A HOT DOG WITH A SIDE OF HYDROCARBONS—NO THANKS!

By Erica Geske

The Food & Beverage industry was shaken up in 1997 when a consumer packaging expert found mineral oil in a vacuum-sealed sausage package. Hydrocarbons were present in the compressed air stream which entered the packaging equipment which then injected the lubricant into the food packaging.[1]

This event caused several countries to develop and enforce more stringent Food & Beverage processing, production, packaging and transportation guidelines.

Hazard Analysis Critical Control Point (HACCP)

HACCP is an internationally recognized systematic approach to the identification, evaluation and control of food safety hazards.

Following the seven principles are key to help make sure you're audit ready and your products are safe for consumption.[2]

Seven Principles of HACCP for Compressed Air Systems

1. Hazard Analysis

Identify any food safety hazards in your compressed air system. According to CAGI, compressed air hazards include:

- Particles
- Water
- Oil
- Microbiological contaminants

Pure air is needed as it passes from the

Sources:

[1] *Smith, R. (2007, August). Oil in the Sausage. Compressed Air Best Practices. Retrieved from https://www.airbestpractices.com/sites/default/files/2007/CABP_August_07_LR.pdf.*

[2] *The Seven Principles of HACCP Application: Compressed Air Systems. AircheckLab.com. Retrieved from https://www.aircheckLab.com/manufacturing/the-seven-principles-of-haccp-application-compressed-air-systems/.*

equipment, to the tools and eventually into the patient's mouth. Ensure your patients' safety with Class 0 oil free air.

2. Identify Critical Control Points (CCPs)

CCPs are steps where control can be applied to help prevent or eliminate a food safety hazard or reduce it to a safe level. Compressed air used in Food & Beverage applications fall into one of the following categories:

- **Contact systems:** Compressed air contacts products directly (CCP)
- **Non-contact, high-risk systems:** Compressed air doesn't contact product directly, but creates materials that do contact the product. Packaging is a common non-contact, high-risk application. Highly likely these applications would be identified as a CCP.
- **Non-contact systems:** Compressed air doesn't contact product or packaging. These applications are not likely to be identified as a CCP.

3. CCP Preventive Measures

Establish CCP preventative measures which can include:

- Using oil free air compressors
- Using appropriate filtration and purification equipment
- Regularly checking and replacing filters as needed

4. CCP Prevention Monitoring

Test your compressed air system regularly. Testing schedules vary and can be unique to specific operations. Quarterly testing is recommended to set a baseline if regular testing procedures are not currently in place.

5. Establish Corrective Action

If CCPs exceed acceptable hazard levels, corrective actions are crucial. These corrective actions will need be recorded and monitored. Common corrective actions include:

- Filter changes
- System maintenance
- Increased frequency of air system testing

6. Verify Controls

Establish verification procedures beyond just monitoring to help ensure the HACCP plan is accurately addressing hazards.

7. HACCP and CCP Control Logs

Keep detailed logs of air system testing, maintenance and corrective actions.

The Cost of Failure is High

In 2012, the Grocery Manufacturers Association (GMA) and Food Marketing Institute estimated the average cost for a food recall in the US was $10 million in direct costs.

Some recalls have caused permanent reputation damage to manufacturers and they never recover market share.

- 18% of GMA multi-national corporations have been involved in recalls estimated to cost between $30 and $99 million
- 5% of reported recalls are estimated to cost over $100 million

To top it off, the money used to address recalls could go to new product development, marketing, infrastructure innovations or anything else helping to grow the business.

Sullair can help!

Today, many Food & Beverage operations require oil free air to help ensure safety and compliance.

When Sullair became A Hitachi Group Company, two compressor titans joined forces to bring you oil free compressed air solutions backed by 100 years of Hitachi engineering experience and the reliability Sullair is known for.

Plus, our network of Sullair Authorized Distributors are true compressed air system experts. They can help you determine the best systems for your operation, perform air system audits and provide some of the best service and maintenance in the industry.