**Cheese Cold Smoking SOP (Small Artisanal Operation) 9-5-23**

**Purpose:** Provide steps and guidance for Cold Smoking Cheese to promote quality and food safety for the smoking process and subsequent packaging and storage.

**Cold Smoking Cheese:** The cold smoke method of smoking cheese involves smoking cheese in an enclosed chamber (smoker) for a predetermined time period at a temperature typically below 90°F or below the temperature at which the cheese will melt or soften to the point it will not hold its shape.

**Fuel for generating smoke for smoking:** Wood pellets or wood chips of oak, pecan, cherry, maple, or apple.

**Steps:**

1. Identify a source and type of wood that will meet your application requirements, especially for flavor.
	1. Maintain an approved supplier list (meets supplier approval program requirement).
	2. Maintain specifications which will provide variety of wood, and physical type (chips, pellets, or other), age, and moisture level.
	3. Record fuel (wood) lot number for traceability records.
2. Prep the cheese.
	1. Bring the cheese up to about room temperature. Condensation will form on cold cheese when placed in the smoking cabinet. Condensation and moisture will affect the cheese’s ability to absorb smoke.
	2. If there is moisture on the cheese, wipe if off before placing in the smoker.
	3. Place the cheese on a grate or rack that will allow smoke to circulate around all contact surfaces of the cheese. The grate or rack must meet applicable regulations and requirements for direct food contact.
3. Make the smoke.
	1. Light the fuel (wood) so it smokes. You want to smoke the cheese with a steady, light, and consistent stream of smoke without heat or flame.
	2. The smoke may be generated in a chamber adjacent to the cheese smoking chamber or below the cheese in the smoking chamber.
4. Smoke the cheese.
	1. Place cheese on grates in the smoking chamber and start the timer for how long the cheese is to be smoked. Smoking time may vary depending upon the desired finished smoke flavor.
	2. Monitor and record the temperature of the smoke house and the cheese throughout the process.
	3. If cheese does not take up smoke evenly, consider rotating the cheese to ensues even smoking.
5. Remove, wrap, and store.
	1. Remove cheese from the smoker and package.
	2. It may be beneficial to hold the cheese for a period to allow the smoke flavor to penetrate the cheese evenly.
	3. Store in typical refrigerated conditions for cheeses of the same variety.

**Other:**

1. Utilize Good Manufacturing and Sanitary Practices during the smoking process and limit traffic flow in the smoking area.
2. Maintain sanitary environment and keep smoking equipment in good condition.
3. Conduct environmental monitoring to verify the effectiveness of hygienic practices and sanitation.

As a note, Natural “Liquid Smoke” may be used as an alternative method. It can be added to the milk, curd and/or salt brine during the make, or used as a dip and or sprayed on the cheese. If using liquid smoke, we would recommend one connects with a technical resource for best practice.

In addition, we have included on our support documents the following references:

**References:** These references can be found under “Support Documents” on the WCMA Food Safety “Dairy Food Safety Alliance” (DFSA) website

* Smoking Cheese “Cold Smoke” Instructional reference
* Smoke Flavoring Cheese Products (Liquid Smoke) Red Arrow
* Smoking of Cheese Products by W.L. Wendorff