

The 07 principle of HACCP are...

Principle 01	Conduct a Hazard Analysis
Principle 02	Identify Critical Control Points (CCP)
Principle 03	Establish Critical Limits for CCP
Principle 04	Establish Monitoring Procedures
Principle 05	Establish Corrective Actions
Principle 06	Establish Record Keeping Procedures
Principle 07	Establish Verification Procedures

The 2nd principle in HACCP is the identify critical control points or CCPs. CCPs are useful for hazard control by...

- Preventing the hazard, OR
- Eliminating the hazard, OR
- Reducing the hazard to an acceptable level

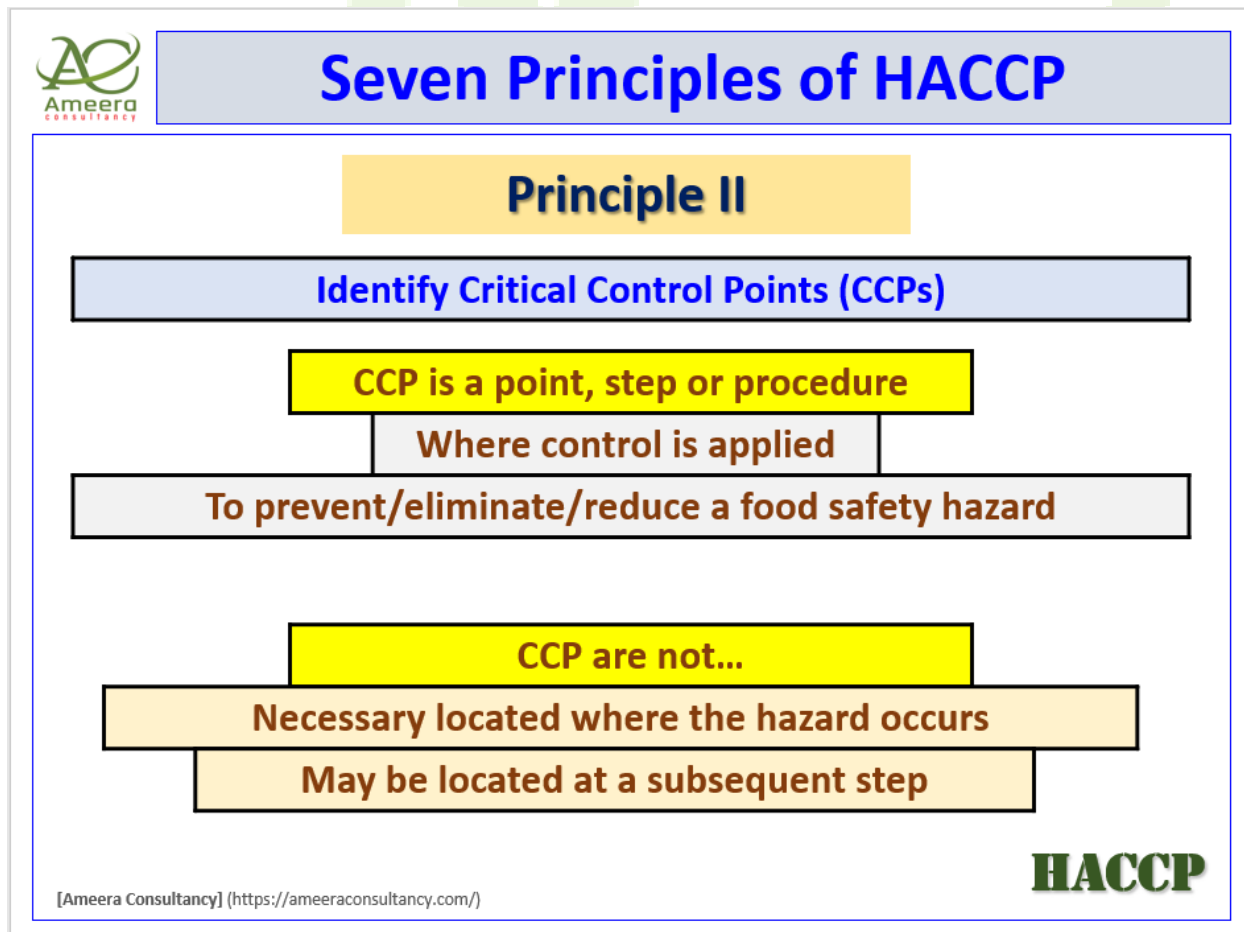


Figure: Identify CCCPs [Critical Control Point]

Acceptable level in the end

The definition of CCP [Critical Control Point] is, “Critical Control Point is a point of step at which the control measure is taken to take the hazard to an acceptable level”.

In this step of data construction, an acceptable level will be declared based on each ingredient/process-step and its physical, chemical and biological aspects.

Sample Copy 01

Step No	Ingredient/ Process-Step	No.	Type	Hazard	Likelihood	Severity	Risk Score	Hazard Type	Acceptable Level
	Deep Tube Well		P	Debris, Black Particle, Foreign Particle, Fe in dissolve form	1	1	1	In-Significant	Nil
			C	Hardness	1	1	1	In-Significant	≤ 0.05 ppm
			B	Coliform indicator	1	1	1	In-Significant	Nil

Sample Copy 02

Step No	Ingredient/ Process-Step	No.	Type	Hazard	Likelihood	Severity	Risk Score	Hazard Type	Acceptable Level
	ACF		P	Debris, Black Particle, Foreign Particle, Fe in dissolve form	1	1	1	In-Significant	Nil
			C	Hardness	2	3	6	Significant	Cl = Nil (Check with OT solution)
			B	Coliform indicator	1	1	1	In-Significant	Nil



CCP Decision tree

CCP Decision Tree is a sequence of question by which anyone can determine if the control point is a CCP or not.

PRP, OPRP, CCP all of them are the control measures.

Based on the context of food safety & ISO, a control measure can be defined as an action or activity which can be used to prevent or eliminate a hazard or reduce the hazard to an acceptable level.

PRP/OPRP/CCP declaration Sample Copy 01

Step No	Ingredient/ Process-Step	No.	Type	Hazard	Q1	Q2	Q3	Q4	Q5	Q6
	Deep Tube Well		P	Debris, Black Particle, Foreign Particle, Fe in dissolve form	YES	YES	NO	YES	NO	-
			C	Hardness	YES	YES	NO	YES	NO	-
			B	Coliform indicator	YES	YES	NO	YES	NO	-

Step No	Ingredient / Process step	No.	Type	Hazard	Q1	Q2	Q3	Q4	Q5	Q6	OPRP/ CCP/PRP
	Deep Tube Well		P	Debris, Black Particle, Foreign Particle, Fe in dissolve form	YES	YES	NO	YES	NO	-	PRP
			C	Hardness	YES	YES	NO	YES	NO	-	PRP
			B	Coliform indicator	YES	YES	NO	YES	NO	-	PRP



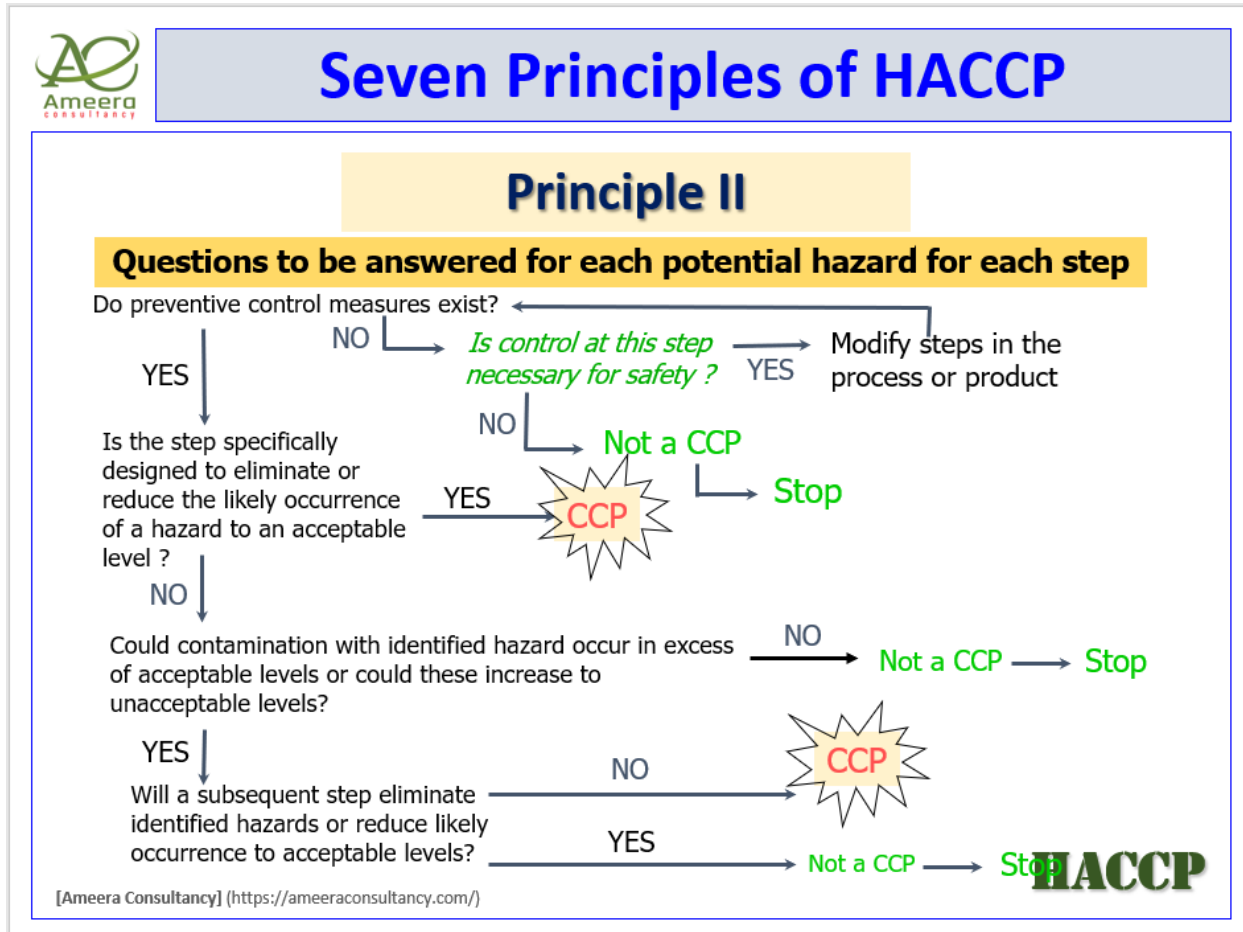
PRP/OPRP/CCP declaration Sample Copy 02

Step No	Ingredient / Process step	No.	Type	Hazard	Q1	Q2	Q3	Q4	Q5	Q6
	ACF		P	Debris, Black Particle, Foreign Particle	YES	YES	NO	YES	NO	-
			C	Presence of Cl on the water after ACF process	YES	YES	NO	YES	NO	-
			B	Coliform indicator	YES	YES	NO	YES	NO	-

Step No	Ingredient / Process step	No.	Type	Hazard	Q1	Q2	Q3	Q4	Q5	Q6	OPRP/ CCP/PRP
	ACF		P	Debris, Black Particle, Foreign Particle	YES	YES	NO	YES	NO	-	PRP
			C	Presence of Cl on the water after ACF process	YES	YES	NO	YES	NO	-	CCP
			B	Coliform indicator	YES	YES	NO	YES	NO	-	PRP

CCP decision tree

The HACCP team must use the CCP decision tree for assisting in evaluation of each of the steps where food safety hazards can be prevented, eliminated or reduced to an acceptable levels.



CCPs are product and process specific. It means that, if the hazard analysis conducted for 02 establishments or industry who are producing the same products, but the CCP can differ. The CCP differing for the same product in different plant must rely on...

- Process flow
- Establishment facility
- Product formulation
- Process equipment's
- Ingredient using
- Supplier condition
- Sanitation facilities
- PRPs (pre requisite programs)
- Other related factors

It should keep in mind that; HACCP team should not use the CCP decision tree before completing the hazard analysis. HACCP team should use the CCP decision tree with proper caution.

Comparison within PRP, OPRP & CCP

Critical Control Point [CCP]	Prerequisite Program [PRP]	Operational PRP [OPRP]
Point of absolute control in HACCP system	The generic controls for any type food operation	Food operation specific
Steps in food process that must be under control to get a safe product	Applied in any type of food operation to maintain hygienic environment to reduce the risk on food safety	Determined after doing the hazard analysis
Intervention used when the hazard has a high probability of existing and the risk level to the consumer is high	It is in operation at all time	Essential controlling specific food safety hazard
CCP is the Last, Critical Step or Key Control Operation prevent or eliminate a hazard or reduce the hazard to an acceptable level	HACCP foundation	Not focused on specific source of hazard
	Having ability to affect the end product safety if not included in food safety system	Useful to reduce the likelihood in risk analysis
	Not specific to one step in the process and do not control a specific hazard	OPRP can be removed from the system & it will not necessarily lead to producing unsafe food

Figure: Comparison within PRP, OPRP & CCP

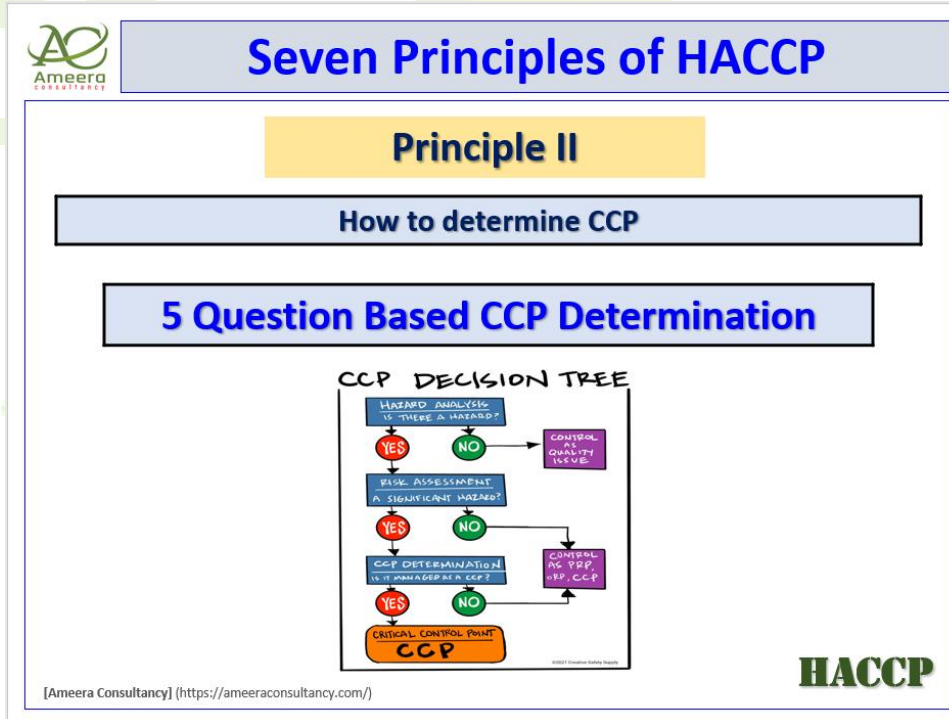


Figure: Critical Control Point