

# Introduction to Environmental Monitoring & Sanitation

## Course Agenda

Day 1 – 8:00 am – 5:00 pm	
Section 1	<b>INTRODUCTION TO MICROORGANISMS AND CONCERNS IN THE FOOD PROCESSING ENVIRONMENT</b> <ul style="list-style-type: none"> <li>• Introduction to microorganisms in foods</li> <li>• General characteristics</li> <li>• Factors influencing growth of microorganisms: The basics</li> <li>• Roles in food production</li> </ul>
Section 2	<b>INTRODUCTION TO ENVIRONMENTAL MONITORING</b> <ul style="list-style-type: none"> <li>• Environmental monitoring</li> <li>• Growth niches and biofilms</li> <li>• Zone concept</li> <li>• Target analytes</li> <li>• <b>Breakout Groups: ACTIVITY PART 1 (investigation, problems, identification) and BRIEFINGS</b></li> </ul>
Section 3	<b>REGULATORY REQUIREMENTS FOR SANITATION, SANITARY OPERATIONS, AND ENVIRONMENTAL MONITORING</b> <ul style="list-style-type: none"> <li>• FDA Preventive Controls Requirement</li> <li>• 21 CFR Part 117 Subpart B</li> <li>• USDA-FSIS Sanitation Standard Operating Procedures</li> <li>• Other Regulatory Requirements</li> </ul>
Lunch Break (60 min)	
Section 4	<b>SANITATION, ENVIRONMENTAL MONITORING, &amp; EQUIPMENT DESIGN</b>
Session 5	<b>HYGENIC CONSIDERATIONS IN FACILITY &amp; EQUIPMENT DESIGN</b>
Session 6	<b>CLEANERS</b> <ul style="list-style-type: none"> <li>• The function of cleaners</li> <li>• Cleaning defined</li> <li>• Soil and its components</li> <li>• Chemistry of detergents and cleaners</li> </ul>

Day 2 – 8:00 am – 12:00 pm	
Section 8.	SANITIZERS
Section 9	SANITATION VERIFICATION <ul style="list-style-type: none"> <li>• Monitoring of Cleaning and sanitation</li> <li>• Validation and verification</li> <li>• Best practices</li> </ul>
Section 10	ROOT CAUSE ANALYSIS & CORRECTIVE ACTION
Section 11	DATA MANAGEMENT AND MAINTENANCE OF AN ENVIRONMENTAL MONITORING PROGRAM <ul style="list-style-type: none"> <li>• Program management</li> <li>• Data management</li> <li>• Tools</li> <li>• Communication</li> <li>• Breakout Groups: ACTIVITY PART 2 (data interpretation, next steps) and BRIEFINGS</li> </ul>
	Wrap-up Exam