



The Home Of
Wholesome Brands.

HACCP Training Manual





HACCP

Hazard Analysis and Critical Control Points.

HACCP is a Food Safety Management System used by FMCGs to control physical, chemical and microbiological hazards in production processes that can cause the finished product to be unsafe; and designs measurements to reduce these risks to a safe level.

This is the first Food Safety Management System that CIL has implemented.





HACCP PRINCIPLES

1. Conducting a hazard analysis.
2. Determining critical control points.
3. Establish critical limits to ensure that each CCP is under control.
4. Establish a monitoring system to ensure control over each CCP by scheduled testing.
5. Establish corrective action to be taken when monitoring indicates a particular CCP is moving out of control.
6. Establish validation and verification procedures to confirm HACCP system is working effectively.
7. Establish documentation on the procedures and records appropriate to these 7 principles and their application.



HACCP Processes

1. Raw material receiving (sampling/grading/weighing) and offloading.
2. Raw Material Storage
3. Pre-Cleaning (magnet/cleaner/weigher)
4. Drying (hopper/cleaner/heater/drier)
5. Storage (silo/go down/day bins)
6. Transfer to the mill
7. Separator
8. Magnet
9. Destoner
10. Scourer (brush to remove dust)
11. Moisture Reader
12. Sortex
13. Conditioning (moisture addition/tempering bin)
14. De-germing
15. Sifting
16. Gravity selector
17. Rollers 1-6/Sifter 2
18. Fortification
19. Air blowing (Blower)
20. Infestation destroyer (Matador)
21. Packing bin
22. Packing (coding)
23. Storage
24. Distribution



HACCP Controls- Physical

Hazard	HACCP Control
Pieces of metals	There is active magnet along the process step to remove them.
Pieces of woods Maize cobs Threads/Strings	They are removed during cleaning /screening.
Grease/Oil	Material inspected during offloading. Vehicle cleaning/Inspection.
Dust particles	Material stored in sealed containers/Cartons/wrappers; and scourer.
Yeast & moulds	Physical check on the grain during receiving. Moisture control and testing. Microbial testing monthly on the product.
Soot, earth, sand & stones	Destoner/ Sortex.
Glue	Preventive maintenance.



HACCP Controls- Chemical

Hazard	HACCP Control
Pesticides residues Crop protection chemicals	Has not been witnessed, but materials with chemical odor are rejected. Use of approved pesticides in raw material storage.
Heavy metal (Mercury, Zinc, Lead)	Premixes accompanied by COAs (Certificate of Analysis).
Ink (packaging)	Inspection of packaging material to ensure ink is dry.
Infestation	Fumigation of materials and; spraying and fogging of warehouse. Aeration in the silo. Matador machine to reduce numbers of weevil eggs in the flour.
Detergents	Controlled through segregation.



HACCP Controls-Microbiological

Hazard	HACCP Control
Salmonella E. Coli Yeast & Moulds Infestation S.aureus	COAs for pre-mixes. Use of the appropriate PPEs-dust coats, musks, closed shoes etc. Controlled by hand washing and sanitation. Reduced in bran. No cases have been encountered. Rejecting moldy grains. Fumigation.
Aflatoxin	Analysis and rejection.



Why Talk about HACCP?

1. The first food safety management system that CIL has implemented.
2. Quality assurance to our customers:
 - Documented measures against weevils, aflatoxin, infestation, foreign matter (stones, metals, twigs, grease e.t.c.), disease-causing agents (Salmonella, e-coli, moulds).
3. HACCP communication as a **key differentiating parameter for CIL** brands.



THANK YOU

