	2022	2023	2024
Number of Inspections	2,384	2,371	2,610
completion rate	100%	100%	100%

Product Traceability Management

- The SAP system is used to manage the entire traceability process from raw material input to finished products, with monthly uploads of production data to the Food Traceability Management Platform.
- At least one traceability drill is conducted annually, including internal self-exercises and external audit sampling, to be completed within 2 hours; if not achieved, it must be redone.

In 2024, the Beverage Division completed 8 self-initiated recall drills (100% completion rate) and passed 43 external audits, affirming its traceability capability.

4.2 Supply Chain Management

As the world moves toward net-zero emissions and green transformation, customers place increasing importance on renewable energy and circular materials within their supply chains.

Hon Chuan ensures raw material quality and regulatory compliance through supplier validation, audits, and evaluation mechanisms. In 2024, Hon Chuan invited a total of 90 suppliers to sign the Supplier Sustainability Commitment, which covers four major areas: corporate governance, labor rights, health and safety, and environmental protection. Environmental regulations and labor rights are also included in the evaluation of new suppliers.

Products and food are closely connected, and maintaining stability in key supply chains is Hon Chuan's top priority. We aim to develop critical, primary, and secondary suppliers both domestically and internationally to ensure supply chain stability.

4.2.1 Supplier Verification and Selection 308-1

Hon Chuan adheres to ISO 9001, FSSC 22000, ISO 22000, TQF, and other international standards, along with national food safety regulations. Certification is conducted by independent third-party bodies to ensure transparency, impartiality, and customer trust. Packaging and beverage suppliers with ISO 9001 or ISO 22000 certification are prioritized, and must undergo evaluation across five key dimensions to qualify, including raw material testing.

The qualification of approved suppliers follows a three-step process:

In 2024, all newly added suppliers complied with environmental regulations and emergency response standards.

- Supplier numbers for beverages from 2022 to 2024: Total suppliers: 111 → 119 → 135, Key suppliers remained steady at 31, Tier 1 suppliers: 38 → 43 → 36, Non-tier 1 suppliers: 68
- Supplier numbers for packaging materials from 2022 to 2024: Total suppliers: 185 → 178 → 198, Key suppliers: 34 → 38 → 37, Tier 1 suppliers: 73 → 67 → 66, Non-tier 1 suppliers: 95