

Guidance to Help the Seafood Industry Control *Listeria monocytogenes* in Ready-to-Eat Seafoods

Developed by the National Fisheries Institute and Seafood Products Association

Purpose: Provide up-dated industry standards and practices, highlighting appropriate measures to prevent and control environmental pathogens of concern (specifically *Listeria monocytogenes* and *Salmonella* spp.) in ready-to-eat seafood production facilities.

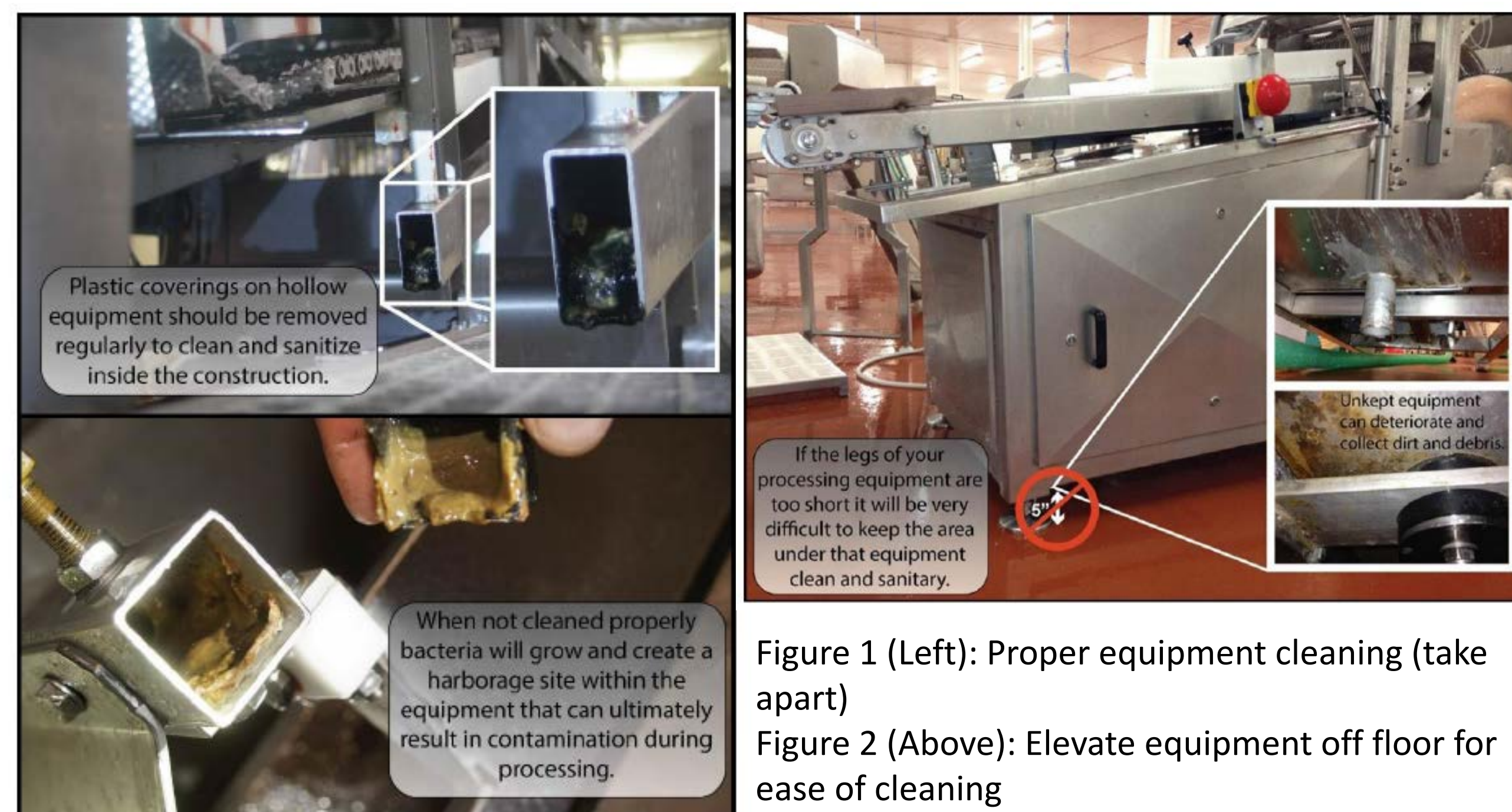
Introduction

Understand the food safety risks for ready-to-eat seafood and recent case history

Section 1

Ready-to-Eat Specific GMP and Sanitation

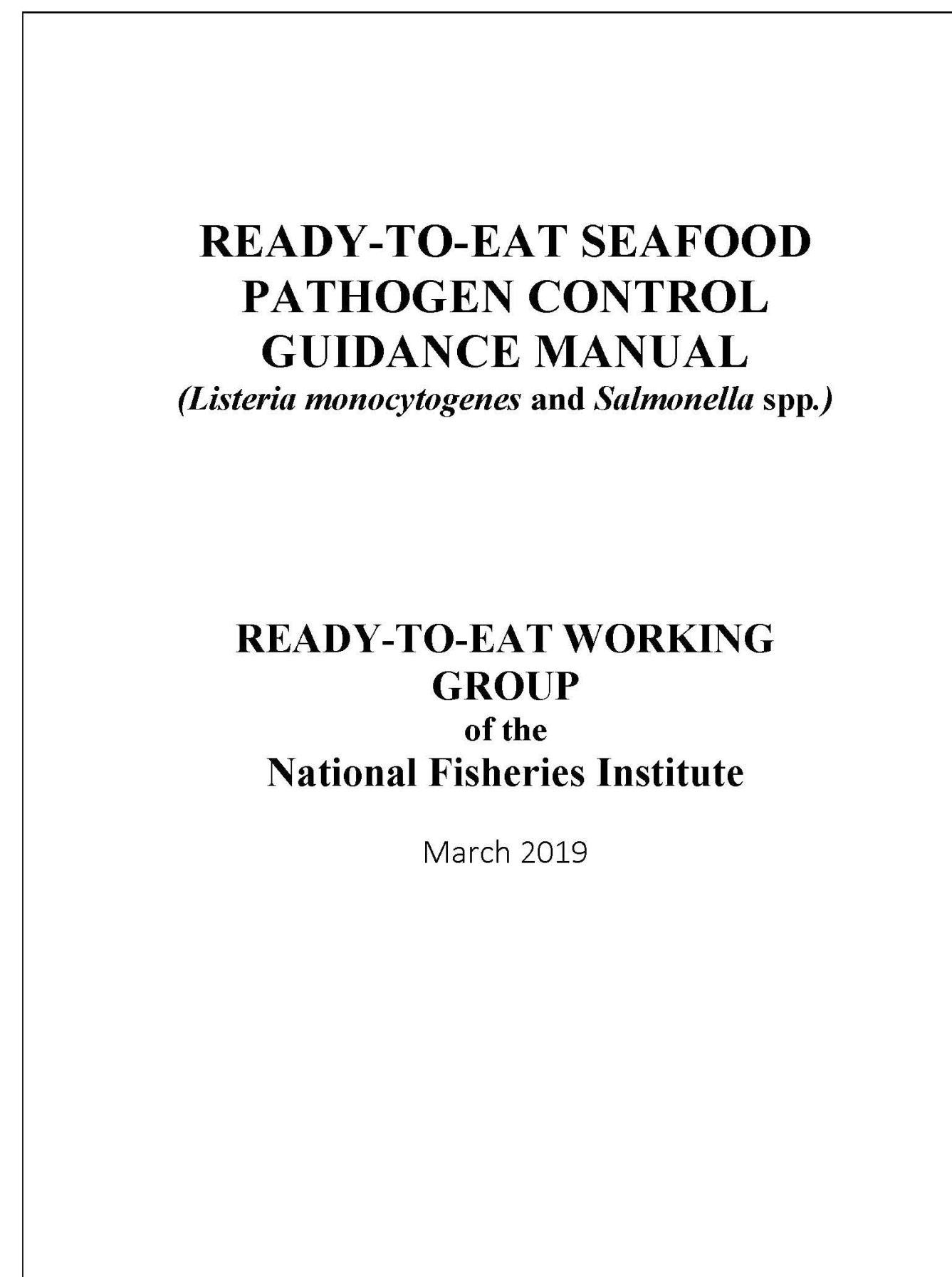
Learning Objective: Importance of good manufacturing Practices (GMPs) and Sanitation Control Procedures



Section 2

Training Plant Personnel

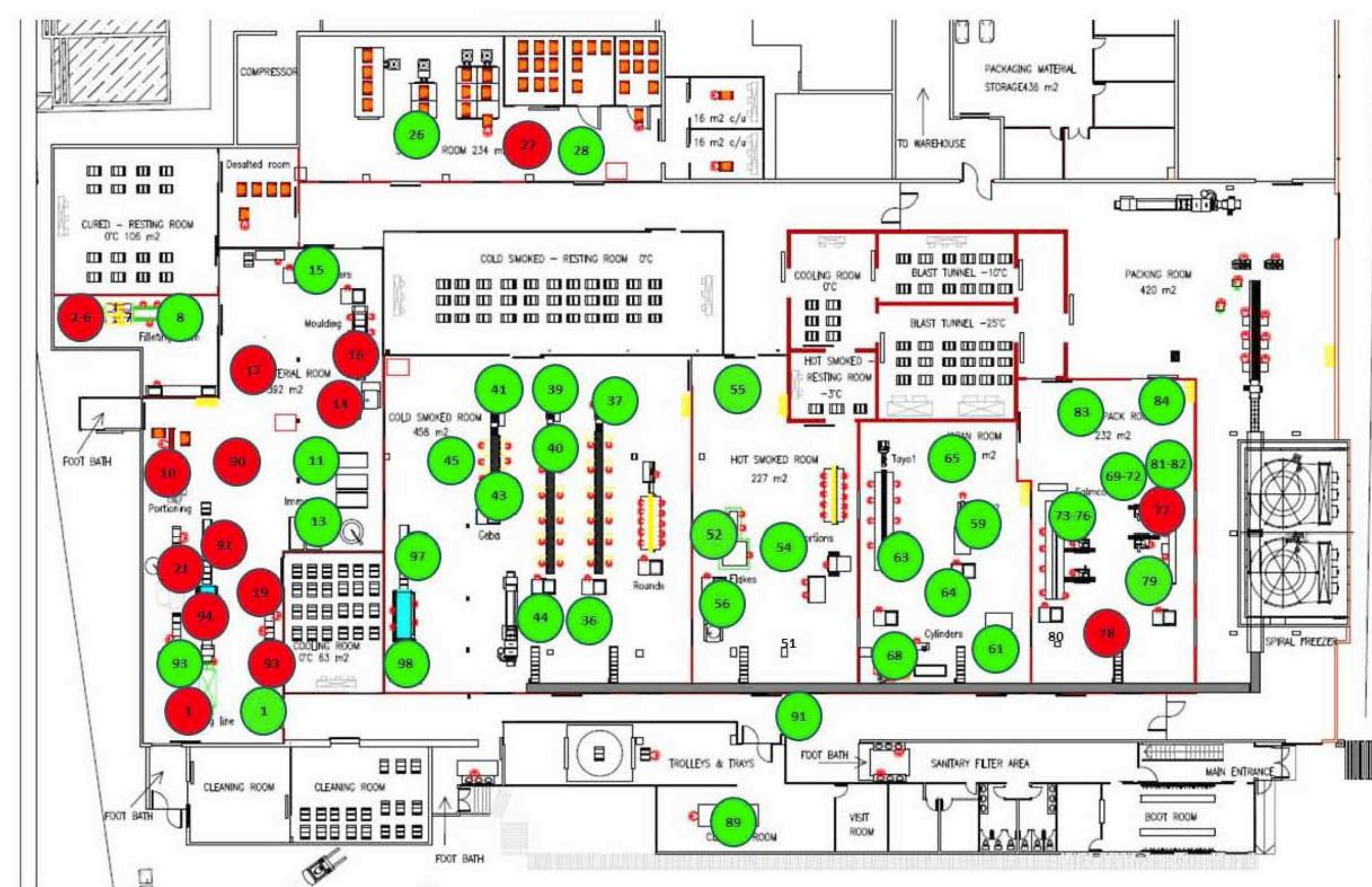
Learning Objective: Personnel training recommendations



Section 3

Environmental Monitoring in Food Processing Areas

Learning Objective: Importance of a good Environmental Monitoring Plan (EMP) and how to develop a comprehensive EMP



Section 4

Finished Product Labelling

Learning Objective: Highlights proper food safety communication with consumers

Section 5

Non-Thermal Intervention Measures

Learning Objective: Overview of FDA-approved intervention measures and hurdles

Measures	For Raw Materials	During Processing	For Finished Product
1) Chlorine	X	X	
2) Treating raw fish with calcium hydroxide (pH 12)	X		
3) Washing raw fish with water containing acidified sodium chlorite	X	X	
4) Skin removal before curing	X		
5) Peracetic acid	X	X	
6) Green tea	X	X	X
7) Bacteriocins (includes nisin)	X		X
8) Bacteriophages	X	X	X
9) Ozone	X	X	
10) Cetylpyridinium chloride (CPC)			Not approved for seafood
11) Fatty Acids	X		
12) Electrochemical brine tank treatment	X		
13) Electrolyzed water	X	X	
14) Higher pressure processing (HPP)			X
15) Ultraviolet (UV) pulse light		X	X
16) Irradiation			X
17) Competitive lactic acid bacteria (probiotics)			X
18) Sodium lactate			X
19) Packaging and Sodium Nitrite NaNO ₂		X	X
20) Nitrates and Nitrites		X	X
21) Essential Oils		X	

*See specific section for regulatory approval information

Conclusion

Industry guidance recommended by FDA and supports industry best practices. This free guidance is available at: aboutseafood.com

Updated resource for industry, which was developed through the efforts of subject matter experts* from the seafood industry, academia, Seafood Products Association and National Fisheries Institute. *See manual for list of contributors