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## western od Processor

The magazine for food professionals & processors

SCOTT ENTZ

High River's Cargill meat processing plant celebrates 25 years

Manufacturing Safety Conference 2014

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**MEAT REPORT • BRAND MANAGEMENT • ALBERTA FOCUS** 

### RGF Environmental Photohydroionization™ for Meat Processors

# How Does it Work

Photohydroionization™, PHI for short, is a chemical-free, natural, green and environmentally-friendly advanced oxidation technology which utilizes broad-spectrum ultraviolet light rays in conjunction with a catalytic target.

PHI's UV combined with Advanced Oxidation has consistently outperformed traditional chemical sanitation technology in every field application including beef, chicken, pork, and

ing beef, chicken, pork, and fish as well as vegetables, grains, fruits, brine and marinades, water and ice. It is a very effective and safe method of

pathogen control.

This process of treating all products before they leave the processor's plant not only provides a low-cost extra level of food safety, but also has resulted in a liability reduction as well as a marketing advantage in promoting "chemical free" products.

The PHI technology has been validated for control of Salmonella, Listeria monocytogenes, Escherichia Coli O157:H7 and Staphylococcus aureus, as well as Mould Yeast and viruses.

### So we Know the Results, but How Does it Work?

The concept behind PHI is to utilize the efficiency of radiation without the traditional problems associated with penetrating radiation such as x-rays and gamma rays. The effectiveness of PHI treatment is basically the same except it does not penetrate packaging or food surfaces.

This is an advantage when treating ground meats, since most meat contamination is on the surface and the grinding operation mixes any surface contamination throughout the product. Aside from ground products, surface contamination is the main concern of food processors. Whole muscle meat and poultry bacteria contamination is virtually always found on

the surface. Meat with microbial contaminants inside the fibre should not make it to the processing facility in the first place.

RGF Environmental Group, the U.S. patent holder for PHI-Cell® Technology, recently introduced an innovative PHI Treatment Tunnel-PLUS. The new tunnel, designed to be placed at the end of the process line just prior to packaging, or in the case of meat processors, prior to grinding, uniquely provides direct 360-degree surface application on all



exposed meat surfaces

resulting in 99.9 per cent surface microbial reduction. It provides final, non-chemical, anti-microbial treatment, and protects products from human error or other cross-contamination events, which may have occurred during earlier processing.

For a look inside the PHI treatment process, please go to http://www.youtube.com/watch?v=wpopIFJPvUw

The PHI treatment, unlike chemicals, does not affect the taste or appearance of the product.

The PHI is also available as an air treatment system and is effective at controlling airborne pathogens and for reducing bacteria and mould on food contact surfaces and throughout food plant environments.

WFP

Bill Svec, vice-president of water and food products RGF Environmental Group



