Glossary

Abbreviations

- **BSE** Bovine Spongiform Encephalopathy
- CAC Codex Alimentarius Commission
- CCIA Canadian Cattle Identification Agency
- **CDC** Centers for Disease Control and Prevention (USA)
- **CEOSC** Canadian Enteric Outbreak Surveillance Centre
- CFIA Canadian Food Inspection Agency
- **CFIS** Canadian Food Inspection System
- **CFISIG** Canadian Food Inspection System Implementation Group
- **CIPHI** Canadian Institute of Public Health Inspectors
- **CIPHS** Canadian Integrated Public Health Surveillance
- CPFSE Canadian Partnership for Consumer Food Safety Education
- **DEFRA** Department for Environment, Food and Rural Affairs (U.K.)
- **EC** European Commission
- **EU** European Union
- **FAO** Food and Agriculture Organization (UN)
- **FDA** Food and Drug Administration (USA)
- FSA Food Standards Agency
- **FSDSS** Food Safety Decision Support System (OMAF computer system)
- **FSEP** Food Safety Enhancement Program (CFIA HACCP based system)
- **FSIS** Food Safety Inspection Service (USDA)
- **GMP** Good Manufacturing Practices
- HACCP Hazard Analysis Critical Control Point
- **iPHIS** National Integrated Public Health Information System (Canada)
- **MNR** Ministry of Natural Resources (Ontario)
- **MOE** Ministry of Environment (Ontario)
- **MOHLTC** Ministry of Health and Long-Term Care (Ontario)

- NMPRC National Meat and Poultry Regulations and Code
- **OFFS** On-Farm Food Safety
- **OFSS** Ontario Food Safety Strategy
- OIMP Ontario Independent Meat Processors

OMAF - Ontario Ministry of Agriculture and Food (previously known as OMAFRA)

- **OPSEU** Ontario Public Service Employees Union
- **OSPCA** Ontario Society for the Prevention of Cruelty of Animals

OVA - Ontario Veal Association

- **RDIS** Reportable Disease Information System (Ontario)
- SMEs Small and Medium Sized Enterprises
- **SOP** Standard Operating Procedures
- **SRM** Specified Risk Materials
- TSE Transmissible Spongiform Encephalopathies
- U.K. United Kingdom
- **UN** United Nations
- U.S. United States
- USDA United States Department of Agriculture
- VTEC Verocytotoxin producing Escherichia coli
- WHO World Health Organization

Glossary

Definitions

Abattoir – A business at which animals are slaughtered and dressed for human consumption.

Abscess – A localized collection of pus in a cavity formed by the degeneration and necrosis (death) of tissue.

Accreditation – Formal recognition of competence to manage and perform a particular activity.

Adulteration – The addition or inclusion of unclean, unwholesome, inferior, impure or foreign materials to a food product.

Ante mortem – Before death (before slaughter).

Antibacterial drug – An antimicrobial drug that is either chemically synthesized (eg. Sulfamethozine) or made by living organisms (eg. Penic illin).

Antibiotic – An antimicrobial drug made by living organisms (e.g. Penicillin) used therapeutically to inhibit the growth of or destroy bacteria and other microorganisms and as growth promotants in animals.

Anti-microbial drug – A drug which either kills bacteria or slows its growth so the animal's immune system will have time to overcome the disease caused by the bacteria.

Aquaculture – A form of agriculture that involves the propagation, cultivation and marketing of aquatic animals (e.g. fish farms).

Audit - The independent examination of records and activities for a process or quality system, to ensure compliance with established controls, policy, and operational procedures, and to recommend any indicated changes in controls, policy, or procedures. An audit can apply to an entire organization or may be specific to a function, process or production step.

Bacteria – Microscopic, single-celled organisms that multiply in numbers by the division of cells.

Biosecurity – The taking of steps and measures to prevent introduction of a disease or microorganism by way of cross-contamination.

Captive bolt stunner or pistol – An instrument that, when activated, drives a bolt out a barrel for a limited distance. The penetration of the bolt into brain tissues renders an animal unconscious, but does not immediately kill the animal.

Certification – The process of validating performance and/or compliance with the criteria and standards established by the certifying organization for issuing a certificate.

Chill rate – The rate at which a product achieves the desired chill temperature.

Codex Alimentarius Commission (CAC) - A commission set up by the Food and Agriculture Organization (FAO) and World Health Organization (WHO) of the United Nations to develop internationally recognized food standards, guidelines and related text such as codes of practices.

Commodity - A specific agricultural or aquaculture product such as beef, eggs, turkey or salmon.

Commodity groups – Organizations that have formed to represent the producers of a specific commodity.

Communicable disease – A disease that may be transferred to food by an infected person and that remains in the food until someone eats it and becomes ill. **Condemned**– Products or ingredients inspected and determined to be unfit for human consumption.

Contamination – The presence of hazards in the food that can be harmful to humans. Hazards may be biological, chemical or physical in nature.

Control measures - Actions and activities that can be used to prevent or eliminate a food safety hazard or reduce it to an acceptable level.

Corrective actions - Actions or measures to be taken when the results of monitoring at the CCP indicate the loss of control.

Critical Control Point (CCP) - A point, step or procedure at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level.

Critical limit - The maximum or minimum value to which a biological, chemical or physical hazard must be controlled at a critical control point to prevent or eliminate the food safety hazard or reduce the hazard to an acceptable level.

Cross-contamination – The physical movement, or transfer, of hazards from one person, object, food or place to another.

Cull animals – Animals or birds that are removed from herds or flocks because they are no longer producing or reproducing.

 \mbox{Curing} – A process of treating meats with salt, nitrates and /or nitrite salts with or without water.

Custom kill or custom slaughter - The slaughter of animals and provision of basic butchering services of a producer's animal for consumption by the owner's immediate family or farm-gate sales.

Deadstock - Dead animal carcasses.

Deboning – The removal of bones from animal carcasses.

Dioxins - Highly toxic chlorinated compounds that are the by-product of incineration or chlorine bleaching.

Disinfectant – A germicide (chemical agent which kills organisms) applied to objects rather than living animals.

Downer – An animal unable to rise and stand on its own volition due to weakness or injury, and is non-ambulatory, prior to slaughter.

Dressing – The processes used to convert animals into a human food product by cleaning and preparing the meat of the carcass.

Drug Identification Number – A coded number that identifies the product and assures the purchaser that the product is approved by the Government of Canada.

Edible – Any material fit to be eaten or determined after inspection to be safe for eating.

Enteric illnesses – A phrase used to refer to various illnesses typically transmitted by a common source (water, food, or person to person) and entering humans orally.

Epidemiology - The study of the incidence, distribution, and control of disease in populations.

Euthanasia – An induced death that is free of pain and distress.

Evisce rate – Refers generally to the removal of the internal organs or entrails of an animal or bird.

Extension Programs – The provision of on-site assistance and education to operators, such as farmers, offered through agents hired by government or educational institutes, as well as resource materials.

Farm gate sales –Sales of meat that take place right at the farm or direct from the farmer.

Fecal (Feces) – Waste matter from bowels. (i.e. manure)

Fermented meat products – Manufactured ready-to-eat raw meat sausages produced by way of a controlled fermentation process.

Flock sheets – Forms that are used by chicken producers on a per flock or lot basis to record information on feed, medication and other information needed for preventative HACCP-based programs, that are submitted to processors.

Food allergen– A substance in food that causes some individuals to experience an immune system response such as an allergic reaction.

Food continuum - The agri-food system starting with production and ending with consumption by the consumer.

Food premises – A facility where food or milk is manufactured, processed, prepared, stored, handled, displayed, distributed, transported, sold or offered for sale, but does not include a private residence.

Food safety objectives (FSO)_- The maximum frequency and/or concentration of a hazard in a food at the time of consumption that provides the appropriate level of protection.

Food spoilage – Chemical, physical or microbial changes in food that makes it unfit for human consumption.

Foodborne illness – Illness caused by pathogenic microorganisms or toxinproducing bacteria, typically ingested by humans through contaminated foods.

Foodborne infection – A foodborne illness that occurs when a living, disease-causing microorganism is eaten along with food.

Good Agricultural Practices (GAPs) and Good Production Practices (GPPs) – Recommended animal husbandry and best management practices.

Halal – An Arabic term, which translated means "permitted". For food to be permissible under Islamic law to be eaten by Muslims, it must come from animals which were slaughtered in a particular manner.

Hazard Analysis Critical Control Points (HACCP) – An internationally recognized and systemic approach to the identification, evaluation, and control of food safety hazards. It places emphasis on preventing food safety hazards from occurring during production, instead of detecting during end product inspection.

HACCP plan - The written document which is based on HACCP principles and which delineates the formal procedures to be followed by an individual plant or establishment.

HACCP records - Records that a food producer or food processor will keep proving that a HACCP program of safe food production is functioning as designed.

HACCP system– Used to refer to all prerequisite programs (premises, transportation and storage, equipment, personnel, sanitation and pest control, health and safety recall procedures and records) and HACCP plans.

Hazard - A biological, chemical or physical agent or factor that has the potential to cause a food to be unsafe for human consumption.

Hazard analysis - The process of collecting and evaluating information on hazards and conditions leading to their presence in the food under consideration, to decide which are significant for food safety and must be addressed in a HACCP plan.

Hormone – A chemical substance produced in the body that has a specific effect on the activity or function of a certain organ.

Inedible waste – Waste generated during food or meat processing considered unfit or not intended for human consumption.

Infectious –Used to describe various pathogenic microorganisms including viruses, bacteria, protozoa and fungi, which are capable of invading and growing in living tissues.

Irradiation – The process of exposing food or other items to radiation of various wavelengths in order to destroy contamination from undesirable organisms.

Livestock – Domestic animals, the meat of which is intended to be used for human consumption.

Lot/batch – A quantity of food produced under identical conditions.

Kosher– Fit to be eaten or used, according to Hebraic or Talmudic dietary or ceremonial law.

Meat and bone meal (MBM) – A product derived from the rendering of deadstock, abattoir waste and other food waste.

Microorganism– Small living organisms, such as bacteria, that are not visible to the naked eye.

Monitoring - Observing or taking measures at a Critical Control Point at prescribed frequencies for the purpose of verification.

Mould – Multi-cellular microorganisms that are often visible to the naked eye as fuzzy or powdery patches.

Nitrites/Nitrates - Nitrite and nitrate salts are food additives used in curing meats. They stabilize red meat colour, inhibit some spoilage and food-poisoning organisms, and contribute to flavour. Nitrates transform into nitrites in meat.

Offal – In red meat species, the edible organs or parts from the thoracic and abdominal cavities and the tongue. In poultry, the inedible waste materials left after the giblet organs are removed.

Organoleptic techniques – Examination by the five senses – sight, touch, smell, taste and hearing.

Parasite – An organism that is dependent on a living host for growth and reproduction.

Pathogen-A microorganism that can cause illness or disease in humans.

Pathogenic – Causing disease or sickness.

Perishable – Used to describe food that deteriorates rapidly.

Pesticide – A substance intended for killing or controlling insects, rodents, fungi or weeds.

Post mortem – After death (after slaughter).

Potable – Water which is fit or suitable for drinking.

Poultry - Chickens, ducks, geese, turkeys, and other birds.

Prerequisite programs - Steps or procedures, including Good Manufacturing Practices (BMPs, GPPs or GAPs) that control the operational conditions within a food establishment (or livestock production unit) allowing for environmental conditions that are favourable to the production of safe food. They provide the foundation for a HACCP system.

Prescription drugs – Drugs restricted to use by, or on the order of, a licensed veterinarian. These drugs require supervision because of toxicity, other potentially harmful effects or need of a more sophisticated method of administration.

Quality Management Program (QMP) – A phrase used to describe the federally legislated fish inspection and control system, that includes procedures, inspections and records, for the purpose of verifying and documenting the processing of fish and the safety and quality of fish processed in, exported from, or imported into Canada.

Recall – A system by which products that may be hazardous to consumers are removed from the marketplace.

Recognition – A term used to identify that an establishment's complete HACCP system has successfully passed a comprehensive CFIA review and recognition audit resulting in official written recognition of the HACCP system by CFIA. It also applies to commodity HACCP-based on-farm food safety programs.

Rendering – A process which is applied to animal raw materials, to cook and separate the materials into sterile fat and protein products such as tallow, meat and bone meal, blood meal, and feather meal.

Residue – When applied to livestock production, this refers to environmental pollutants, pesticides, veterinary drugs or hormones that are present in the tissues of animals at the consumption or pre-consumption stage.

Rework – The correction of a problem with meat or a carcass to salvage the meat or carcass.

Risk – The estimate of the likely occurrence of a hazard.

Ruminant – A mammal that chews its cud, has even toed hooves and a four-chambered stomach, such as a cow, buffalo, goat, deer or llama.

Sanitize – The process of reducing the number of microorganisms on a clean surface to safe levels.

Sector - A specific part of the food continuum such as production, slaughter (also called harvesting), processing, distribution, retail, food service or consumer.

Specified risk materials (SRM) – Parts of bovines which are considered to be capable or most likely to carry the infectious agent for TSEs: (a) skull, brain, tigeminal ganglia, eyes, tonsils, spinal cord and dorsal root ganglia of cattle aged 30 months or older; and (b) the distal ileum of cattle of all ages.

Standard Operating Procedures (SOPs) – Written procedures that are equivalent to prerequisite programs, which describe the various production processes. For livestock producers these often outline specific steps of 'BMP's' or 'GPPs" or 'GAPs".

Sterilization – The destruction of all pathogenic and spoilage microorganisms.

Tallow – One of the products resulting from the rendering of animal carcasses and waste. Also referred to as animal fats and grease.

Third party accreditation - The official recognition of a food safety program across one or more sectors or commodities of the food continuum

by a nationally accepted authority such as a standards organization, usually granted after an audit.

Third party audits - The periodic examination and verification of the food safety program following a system recognized by a nationally accepted authority and conducted by an agent approved by the government.

Toxin – Used to refer to a protein or conjugated protein substance produced by plants, certain animals and pathogenic bacteria that is highly poisonous for other living organisms.

Vaccine – A preparation containing live or killed microorganisms (bacteria or virus) administered to stimulate immunity to a specific disease.

Verification - The application of methods, procedures, tests and other evaluations, in addition to monitoring to determine whether or not a HACCP system is functioning according to the HACCP plan.

Virus – Very small microorganisms that cannot survive on their own and must attach to and invade a living cell (plant, animal or bacterial) to survive and grow.

Wild ruminants - Bison, elk, caribou, deer, moose, musk ox, mountain goats and mountain sheep, which were not raised on a farm.

Withdrawal time or period – The recommended time between last drug treatment and the slaughter of an animal for food. This is the time necessary to ensure that residues are not present in meat obtained from the carcass.

Zoonoses/zoonotic – Diseases and infections which are transmitted naturally between vertebrate animals and humans.

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Appendix A - Order-In-Council



Order in Council Décret

On the recommendation of the undersigned, the Lieutenant Governor, by and with the advice and concurrence of the Executive Council, orders that: Sur la recommandation du soutsigné, le lieutenant-gouverneur, sur l'avis et avec le consentement du Conseil des ministres, décrète ce qui suit :

WHEREAS it has been determined that it is desirable to authorize under the common law and pursuant to the prerogative of Her Majesty the Queen in right of Ontario and in the discharge of the government's executive functions, an individual to review, on a systemic basis, the mest regulatory and inspection regimes, including free standing meat processors, in Ontario in order to strengthen public health and safety and business confidence;

AND WHEREAS it is desirable to set out the terms of reference for such a review;

NOW THEREFORE the Honourable Mr. Justice Roland J. Haines be authorized to conduct such a review;

AND THAT the terms of reference for Mr. Justice Haines's review be as follows:

Mandate

- 1. Mr. Justice Haines shall:
 - (a) review regulatory standards, including the existing legislative scheme, and the interface among inspection, compliance and enforcement in the meat regulatory and inspection regimes, and those relating to free-standing meat processors. This should include a review of the roles and responsibilities of the Ministry of Agriculture and Food, Ministry of Natural Resources, Ministry of Health and Long-Term Care, and local health units;
 - (b) conduct inter-jurisdictional analysis and identify best practices; and
 - (c) make recommendations on approaches to strengthen regulatory and legislative systems, including strategies for accelerating harmonization with the federal government.
- Mr. Justice Haines may request any person to provide information or records to him, and hold public and/or private meetings.
- 3. Mr. Justice Haines shall perform his duties without making any findings of fact or misconduct, or expressing any conclusions or recommendations regarding the civil or criminal liability of any person or organization, and without interfering in any investigations or criminal or other legal proceedings. In particular, consideration must

O.C./Décret 1/ 2004

be given to the deferral of interviews with potential witnesses in order to maintain the integrity of those processes.

4. Mr. Justice Haines shall deliver his final report containing his findings, conclusions and recommendations to the Attorney General on April 30, 2004 or, if requested by Mr. Justice Haines, at such later date approved by the Attorney General. In delivering his report to the Attorney General, Mr. Justice Haines shall be responsible for translation and printing and shall ensure that the report is available in both English and French, in electronic and printed versions, and in sufficient quantities for public release. The Attorney General shall make the report available to the public.

Resources

- 5. Within an approved budget, Mr. Justice Haines may retain such counsel, staff, investigators, and expert advisers, as he considers necessary in the performance of his duties at rates of remuneration approved by the Ministry of the Attorney General. Persons retained shall be reimbursed for reasonable expenses incurred in connection with their duties in accordance with Management Board of Cabinet Directives and Guidelines.
- 6. Mr. Justice Haines shall follow Management Board of Cabinet Directives and Guidelines and other applicable government policies in obtaining other services and goods he considers necessary in the performance of his duties unless, in Mr. Justice Haines's view, it is not possible to follow them.
- All ministries, Cabinet Office, the Premier's Office, and all boards, agencies and commissions of the government of Ontario shall, subject to any privilege or other legal restrictions, assist Mr. Justice Haines to the fullest extent so that he may carry out his duties.

Recommended		•
	mey General	
Approved and Ordered	JAN 9 / 2004	
	Date	- (

Concurred

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Appendix B - Aylmer Meat Packers Inc.– Its History with Ontario Ministry of Agriculture and Food

Introduction

Until the provisional suspension of its licence on August 21, 2003,¹ Aylmer Meat Packers Inc. (AMP) was a busy abattoir which slaughtered cattle and hogs and further processed and sold meat derived from them. It was known as a plant which specialized in non-ambulatory livestock described in the trade as "downers." The day before the provisional suspension and at the request of an investigator of the Ministry of Natural Resources (MNR), a justice of the peace issued six search warrants in respect of various locations linked to AMP amid allegations that AMP had caused meat from uninspected animals to enter the human food chain. The search warrants were executed on August 21 and 22, 2003.²

While little is yet known about the search and any resulting seizure, shortly after the execution of the search warrants, food products distributed by AMP became the subject of health hazard alerts and of a mandatory food recall order.³

Actions undertaken and the nature of the allegations in respect of AMP created a firestorm of publicity, concern and criticism of the provincial government's delivery of its oversight function. Undoubtedly, the fact that the events surrounding AMP unfolded during a provincial election campaign contributed to the strong political reaction. However, to suggest that AMP was a significant source of concern for that reason alone would be wide of the mark. The alerts and recall order had to be widely distributed to be effective. Their issuance created widespread fear that the health of an untold number was at risk and the fact that the allegations related to a long standing member of a regulated industry made criticism inevitable.

³ The website of the Canadian Food Inspection Agency,

www.inspection.gc.ca/english/corpaffr/recarapp/2003/20030824e.shtml contains the various health hazard alerts, updates and corrections is sued by that Agency. The first health hazard alert was issued August 24, 2003 and indicated that a mandatory recall order had been issued.

¹Ontario, *Meat Inspection Tracking Statistics*, (Ministry of Agriculture and Food, 2003).

 $^{^{2}}$ R. v. Toronto Star Newspapers Limited et al. (2003), 67 O.R. (3d) 577 at 579 (C.A.).

The handling of AMP specifically and meat regulation and inspection more generally were, almost immediately, the subject of detailed analysis, criticism and calls for a full public inquiry⁴. Many have alleged, both publicly⁵ and privately, that AMP is the most telling example of a flawed system which, as presently constituted, provides little assurance that Ontario's meat supply will be safe or secure. While I believe those allegations to be overreaching, the experience provides additional support for the comments and recommendations contained in the chapter on Compliance and Enforcement and the chapter on Communications. Certainly, the events of August, 2003 and their aftermath demonstrate the vulnerability of the entire meat industry to even an isolated case of alleged wrongdoing. For that reason alone, AMP and its history require attention.

Pre - 2003

Information provided by the Ministry of Agriculture and Food (OMAF) with respect to the status of the licences of and a summary of audit results for all provincially licensed abattoirs for the period from 2000 to 2003 confirmed the provisional suspension of AMP's licence on August 21, 2003.⁶ Beyond recording that fact, and presumably because of the ongoing police investigation and the terms of the Order in Council authorizing the Review, the information provided by OMAF did not disclose that there had been any prior problems with respect to AMP's business activities.

Information obtained by the Review from other sources suggested that AMP had been the subject of Food Inspection Branch hearings during the period from 1991 until 2003.⁷ The Review also learned from other sources that persons connected to AMP had been the subject of other enforcement

⁴ See for example, R. Cribb, *Penalties Rare for Bad Meat*, The Toronto Star (21 December 2003), and H. Daniszewski & R. Richmond, *Meat Check Disarray Denied*, The London Free Press (28 August 2003).

⁵ The Ontario Public Service Employees Union's Submissions and Recommendations to the Review into the Meat Regulatory and Inspection Regimes in Ontario, dated March, 2004.

⁶ While audit results for 2003 were provided to the Review for provincially licensed abattoirs, no results for AMP for that year were communicated. Presumably AMP's audit for that year had not occurred at the time of the provisional suspension of its licence.

⁷ The Review received, from another source, a lengthy listing of regulatory and non-regulatory proceedings, and obtained a copy of a decision of the Director, Food Inspection Branch, dated May 13, 2002 relating to AMP which is referred to below.

proceedings as a result of actions taken during the course of AMP's business.

A partial chronological listing of the regulatory and non-regulatory matters identified to the Review involving AMP or persons involved in AMP's business follows. For convenience, the listing includes items that occurred in 2003 although they are discussed in more detail in the next section.

Date	Regulatory or Non-Regulatory Proceeding and Party	Substance of Allegation	Disposition
August 28, 1991	Regulatory, AMP	Threat against meat inspector.	AMP's licence was provisionally suspended until September 17, 1991 at which time the licence was reinstated.
December, 1991 until late February, 1992	Regulatory, AMP	Failure to comply with a meat inspector's direction with respect to the disposal of a condemned animal.	Proceedings were protracted and on February 6, 1992 AMP's licence was provisionally suspended. On February 26, 1992, AMP's licence was reinstated subject to the preparation and execution of an inspection protocol.
September 21, 1994	Regulatory, AMP	Threats against meat inspection staff.	Licence was provisionally suspended and reinstated on October 3, 1994 on condition that an identified representative of AMP be absent while meat inspectors and veterinarians were on site.
Late March 1995	Non-Regulatory, Principal of AMP	Obstruction of inspector and removal of detained product without permission.	Two counts withdrawn; guilty plea entered by principal of AMP on a third count; fine of \$2,000 imposed.
April 10, 1995	Non-Regulatory, Employee of AMP	Obstruction of inspector	Employee of AMP pled guilty and fined \$1,500.

Date	Regulatory or Non-Regulatory Proceeding and Party	Substance of Allegation	Disposition
June 1995	Non-Regulatory, Principal of AMP	Incident arising from the circumstances resulting in the provisional suspension of AMP's licence on September 21, 1994.	Peace bond ordered and other terms and conditions imposed.
July 22, 1997	Regulatory, AMP	Bacteriological contamination.	Licence provisionally suspended. Operating agreement prepared and signed in late July, 1997 resulting in the reinstatement of AMP's licence.
August 1998	Regulatory, AMP	Illegal slaughter	Warning given.
September 6 to October 30, 1998	Regulatory, AMP	Obstruction of meat inspector and disposition of carcass of animal illegally slaughtered	Carcass condemned; finding of obstruction made; warning given.
February 1999	Regulatory, AMP	Obstruction and breaking detention	Hearing adjourned without a definite return date on the basis of the preparation and execution of a memorandum of understanding in March, 1999.
July 1997 to November 1999	Non-Regulatory, Principal of AMP	Assault of an OMAF veterinarian and a Ministry of Labour representative.	In November, 1999, a principal of AMP found guilty of assault and obstruction and fined. Conviction related to July, 1997 incident.

Date	Regulatory or Non-Regulatory Proceeding and Party	Substance of Allegation	Disposition
April 2002 to May 2002	Regulatory, AMP	Multiple animal welfare violations including improper stunning, inhumane handling and transportation of livestock.	Licence retained on conditions relating to the provision of further training, improved equipment maintenance, provision of adequate animal shelter, execution of a written protocol with AMP's suppliers and truckers transporting compromised livestock and an OMAF animal welfare re-audit.
January 2003	Non-regulatory, AMP	Charged with collecting a dead animal without a licence under the <i>Dead Animal</i> <i>Disposal Act.</i>	Acquitted.
January to August 2003	Regulatory, AMP	Over 40 occasions, received non- ambulatory animals without required veterinary certificates.	No sanction beyond holding and testing of animals. On some occasions, animals condemned.
August 21, 2003	Regulatory, AMP	Breach of s. 2(4) of the <i>Meat Inspection</i> <i>Act</i> (which states that no person shall engage in the production, processing, handling or storage of a meat product at a plant except in accordance with the regulations)	The licence of AMP was provisionally suspended.

As evidenced by the chronology, AMP's business practices were the subject of ongoing concern on the part of OMAF and others. In addition to the formal regulatory and non-regulatory proceedings, OMAF also started to investigate other allegations against AMP involving the alleged processing of deadstock, the alleged alteration of samples and illegal slaughter arising from complaints made in 1999. While OMAF's then existing Investigative Unit undertook some investigation of these allegations, its precise scope and its outcome are unknown.⁸

For many years, OMAF has, either through its own personnel or more recently through contracted veterinarians, audited provincial licensees in relation to food safety, animal welfare and occupational health and safety. While limited audit results have been provided to the Review, long continuing deficiencies with respect to AMP were identified. In 2000 and 2001, AMP received, according to OMAF, a respectable audit rating,⁹ The Corrective Action Plans for 1999 and 2001 obtained by the Review evidenced, however, long and concerning lists of corrective actions in each of the food safety, animal welfare and occupational health and safety areas.

In December, 2001, the Ontario Society for the Prevention of Cruelty to Animals (OSPCA) commenced an investigation of an animal welfare complaint. While no charges were ever laid, the OSPCA obtained a search warrant which was executed on February 1, 2002. Extensive concerns with respect to AMP's animal handling practices were featured in the decision of the Director of the Food Inspection Branch released May 13, 2002. The Director heard evidence from the veterinarian who conducted AMP's 2001 annual audit, and two meat inspectors, an area manager, a regional veterinarian and a program manager all employed by OMAF. They provided graphic and troubling evidence concerning improper stunning techniques, malfunctioning stunning equipment, overcrowding, exposure to the elements and inhumane handling. The evidence established that between March 4, 2002 and April 22, 2002:

(a) a number of hogs had regained consciousness before death;

⁸ On April 26, 2004, OMAF advised the Review that annual reports of its chief investigator for the period from 1992 to 1999 were not prepared and that any log books maintained thereby had not been located.

⁹ The Review was advised by OMAF that in 2000, AMP received an audit rating of 82% whereas the Toronto Star reported, on November 28, 2003 in an article entitled "Meat Packer had Prior Violations" that AMP had received an audit rating of 59% in 2000-2001. Thereafter, the audit grade changed from a numerical number to a letter-based system. OMAF advised the Review that AMP received a "B" audit rating in 2001 and 2002. Copies of the actual audits were not provided.

- (b) segregated pens for injured livestock did not exist;
- (c) a maintenance program for stunning equipment had not been established;
- (d) sheep destined for *halal* slaughter had been dragged across the floor while alive;
- (e) cattle had been subjected to multiple unsuccessful stunning attempts;
- (f) truckers walked on top of hogs in a trailer;
- (g) hogs were prodded excessively while unloaded;
- (h) non-ambulatory livestock was dragged off trucks;
- cattle and market hogs were allowed to walk on non-ambulatory cows;
- (j) multiple dead hogs were found in a group of downer hogs with no indication that access to water has been provided.

Despite those observations, AMP's licence had not been provisionally suspended. AMP's sole witness blamed many of the obvious problems on malfunctioning new equipment, an inability to observe the activities of independent truckers during unloading and expressed an intention to take remedial action.

In his decision, the Director observed that:

An operator of a plant that is engaged in the slaughter of debilitated and infirm livestock, must take extraordinary measures to ensure that all animals are handled in the most humane manner possible... In addition, the operator must ensure that all staff are properly trained in livestock handling and operation of stunning equipment. Any other individuals such as truck drivers who are unloading livestock must adhere to the same principles of animal welfare...

The Director found that:

. . . the overall facilities and operational practices of Aylmer Meat Packers Inc. are not in compliance with the

regulations nor are they in conformance with good livestock handling practices . . . There can be no tolerance for practices that cause unnecessary pain or distress to livestock in Ontario licensed abattoirs.

Notwithstanding a lengthy history of obstruction and verbal and physical confrontation, the Director suggested "[w]hen non-compliance is observed, inspectors should communicate with the plant operator or someone designated by him." The Director was critical of inspectors who "often tried to deal directly with truckers or employees and noted "[t]he plant operator was not informed in a timely manner in all cases." Despite obvious reservations, the Director was encouraged that "the operator had made 'some adjustments' in practices . . . to ensure animal welfare," had "responded to inspector orders for corrective action," "by the investments that Aylmer Meat Packers Inc." had made in equipment, its promise to continue upgrading facilities and in the stated willingness of plant management to work with the Ministry to make ongoing improvements that protect animal welfare.

AMP was ordered to provide documented training, establish a documented maintenance program, enter into a written protocol with suppliers and truckers of compromised livestock, provide adequate shelter and submit to an animal welfare audit within 30 days. AMP's licence was not suspended, or otherwise affected, and no penalty of any kind was imposed. I am unable to say whether AMP complied or not.

AMP's 2002 audit resulted in another long and detailed Corrective Action Report. It identified 41 items categorized as "major," 42 as "serious," 9 as "moderate," and one as "minor." The Corrective Action Report evidenced a wide range of concerns, including but not limited to, those which could compromise food safety.¹⁰ It did not, however, refer to those issues addressed in the May 13, 2002 decision.

¹⁰ The 2002 Corrective Action Report included, in the "major" category, these comments: "Not all meat processing and handling equipment is made of approved material," "The operator does not ensure that employees use hygienic food handling practices;" "Condensation is not adequately controlled in operational areas;" "Not all dressed carcasses are adequately trimmed to remove contamination before chilling;" "Beef by-products harvesting is not hygienic and/or

Concerns with respect to AMP's activities existed elsewhere in Ontario's regulatory system as well. Less than two months later, a provincial officer acting under the Ontario Water Resources Act³¹ required that AMP and its officers and directors take action to prevent the discharge of liquid waste from a beef feed lot and transfer facility in the County of Brant. It was subsequently alleged that the terms of the order had not been fulfilled and AMP and its officers and directors were charged under s. 107(2) of the Ontario Water Resources Act. I understand those charges remain outstanding. 12

The Events Leading up to the Provisional Suspension of AMP's Licence

In January, 2003, a charge laid against AMP by the MNR¹³ pursuant to the provisions of the *Dead Animal Disposal Act* (DADA)¹⁴ was tried by a justice of the peace in Owen Sound. The charge was laid as a result of an allegation that AMP had collected and transported a dead animal despite the fact that AMP did not, and as a licensed abattoir could not, hold a licence to collect or to transport animals which had already died on-farm. The charge was dismissed as the evidence led at trial suggested that the animal in question may have been alive at the time of collection.¹⁵

Given the nature of AMP's business, the transportation of non-ambulatory animals was common and permitted so long as the legislative conditions were fulfilled 16

not all parts are approved and/or properly prepared;" "During storage and handling, potential contamination of ready -to-eat meat products is not controlled;" "There is contact between cooked and raw meat products during processing and/or packaging and/or storage." Ontario Water Resources Act R.S.O. 1990. c. O.40.

¹² Ministry of Environment, News Release, Aylmer Meat Packers Inc. and Owners Charged With Failing to Comply with Environmental Order (21 January 2004). R. Cribb, 'Deadstock' Focus of Meat Plant Probe, The Toronto Star (27 August 2003), reported that while under appeal, AMP had been convicted in December, 2002 of improperly discharging abattoir waste and fined \$30,000.

¹³ The MNR obtains its authority from a Cooperative Agreement and Service Level Agreement entered into with OMAF.

¹⁴ Under the *Dead Animal Disposal Act*, R.S.O. 1990, c. D.3, no person shall collect or transport dead animals without a licence (s. 5). Abattoirs are prohibited from holding a licence under the DADA, s. 13(b). ¹⁵ The Legal Services Branch of the MNR provided information to the Review with respect to

the trial. Apparently reasons were delivered orally and were not transcribed.

¹⁶ O. Reg. 732/94 and R.R.O. 1990, Reg. 729, s. 17.1.

A review of OMAF's 2003 incident reports for non-ambulatory livestock revealed that there were sixty-nine incidents in which non-ambulatory cattle arrived at a provincially licensed abattoir without the required veterinarian certificates or with improper veterinarian certificates. Forty-nine of those incidents involved cattle arriving at AMP.¹⁷ Beyond holding and conducting tests on the arriving animals and, on occasion, condemning the animals, no sanction appears to have been imposed.

The informations utilized to obtain the AMP search warrants issued on August 20, 2003¹⁸ and executed shortly thereafter make a number of allegations although no charges have been laid against AMP to date. The informations allege that:

- AMP was the subject of surveillance on fourteen occasions between May 11 and August 20, 2003;
- on eight occasions, no suspicious activities took place;
- on five occasions between June 6 and July 17, 2003, dead cattle were unloaded and taken into the AMP killing room after meat inspection staff had left. A similar activity was alleged to have occurred on August 20, 2003;¹⁹
- meat from the dead animals was "quickly processed" and then "mixed together with legitimate meat products" despite the fact that meat from dead animals "may be diseased, laden with antibiotics or contain high levels of faecal (sic) contamination (E. coli 0157:H7) that can produce serious health concerns, including death."²⁰

Based on this information, the search warrants were issued and AMP's premises were searched on August 21 and 22, 2003. On the basis that it was necessary for the "immediate protection of the safety or health of any person

¹⁷ Those were the reported incidents up to August 21, 2003 when AMP's licence was provisionally suspended.

¹⁸ A copy was obtained by the Review subject to the editing ordered in *R*. v. *Toronto Star Newspapers Limited et al., supra* note 2. All of the informations are reported to be virtually identical.

 $^{^{19}}$ O. Reg. 632/92, s. 55(2) prohibits the taking of an animal into the killing room unless the animal received an *ante mortem* inspection and was approved for slaughter by an inspector.

²⁰ Informations to obtain search warrant, pp. 14-15, para. 38.

or animal or the public," AMP's licence was provisionally suspended on August 21, 2003.²¹

The Aftermath of the Provisional Suspension of AMP's Licence

Due to the ongoing investigation, no other information was sought or obtained by the Review with respect to AMP's provisional licence suspension or any possible enforcement action. Given the fact that there were food safety concerns, however, it is important to summarize the effect of the allegations and the response to them.

While the circumstances are unknown, the MNR investigation would have been initiated at OMAF's request.²² Undoubtedly, therefore, OMAF was aware of the concerns of the MNR investigators but to what extent OMAF was aware of the progress of the investigation or of the health concerns before August 21, 2003 is unknown.²³

Neither MNR nor OMAF have any food recall power and no jurisdiction in respect of free standing meat processors or retail locations. In order to effect a food recall or to attempt to identify, locate and detain product that may have left the AMP plant, the assistance of the Ministry of Health and Long-Term Care (MOHLTC) and the local health units provincially and, federally, the Ministry of Agriculture and Agri-Food and the Canadian Food Inspection Agency (CFIA) is required.

On August 24, 2003, the CFIA with the stated approval of the acting Chief Medical Officer of Health for Ontario, warned consumers not to consume beef or beef products which originated from AMP because they were believed to pose a public health risk. The CFIA indicated that the Minister of Agriculture and Agri-Food had issued a mandatory recall order requiring all persons selling, marketing or distributing AMP beef or beef products to recall them.²⁴ The CFIA attached lists of stores, which it later updated and

²¹ The wording is drawn from *Meat Inspection Act (Ontario)*, R.S.O. 1990, c. M.5, s. 5(2).

²² As required by the provisions of the Cooperative Agreement and Servic e Level Agreement entered into between OMAF and MNR. ²³ Although pursuant to the Cooperative Agreement and the Service Level Agreement, MNR

has a contractual obligation to advise OMAF of the status of investigations from time to time. ²⁴ Posted on the CFIA w ebsite <u>www.inspection.gc.ca</u> on August 24, 2003.

corrected, that were affected by the recall. News reports suggested that CFIA officials indicated that they had first heard of the concerns which resulted in the health hazard alert and mandatory food recall order on August 22, 2003.²⁵ That report is consistent with the timing of the mandatory food recall. It is also consistent with the provincial experience.

The Elgin-St. Thomas Health Unit in which AMP was physically located, was contacted by OMAF by telephone approximately mid-afternoon on August 21, 2003. That initial notification provided the local health unit with basic information and communicated OMAF's concern that a food safety issue existed in relation to beef products.

The MOHLTC first learned of OMAF's concerns the following day and immediately advised all local health units of the unfolding situation and asked that health units review any unusual enteric diseases.

On August 24, 2003, the MOHLTC issued its own public health advisory recommending that consumers not eat any meat products which originated from AMP or that may have used AMP beef in their production. The MOHLTC suggested that the public health risk was low even if such products had been consumed, so long as they were properly cooked. The MOHLTC also provided educational information designed to inform readers of the basic symptoms of food-poisoning and food-borne illnesses. Its notice was updated the next day.

The update repeated the cautionary message expressed before, advised the public of the provisional suspension of AMP's licence, indicated that a criminal investigation was underway at the instance of the Ontario Provincial Police (OPP) and advised readers that there had been no reports of illness associated with the consumption of products from AMP.

On August 27, 2003, OMAF, without reference to AMP, issued a news release outlining the nature and purpose of OMAF's meat inspection system.

²⁵ R. Cribb, *10 Dead Stock Cases: Source*, The Toronto Star (29 August 2003).

On that same day, the Ministry of Community Safety and Correctional Services released a statement of Dr. James Young, the Commissioner of Public Safety and Security, with respect to the AMP situation. Dr. Young indicated that he had been appointed by the Premier that day to coordinate, on behalf of the Government of Ontario, an investigation into issues arising from the AMP situation. The statement was clearly designed to allay public concern by stressing that the difficulties with respect to AMP appeared to be limited to beef and beef products and by indicating that less than one percent of Ontario's meat supply was processed there.²⁶

On August 28, 2003, the office of the Premier of Ontario issued a press release announcing that a former Deputy Solicitor General and Deputy Minister of the Environment had been asked to recommend improvements to processes and tools used to investigate safety in the food industry. The press release confirmed that Dr. Young had been requested to report on the day-to-day issues regarding the AMP situation. The Premier said, "We cannot let one situation under investigation diminish the confidence we have in so many dedicated and professional members of the food industry."

A further press release was issued by the Ministry of Community Safety and Correctional Services on September 8, 2003. It reported that extensive testing of products from AMP had been completed by the University of Guelph's laboratory services division and quoted Dr. Young as reporting that preliminary results suggested recalled meat products from AMP posed "minimal risk to the public." While the press release indicated that samples had been randomly collected and tested in accordance with protocols established by the CFIA, the press release did not indicate whether or to what extent samples had been obtained and tested by others.

On September 15, 2003, the OPP issued a news release advising the public of a hot line number that had been established for those wishing to provide information concerning AMP's operations. The OPP indicated that it had commenced its investigation into possible criminal wrongdoing after receiving a request from Dr. Young on August 27, 2003.

²⁶ I suspect this refers to 1% of meat processed at provincially licensed abattoirs. The actual percentage is unknown. AMP was then one of over 200 provincially licensed abattoirs.

The CFIA, which was charged with the task of monitoring the effectiveness of the mandatory recall order in conjunction with the MOHLTC and local public health units, continuously updated, corrected and consolidated health hazard alerts until September 16, 2003.²⁷

Press coverage of the unfolding events was substantial.²⁸ Writers suggested that.

- provincial standards were different from and deficient in • comparison to those in federal facilities;²⁹
- provincial oversight was lacking given AMP's history of complaints;³⁰
- interaction between OMAF and the MNR was lacking:³¹ •
- the AMP situation was a product of budget cuts, lack of regulatory oversight and a history of ignoring concerns expressed by inspectors and auditors:32
- concerns with AMP were not limited to meat production given the commencement of an investigation by the OSPCA concerning animal welfare issues and the fact that AMP and its principals were the subject of a number of charges under environmental legislation;33

²⁷ Two updates were released – August 25 and a correction was issued August 27, followed by a consolidated update on that same day, an educational piece in the form of questions and answers was released August 29, after a further correction and update were issued August 28, further updates were released August 29 and 30, 2003, a further correction on September 2 with final updates released September 5 and 16, 2003.

³ Articles appeared in newspapers throughout the province.

²⁹ See for example, R. Cribb, *Testing Standards Vary for Plants*, The Toronto Star (27 August

^{2003).} ³⁰ R. Cribb, *Deadstock' Focus of Meat Plant Probe*, The Toronto Star (27 August 2003); H. Daniszew ski, Packer Faces Stiff Penalties, The London Free Press (29 August 2003); and P. Waldie, Aylmer Warnings Ignored, Inspectors Say, The Globe and Mail (5 September 2003).

³¹ Attributed to Premier Eves in R. Cribb, *10 Dead Stock Cases: Source*, The Toronto Star (29 August 2003).

³² R. Cribb & R. Brennan, *Processing Plants Pose Health Risk: Document*, The Toronto Star (11 September 2003); P. Waldie, Aylmer Owner has Troubled History, The Globe and Mail (6 September 2003): and H. Daniszewski, Packer Faces Stiff Penalties, The London Free Press (29 August 2003). ³³ R. Cribb, *Call for Ministers to Resign*, The Toronto Star (30 August 2003); P. Waldie, *Aylmer*

Owner has Troubled History, The Globe and Mail (6 September 2003).

- systemic failures existed including a lack of regulatory supervision of free standing meat processors, inconsistencies in food handler training requirements with no provincial standard existing and municipal requirements varying across the province,³⁴
- systemic failures were acknowledged by the regulator itself as evidenced by OMAF's April 2002 cabinet submission. It was said to outline deficiencies in the meat inspection system which followed "the Walkerton pattern." Existing legislation was criticized as being unresponsive to technological advances, industry initiatives and market demands and the failure to develop regulations to bring life to the *Food Safety and Quality Act, 2001* despite its proclamation in December 2001 was assailed.³⁵

The intense media coverage continued for weeks.³⁶ On September 2, 2003, the Crown sought, on a without notice basis, an order sealing all information in or relating to the AMP search warrants on the basis that disclosure could identify a confidential informant and jeopardize the ongoing criminal investigation.

A member of the media was present on the return of the Crown's application and requested an adjournment so that counsel for the media could attend and offer opposition. The request was denied and a sealing order was granted.³⁷

Various media outlets combined to successfully overturn the sealing order. On September 24, 2003, the Superior Court of Justice directed that the informations used to obtain the search warrants be made public subject to

³⁶ See for example, M. Jimenez, *Officials probing meat-related illnesses*, The Globe and Mail (1 September 2003); C. Sorenson, *What the Butcher Doesn't Know Can Hurt You*, The Toronto Star (28 September 2003); J. Sher, *Aylmer Processed Dead Stock, Warrant Says*, The London Free Press (24 October 2003); and R. Cribb, *Penalties Rare for Bad Meat*, The Toronto Star (21 December 2003). AMP was also raised whenever other meat related issues were discussed. See for example, K. Harries & Luke Hendry, *Questionable Meat Sold in Eastern Ontario Cities*, The Toronto Star (9 October 2003) and *Meat Safety: Is it Safe to Eat Canadian Beef?*, CBC News Online (29 December 2003), available from

http://www.cbc.ca/news/background/madcov/meatsafety.html [accessed 19 May 2004].

³⁴ R. Cribb, *Food Handler Training 'is essential,' Tories told*, The Toronto Star (12 September 2003).

 ³⁵ R. Cribb, Tories Fail to Act on Meat Warning, The Toronto Star (11 September 2003); and J. Sher, Ministry Accused of Inaction, The London Free Press (12 September 2003).

⁷ Described in *R.* v. *Toronto Star Newspapers Limited et al.*, *supra* note 2.

editing designed to protect the informant's identity. The Crown's appeal was heard by the Court of Appeal on an expedited basis. Two additional paragraphs were ordered to be excluded.³⁸

As outlined, while a great deal of media attention focussed on the AMP operation and the provincial government's oversight of that operator, a much wider range of issues was raised and examined. The adequacy and effectiveness of the regulatory scheme as a whole was put into question, perceived failures were exposed and targets for the placement of blame sought. It was only later that there was any questioning of whether the health hazard alert and mandatory food recall order should have been issued at all. In the relative calm of the ensuing months, there was limited recognition of the possibility that AMP's customers may have suffered damage to their reputation and business in circumstances where proof may have been lacking that any portion of the recalled product in fact constituted a health hazard.³⁹

AMP is a dramatic illustration of conflicting tensions and interests.

From the side of those investigating alleged wrongdoing, there is a fear that communication can occur too early when suspicion borders on speculation or beyond that but before needed evidence is in hand. If communication occurs too early, investigators fear that their investigation may do no more than stop illegal activity temporarily and drive it further underground. At worst, investigators fear confidential information may fall into the wrong hands and jeopardize the safety of the investigators themselves. Further, there is an obvious risk that premature communication of suspicion may precipitate erroneous allegations of wrongdoing and unfairly jeopardize the businesses of those being investigated and those with whom they deal.

Those concerned solely with food safety believe that communication should occur at the first instant there is a suggestion that harm may be occasioned

³⁸ Ibid.

³⁹ One such article is R. Cribb, Meat Recall Left Bad Taste for Business in Middle, The Toronto Star (22 December 2003). Earlier the meat sample results had been reported in a Canadian Press release, Aylmer says it's gratified test shows meat products likely safe for humans, (9 September 2003), available from <u>http://www.canoe.ca/CNEWS/Canada/2003/08/25/pf-168700.html</u> [accessed 19 May 2004].

to a consumer. They believe that steps must be taken to ensure the removal of food that is or which may be unwholesome until concerns of contamination are eliminated. Allowing product that is suspected to be unfit for human consumption to be distributed or consumed in order to obtain better evidence and a greater chance of conviction exposes the public to sickness or even, in extreme cases, to death and taking that risk, no matter how small, is viewed by many as simply unacceptable.

Those tensions yield no easy answer but must be addressed. Those responsible for enforcement and those responsible for the protection of public health must have in place a current, coherent and comprehensive protocol which represents a fair balance of enforcement and safety concerns. The issues exposed by AMP are discussed throughout this Report.

Present Status of AMP

The provisional suspension of AMP's licence appears to continue.⁴⁰ On the non-regulatory side, the Review understands that the OPP investigation continues. The MNR is no longer acting in respect of AMP and indeed the statutory time limit for the laying of charges by that Ministry has passed.⁴¹ From published reports, the Review understands that legal proceedings have been commenced by AMP against the federal and provincial governments.⁴²

⁴⁰ Although, technically, AMP licence expired March 31, 2004. In the usual case, OMAF will "deem" the licence to continue until a hearing is held.

⁴¹ See the *Provincial Offences Act*, R.S.O. 1990, c. P.33 as amended, s. 76(1) which provides (insofar as the MIA and DADA are concerned) that a proceeding shall not be commenced, absent the consent of the defendant, after six months after the date on which the offence was, or is alleged to have been, committed.

⁴² As reported by the media. See J. Sher, Aylmer Staff Sue OPP, Province, The London free Press (24 June 2004) which suggests certain employees of AMP have recently initiated proceedings.

Appendix C - Wallace Beef Inc.

Background

Wallace Beef Inc. (Wallace Beef) started operations as a provincially licensed slaughter plant on premises at the Pittsburgh Institution leased from the business arm of the Correctional Service of Canada (Correctional Services) in or about 1995.

Joyceville Institution is a medium security correctional institution on 640 acres between Highway 15 and the Rideau Canal, approximately 20 kilometres northeast of Kingston which officially opened in 1959. Pittsburgh Institution is adjacent to Joyceville Institution which opened in 1963 as the "Joyceville Farm Annex." The facility is minimum security with slightly over 190 inmates and was designed to manage a herd of thirty beef cattle and an abattoir which produces meat for Joyceville Institution and other area prisons. Today, Pittsburgh Institution has an agri-business which includes cattle, vegetable gardens and a greenhouse.¹

Joyceville Institution and Pittsburgh Institution are operated by Correctional Services. The head of Correctional Services, the Commissioner of Corrections, reports to the Minister of Public Safety and Emergency Preparedness of the federal government.

Wallace Beef was issued a licence under the *Meat Inspection Act* (Ontario) by the Director of the Food Inspection Branch of the Ontario Ministry of Agriculture and Food (OMAF). The operations of Wallace Beef were regulated under the *Meat Inspection Act* (Ontario) as administered by OMAF and, although a commercial operation operated by a private businessperson, provided training to inmates of the institution.

Wallace Beef is reported to have utilized between twelve to fifteen inmates to staff the plant who worked in the plant as part of an apprenticeship/rehabilitation program designed to train inmates for

¹ Correctional Service of Canada, *Institutional Profiles: Pittsburgh Institution*, available from <u>http://www.csc-scc.gc.ca/text/facilit/institutprofiles/pittsburgh_e.shtml</u> [accessed 28 April 2004].

employment in a variety of work sectors.² Wallace Beef paid approximately \$1.50 per hour toward the wages of the inmates and had four staff other than the prison inmates.³

The abattoir conducted custom slaughter for local farmers and sold meat to local butchers, institutions and restaurants. It also sold meat to the public at a retail counter on the premises in addition to supplying meat to federal correctional facilities.⁴ The plant operated around three to four days per week slaughtering less than fifty cattle, sheep and pigs each week.⁵

OMAF gave Wallace Beef a grade of 82% on its compliance rating for the year ending March 31, 2001 and "A" audit ratings for the years ending March 31, 2002 and March 31, 2003. The last annual audit was completed within three weeks of the closure of the plant. An "A" rating is given to plants which are "meeting regulatory requirements"⁶.

² Owners of prison-run plant say meat is safe, CTV.ca News Staff (9 October 2003), available from <u>http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/1065703668405</u> 13 [accessed 1 April 2004]; *Meat from prison-run plant sold to public*, Canadian Press (8 October 2003), available from

http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/1065628673366_61037873 [accessed 1 April 2004]; *Meat from prison-run Joyceville plant sold to public in Ontario, maybe Quebec*, Canadian Press, M. Habib (8 October 2003), available from

http://medbroadcast.com/health_news_details.asp?news_channel_id=1000&news_id=2438 [accessed 28 April 2004]; Ontario police probing jailhouse abattoir again, Canadian Press (21 October 2003), available from

http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/1066751843367_62161043/?hub=Canad a [accessed 1 April 2004].

³ *Meat plant owner regrets working with inmates*, Canadian Press (9 October 2003), available from

http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/20031009/meat_plant_jail_031009/Cana da?s_name=&no_ads [accessed 1 April 2004]; L. Lambert, *Farmers rally behind Wallace Beef*, Kingston This Week (2 December 2003).

⁴ Police investigate prison meat plant, CBC News (8 October 2003), available from <u>http://www.cbc.ca/stories/2003/10/08/consumers/prison_meat031008</u> [accessed 1 April 2004]; Meat from prison-run Joyceville plant sold to public in Ontario, maybe Quebec, Canadian Press, supra note 2.

⁵ Meat from prison-run Joyceville plant sold to public in Ontario, maybe Quebec , Canadian Press, supra note 2.

⁶ OMAF, How Does Your Plant Rate, (Queen's Printer for Ontario, 2003, 09-03-5M).

Events of October & November 2003

In October 2003, the media reported Wallace Beef had been shut down by Correctional Services⁷ and on October 7, 2003, the Director of the Food Inspection Branch of OMAF provisionally suspended its licence. This suspension came soon after the warden of Pittsburgh Institution contacted the Director of the Food Inspection Branch to report that the abattoir had been temporarily closed because of alleged questionable practices. OMAF advised the public that there was no known threat to public health, but all meat products were being detained in the plant as a precautionary measure.⁸

OMAF directed the Ministry of Natural Resources (MNR) to investigate pursuant to the Cooperative Agreement between the two ministries. Information was also provided to the Canadian Food Inspection Agency (CFIA) and the office of the Chief Medical Officer of Health of Ontario. The Public Health Branch of the Ministry of Health and Long-Term Care (MOHLTC) notified staff at the Kingston, Frontenac and Lennox and Addington Health Unit.

On or about October 7, 2003, Correctional Services reportedly ordered a police investigation. Within twenty-four hours, the Ontario Provincial Police (OPP) concluded that there was no criminal wrongdoing, but advised the media it would re-institute its investigation if further information surfaced in the MNR investigation.⁹

There was little heard about the plant or any investigation over the next two weeks until the media reported that the OPP had entered the plant again on October 20, 2003 and Correctional Services advised that a criminal

http://www.globeandmail.com/servlet/story/RTGAM.20031021.wmeat1021/BNStory/National [accessed 28 April 2004].

⁷ Correctional Service of Canada, News Release, *Correctional Service of Canada Suspends Operations of Private Firm's Meat Processing Plant at Pittsburgh Institution* (8 October 2004); L. Lambert, *Farmers rally behind Wallace Beef*, *supra* note 3.

⁸ Meat from prison-run Joyceville plant sold to public in Ontario, maybe Quebec, Canadian Press, supra note 2.

⁹ Police investigate prison meat plant, CBC News, supra note 4; Meat from prison-run plant sold to public, Canadian Press, supra note 2; Meat from prison-run Joyceville plant sold to public in Ontario, maybe Quebec, Canadian Press, supra note 2; Ontario police probing jailhouse abattoir again, Canadian Press, supra note 2; Criminal probe resumes at jailhouse abattoir, Canadian Press (21 October 2003), available from

investigation was underway.¹⁰ It was reported that an unidentified inmate who worked at the plant¹¹ had made certain allegations that had led to the investigation.¹²

On November 3, 2003, the plant operator advised the media that he had been told that the problem was with respect to *halal* meat. He also advised that he had not been permitted back into the plant for several weeks when he was allowed to return to remove approximately 67,000 pounds of spoiled meat that he valued at \$200,000.¹³ The OPP confirmed that the investigation related to the preparation and packaging of meat. On November 4, 2003, Correctional Services announced that although their investigation was ongoing,¹⁴ frozen meat from the plant had been deemed safe to eat.

The provisional suspension of the licence by OMAF was lifted on Sunday, November 9, 2003.¹⁵ The plant reportedly re-opened on November 12, 2003 and slaughter resumed within a few days. The plant was permitted to supply correctional institutions and its wholesale customers, but was not allowed to open its retail operation.

On November 25, 2003, the media reported that the material filed in support of the OPP search warrant indicated the police were investigating allegations that the plant had:

- sold product containing meat from dead animals;
- sold uninspected meat; and

¹¹ J. Pringle, *Kingston Meat Plant Seized by OPP*, available from

¹⁰ Criminal probe resumes at jailhouse abattoir, Canadian Press, supra note 9.

http://www.cfra.com/headlines/index.asp?cat=1&nid=7166 [accessed 25 May 2004]. ¹² C. Szalarski, *Owner rues jail meat plant*, Canadian Press, (10 October 2003), available from http://www.canoe.ca/NewsStand/LondonFreePress/News/2003/10/10/221872.html [accessed 28 April 2004].

 ¹³ L. Lambert, Unblessed halal meat results in plant shutdown, Kingston This Week (3 November 2003).

¹⁴ OMAF, News Release, *Abattoir's Licence Suspension Lifted* (10 November 2003).

¹⁵ *Ibid.*, The *Meat Inspection Act* (Ontario) permits the Director of the Food Inspection Branch of OMAF to provisionally suspend a licensee's licence where, in the Director's opinion, it is necessary to do so for the immediate protection of the safety or health of any person or animal. The Director gives reasons for the suspension in the suspension notice and thereafter holds a hearing to determine whether the licence should be further suspended or revoked. The Review did not receive a copy of the provisional suspension notice nor a copy of any hearing records.

 sold meat as *halal* which had not been slaughtered according to Islamic religious practice.¹⁶

The Review is not aware of any charges being laid to date and has no information that Wallace Beef has any history of regulatory breaches.

The events relating to Wallace Beef are significant to the extent they illuminate concerns that were expressed to the Review with respect to the apparent lack of co-ordination among the multiple agencies involved in the investigation process since no one agency appears to have taken the lead in collecting, distilling and disseminating available information in order to fairly inform and reassure each other and the public.

¹⁶ F. Armstrong, Warrants reveal scope of abattoir probe: Criminal allegations include butchering of dead animals, selling unfit meat, The Kingston Whig-Standard (25 November 2003).

	Ca	ttle	Calves (Beef & Veal)	Dairy Cows	Swine	Poultry	Sheep & Lambs	Goat	Deer	Elk	Wild Boar	Llama	Bison	Ratites
Number of Farms in Ontario	16,179 (t	peef cows)	23,906	7,557	4,972	8,306 (1,200 commercial poultry)	3,978	2,342	234	100	58	437	58	241
Average Size of Farms in Ontario	beef cow	(average herd size nada)	175 grain fed veal / 400 milk fed veal	50				26.6	61.8	59	25.8	5.8	64.7	15 ostrich 29 emu & rhea
Location of Production	beef cow	fed cattle	Veal											
Ontario	8.3%	21.2%	40%		24.7	32-39	28.3							
Alberta	39.0%	67.7%												
Quebec/Atlantic	5.8%	1.9%	55%											
Saskatchewan, Manitoba, B.C.	46.9%	9.2%	5%											
Estimated Animal Populations in Ontario		6,000 20 beef)	528,000 (beef) 100,000 (veal)	566,000	3,460,000	43,624,696	337,625	62,310	14,464	5,902	1,499	2,554	3,755	8,121
Estimated Animal Populations in Canada	9,28	6,714	5,203,770	1,060,965	14,666,900	126,159,529	1,262,448	182,851	53,258	74,478	33,131	25,782	145,094	21,027
Slaughter at Ontario Abattoirs		582 dairy)	56,604		609,630	19,274,746	236,529	25,668	1,920	341	417		170	1,461
Slaughter at Federal Plants in Ontario	544	,586	16,351		4,620,615	in excess 185 million	72,871							

Appendix D - Farmed Animal Statistics

Notes: The sources of the information include: Statistical Briefers, Red Meat Section AAFC, October 2003 & Statistical Briefers, Canfax Research, September 2003 and 2001 Census of Agriculture & Animal Health Surveillance Network, Surveillance Coverage of Livestock Populations at Risk, October 7, 2003. Most of the statistics are from 2002. Ratite statistics include ostriches, emus and rhea.

Appendix E - Codex Alimentarius Commission Hazard Analysis and Critical Control Point (HACCP) System and Guidelines for Its Application (Annex to CAC/RCP 1-1969, Rev. 3 (1997))

PREAMBLE

The first section of this document sets out the principles of the Hazard Analysis and Critical Control Point (HACCP) system adopted by the Codex Alimentarius Commission. The second section provides general guidance for the application of the system while recognizing that the details of application may vary depending on the circumstances of the food operation¹.

The HACCP system, which is science based and systematic, identifies specific hazards and measures for their control to ensure the safety of food. HACCP is a tool to assess hazards and establish control systems that focus on prevention rather than relying mainly on end-product testing. Any HACCP system is capable of accommodating change, such as advances in equipment design, processing procedures or technological developments.

HACCP can be applied throughout the food chain from primary production to final consumption and its implementation should be guided by scientific evidence of risks to human health. As well as enhancing food safety, implementation of HACCP can provide other significant benefits. In addition, the application of HACCP systems can aid inspection by regulatory authorities and promote international trade by increasing confidence in food safety.

The successful application of HACCP requires the full commitment and involvement of management and the work force. It also requires a multidisciplinary approach; this multidisciplinary approach should include, when appropriate, expertise in agronomy, veterinary health, production, microbiology, medicine, public health, food technology, environmental health, chemistry and engineering, according to the particular study. The application of HACCP is compatible with the implementation of quality

¹ The Principles of the HACCP System set the basis for the requirements for the application of HACCP, while the Guidelines for the Application provide general guidance for practical application.

management systems, such as the ISO 9000 series, and is the system of choice in the management of food safety within such systems.

While the application of HACCP to food safety was considered here, the concept can be applied to other aspects of food quality.

DEFINITIONS

Control (verb): To take all necessary actions to ensure and maintain compliance with criteria established in the HACCP plan.

Control (noun): The state wherein correct procedures are being followed and criteria are being met.

Control measure: Any action and activity that can be used to prevent or eliminate a food safety hazard or reduce it to an acceptable level.

Corrective action: Any action to be taken when the results of monitoring at the CCP indicate a loss of control.

Critical Control Point (CCP): A step at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level.

Critical limit: A criterion which separates acceptability from unacceptability.

Deviation: Failure to meet a critical limit.

Flow diagram: A systematic representation of the sequence of steps or operations used in the production or manufacture of a particular food item.

HACCP: A system which identifies, evaluates, and controls hazards which are significant for food safety.

HACCP plan: A document prepared in accordance with the principles of HACCP to ensure control of hazards which are significant for food safety in the segment of the food chain under consideration.

Hazard: A biological, chemical or physical agent in, or condition of, food with the potential to cause an adverse health effect.

Hazard analysis: The process of collecting and evaluating information on hazards and conditions leading to their presence to decide which are significant for food safety and therefore should be addressed in the HACCP plan.

Monitor: The act of conducting a planned sequence of observations or measurements of control parameters to assess whether a CCP is under control.

Step: A point, procedure, operation or stage in the food chain including raw materials, from primary production to final consumption.

Validation: Obtaining evidence that the elements of the HACCP plan are effective.

Verification: The application of methods, procedures, tests and other evaluations, in addition to monitoring to determine compliance with the HACCP plan.

PRINCIPLES OF THE HACCP SYSTEM

The HACCP system consists of the following seven principles:

PRINCIPLE 1

Conduct a hazard analysis.

PRINCIPLE 2

Determine the Critical Control Points (CCPs).

PRINCIPLE 3

Establish critical limit(s).

PRINCIPLE 4

Establish a system to monitor control of the CCP.

PRINCIPLE 5

Establish the corrective action to be taken when monitoring indicates that a particular CCP is not under control.

PRINCIPLE 6

Establish procedures for verification to confirm that the HACCP system is working effectively.

PRINCIPLE 7

Establish documentation concerning all procedures and records appropriate to these principles and their application.

GUIDELINES FOR THE APPLICATION OF THE HACCP SYSTEM

Prior to application of HACCP to any sector of the food chain, that sector should be operating according to the Codex General Principles of Food Hygiene, the appropriate Codex Codes of Practice, and appropriate food legislation. Management commitment is safety necessary for implementation of an effective HACCP system. During hazard identification, evaluation, and subsequent operations in designing and applying HACCP systems, consideration must be given to the impact of raw materials, ingredients, food manufacturing practices, role of manufacturing processes to control hazards, likely end-use of the product, categories of consumers of concern, and epidemiological evidence relative to food safety.

The intent of the HACCP system is to focus control at CCPs. Redesign of the operation should be considered if a hazard which must be controlled is identified but no CCPs are found.

HACCP should be applied to each specific operation separately. CCPs identified in any given example in any Codex Code of Hygienic Practice

might not be the only ones identified for a specific application or might be of a different nature.

The HACCP application should be reviewed and necessary changes made when any modification is made in the product, process, or any step.

It is important when applying HACCP to be flexible where appropriate, given the context of the application taking into account the nature and the size of the operation.

APPLICATION

The application of HACCP principles consists of the following tasks as identified in the Logic Sequence for Application of HACCP (Diagram 1).

1. Assemble HACCP team

The food operation should assure that the appropriate product specific knowledge and expertise is available for the development of an effective HACCP plan. Optimally, this may be accomplished by assembling a multidisciplinary team. Where such expertise is not available on site, expert advice should be obtained from other sources. The scope of the HACCP plan should be identified. The scope should describe which segment of the food chain is involved and the general classes of hazards to be addressed (e.g. does it cover all classes of hazards or only selected classes).

2. Describe product

A full description of the product should be drawn up, including relevant safety information such as: composition, physical/chemical structure (including A_w , pH, etc.), microcidal/static treatments (heat-treatment, freezing, brining, smoking, etc.), packaging, durability and storage conditions and method of distribution.

3. Identify intended use

The intended use should be based on the expected uses of the product by the end user or consumer. In specific cases, vulnerable groups of the population, e.g. institutional feeding, may have to be considered.

4. Construct flow diagram

The flow diagram should be constructed by the HACCP team. The flow diagram should cover all steps in the operation. When applying HACCP to a given operation, consideration should be given to steps preceding and following the specified operation.

5. On-site confirmation of flow diagram

The HACCP team should confirm the processing operation against the flow diagram during all stages and hours of operation and amend the flow diagram where appropriate.

6. List all potential hazards associated with each step, conduct a hazard analysis, and consider any measures to control identified hazards

(SEE PRINCIPLE 1)

The HACCP team should list all of the hazards that may be reasonably expected to occur at each step from primary production, processing, manufacture, and distribution until the point of consumption.

The HACCP team should next conduct a hazard analysis to identify for the HACCP plan which hazards are of such a mure that their elimination or reduction to acceptable levels is essential to the production of a safe food.

In conducting the hazard analysis, wherever possible the following should be included:

• the likely occurrence of hazards and severity of their adverse health effects;

- the qualitative and/or quantitative evaluation of the presence of hazards;
- survival or multiplication of microorganisms of concern;
- production or persistence in foods of toxins, chemicals or physical agents; and
- conditions leading to the above.

The HACCP team must then consider what control measures, if any, exist which can be applied for each hazard.

More than one control measure may be required to control a specific hazard(s) and more than one hazard may be controlled by a specified control measure.

7. Determine Critical Control Points

(SEE PRINCIPLE 2)²

There may be more than one CCP at which control is applied to address the same hazard. The determination of a CCP in the HACCP system can be facilitated by the application of a decision tree (e.g. Diagram 2), which indicates a logic reasoning approach. Application of a decision tree should be flexible, given whether the operation is for production, slaughter, processing, storage, distribution or other. It should be used for guidance when determining CCPs. This example of a decision tree may not be applicable to all situations. Other approaches may be used. Training in the application of the decision tree is recommended.

If a hazard has been identified at a step where control is necessary for safety, and no control measure exists at that step, or any other, then the product or process should be modified at that step, or at any earlier or later stage, to include a control measure.

² Since the publication of the decision tree by Codex, its use has been implemented many times for training purposes. In many instances, while this tree has been useful to explain the logic and depth of understanding needed to determine CCPs, it is not specific to all food operations, e.g. slaughter, and therefore it should be used in conjunction with professional judgement, and modified in some cases.

8. Establish critical limits for each CCP

(SEE PRINCIPLE 3)

Critical limits must be specified and validated if possible for each Critical Control Point. In some cases more than one critical limit will be elaborated at a particular step. Criteria often used include measurements of temperature, time, moisture level, pH, A_w, available chlorine, and sensory parameters such as visual appearance and texture.

9. Establish a monitoring system for each CCP

(SEE PRINCIPLE 4)

Monitoring is the scheduled measurement or observation of a CCP relative to its critical limits. The monitoring procedures must be able to detect loss of control at the CCP. Further, monitoring should ideally provide this information in time to make adjustments to ensure control of the process to prevent violating the critical limits. Where possible, process adjustments should be made when monitoring results indicate a trend towards loss of control at a CCP. The adjustments should be taken before a deviation occurs. Data derived from monitoring must be evaluated by a designated person with knowledge and authority to carry out corrective actions when indicated. If monitoring is not continuous, then the amount or frequency of monitoring must be sufficient to guarantee the CCP is in control. Most monitoring procedures for CCPs will need to be done rapidly because they relate to on-line processes and there will not be time for lengthy analytical testing. Physical and chemical measurements are often preferred to microbiological testing because they may be done rapidly and can often indicate the microbiological control of the product. All records and documents associated with monitoring CCPs must be signed by the person(s) doing the monitoring and by a responsible reviewing official(s) of the company.

10. Establish corrective actions

(SEE PRINCIPLE 5)

Specific corrective actions must be developed for each CCP in the HACCP system in order to deal with deviations when they occur.

The actions must ensure that the CCP has been brought under control. Actions taken must also include proper disposition of the affected product. Deviation and product disposition procedures must be documented in the HACCP record keeping.

11. Establish verification procedures

(SEE PRINCIPLE 6)

Establish procedures for verification. Verification and auditing methods, procedures and tests, including random sampling and analysis, can be used to determine if the HACCP system is working correctly. The frequency of verification should be sufficient to confirm that the HACCP system is working effectively. Examples of verification activities include:

- Review of the HACCP system and its records;
- Review of deviations and product dispositions; and
- Confirmation that CCPs are kept under control.

Where possible, validation activities should include actions to confirm the efficacy of all elements of the HACCP plan.

12. Establish documentation and record keeping

(SEE PRINCIPLE 7)

Efficient and accurate record keeping is essential to the application of a HACCP system. HACCP procedures should be documented. Documentation and record keeping should be appropriate to the nature and size of the operation.

Documentation examples are:

- Hazard analysis;
- CCP determination;
- Critical limit determination.

Record examples are:

- CCP monitoring activities;
- Deviations and associated corrective actions;
- Modifications to the HACCP system.

An example of a HACCP worksheet is attached as Diagram 3.

TRAINING

Training of personnel in industry, government and academia in HACCP principles and applications, and increasing awareness of consumers are essential elements for the effective implementation of HACCP. As an aid in developing specific training to support a HACCP plan, working instructions and procedures should be developed which define the tasks of the operating personnel to be stationed at each Critical Control Point.

Cooperation between primary producer, industry, trade groups, consumer organizations, and responsible authorities is of vital importance. Opportunities should be provided for the joint training of industry and control authorities to encourage and maintain a continuous dialogue and create a climate of understanding in the practical application of HACCP.

DIAGRAM 1. LOGIC SEQUENCE FOR THE APPLICATION OF HACCP

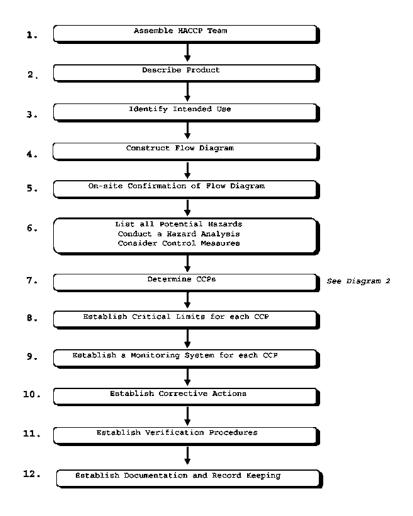


DIAGRAM 2. EXAMPLE OF DECISION TREE TO IDENTIFY CCPs (answer questions in sequence)

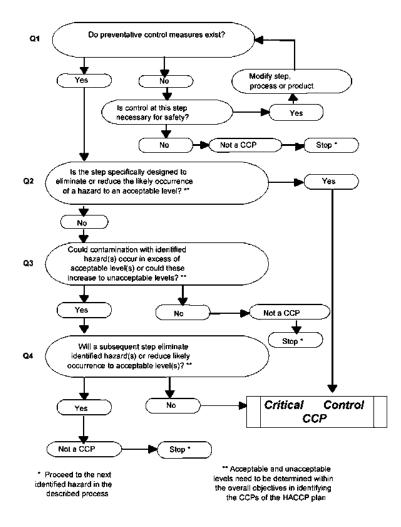
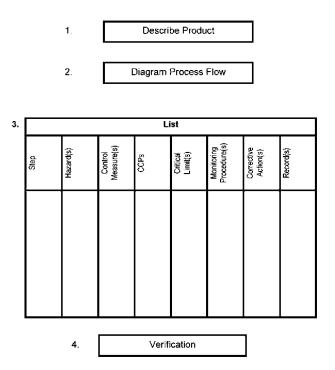


DIAGRAM 3. EXAMPLE OF A HACCP WORKSHEET



Appendix F - An Assessment of Biological, Chemical and Physical Hazards, Sources of the Hazards, Possible Interventions Associated with Production of Raw Food of Animal Origin During the Slaughter, Processing, Retail Distribution and Food Service Phases

A recent report prepared for Health Canada related to the production of raw food of animal origins contains a helpful outline of the biological, chemical and physical hazards, their sources and possible interventions.

Phase	Component of Risk Assessment	Commodity	Examples of Hazards	Source / Intervention
	Biological	Beef	 Escherichia coli (O157:H7) Listeria monocytogenes Salmonella spp. Clostridium spp. 	 Carcass pasteurization Steam vacuuming Proper hide removal
		Poultry	Camplyobacter spp.Salmonella spp.Clostridium spp.	 Chemical sprays and rinses e.g. chlorine dioxide, acid rinse Rapid chilling
S L A		Pork	Salmonella spp.Yersinia enterocoliticaTrichinae sp.	 Hot water wash Good sanitation practices Good hygiene
U G		All	- Pests Birds, flies, rodents carrying pathogens	practices
H T E R	H T E	All	 Pharmaceutical residues Pesticides Allergens Agricultural chemicals Sanitation chemicals Packaging films 	 On farm education Chemical testing Approved films Surveillance and monitoring Sanitation SOPs and chemical backups
	Physical	All	 Broken injection needles Carcass metal tags Head shot Knife chips Bone fragments Wood slivers 	 Visual by buyer Visual on farm, tag the animal On-farm education Deboners on grinders No wood pallets in the process

P R O C E S		Beef	 Escherichia coli (O157:H7) Salmonella spp. Listeria monocytogenes Clostridium spp. Cysyicurbus bovis 	Source: - Raw material - Poorly designed facilities and equipment - Poor hygiene Poor
S S I N		Poultry	Salmonella spp.Campylobacter spp.Clostridium spp.	sanitationCross contaminationContaminated water
G	Biological	Pork	Salmonella spp.Yersinia spp.Trichinella spiralis	Intervention: - Good GMPs - Ingredients - Good hygienic
		All	 Staphylococcus aureus Birds, flies and rodents which can carry pathogens 	 Good nygenic practices Good sanitation practices Proper design of facilities and equipment Good temperature control Good processing criteria
	Chemical	All	 Allergen cross contamination Pharmaceutical residues Pesticides Growth promotants Chemical residues e.g. sanitation 	Source: - Raw material - Feed - Water - Improper use e.g. fail to follow directions Intervention: - - Farm food safety programs - Good sanitation - Government evaluation and approval - Good sanitation practices - Rapid test kits e.g. allergens

	Physical	All	 Foreign objects e.g. gloves, hair, bone, metal Injection needles Packaging materials Wood e.g. pallets 	Source: - Raw material - Employee carelessness - Poorly maintained equipment Intervention: - - Covered containers - Metal detectors - Preventative maintenance programs - Trace back systems - Employee training
	Biological	Beef Poultry Pork Fish (retail product)	 Temperature fluctuations Cross contamination Hepatitis A virus Norwalk virus Air borne pathogens 	 Maintenance of cold chain; monitoring Separate work stations and/or cleaning and sanitizing between species Sanitation protocol Staff training
R E T A I L	Chemical	All	 Antibiotics Pesticides Allergens Nitrite Salt Ag. Chemicals Sanitation Chemicals 	 Surveillance and monitoring Public Health visual surveillance at establishment level Sanitation SOPs Regulatory controls Government approved products and processes
	Physical	All	 Injection needles Foreign materials Bone fragments 	 Perform sensory evaluation Metal detectors Industry Programs to address foreign materials Code dating

D I S T R I B	I S Biological All R I Chamical		 Meat products carried by CCGD food service members are received and sold by frozen case lot Some food service distributors also handle fresh ground meat As above 	- Temperature control maintained
T I O			 Sold to end user (restaurant) in frozen case to be inspected by final user 	- Perform sensory evaluation
F O O D S E	Biological	All	 Bacterial: Salmonella spp. E. coli Campylobacter sp. Yersinia sp. C. botulinum Listeria monocytogenes <u>Viral:</u> Norwalk Hepatitis A Parasites: Anisakis sp. <u>Toxin:</u> Scombroid PSP DSP 	 Incoming products, particularly raw foods, infected food handlers, cross contamination. Safe food handling procedures, e.g. cooking, cooling, reheating, cross contamination control, good personal hygiene
R V I C E	Chemical	All	 e.g. sanitizers, cleaners, pesticides 	<u>Sources:</u> - Agents used in the establishment. <u>Interventions:</u> - Safe handling, st orage and application procedures; education of staff.
	Physical	All	 e.g. allergens, hair, foreign material 	<u>Sources:</u> - Food service environment. <u>Interventions:</u> - Education of staff, particularly of allergen hazards, sanitation/quality control.

Appendix G - Veterinary Certificate for Direct Transport to Slaughter

Certificate to be completed and signed by **both** Veterinarian & owner and animal to be tagged**before** it can be moved or loaded. Veterinary Certificate for Direct Transport to Slaughter

Other 🗖

Non Ambulatory

🕅 Ontario

Ministry of Agriculture, Food and Rural Affairs Food Inspection Branch													
County	ounty Date: YYYY MM DD Time: A				A.M.		P.M.						
Owner Name & Address (Please Print)													
				Posta	l Cod	e	(Are	ea Code))	Tele	ephone		
	-												
Class (<i>Indicate</i>) Bovine:	Steer 🗖	Heifer [Beef Cow	Dairy Cow 🗖		Male Calf 🗖		f 🗖		nale If 🗖	
Porcine:	Market Pig 🗖		Sow			Boar 🗆	Boar 🗆 Ria		lgling 🗖				
Ovine:	Sheep 🗖		Lam	b 🗖		Caprine	e 🗖	Oth	er 🗖	(Speci	fy)		
OMAFRA I.	D. Tag					Age, De	scription	, Other I	.D.				
Based on yo	FINDINGS: ur physical exam pplies to the anin								ings o	f cond	litions n	iost	
Parturition	al/Obstetrical	Trauma	atic	Metabo	olic/N	utritional	Locom	otory		Int	ernal-ac	cidei	ntal
Respiratory	-Circulatory-Syst	emic 🗖	Shock-like Emergencies 🗖			Neoplasmlike 🗖 No abnorm			al fii	ndings			
Other 🗖 (Sp	ecify)						1						
Disposition	: Recommended	l for slaug	hter ur	ıder insj	pectio	on within _		_Hrs.					
Temp:	Pulse F ^o /C ^o	: /m	:	Respi	ratior		Demeanor : Bright & Alert Quiet & Responsive						
Veterinarian	's Name (Please		111.	/min. Responsive Dull & Depresse Other D (Specif									
Clinic/Hos	pital Name &	Address:						. 1					
	phai maine &	Autress.											
		I	Postal	Code	(A	rea Code)) Business Telephor			one No).		
To the best of my knowledge and belief the above described animal has undergone the proper withdrawal times for any drugs it has received that might lead to illegal residues being present in the meat. It is my opinion, that the animal described above is suitable for slaughter and is capable of being loaded and transported to a slaughter establishment in a humane manner. (Signed) Veterinarian													
Owner/nerso	on in charge:					(* 8	,						
I certify that	the above descri times for any dru											the p	proper
	-	-		U		Signatu							
Authority to collect personal information: Meat Inspection Act (Ontario); Livestock and Livestock Products Act; Livestock Community Sales Act. Uses: Inspection and reporting purposes. Contact for questions: Program Manager, Policy & Audit, Food Inspection Branch, OMAFRA, 1 Stone Road W., Guelph, ON N1G 4Y2 (519) 826-4361													

352645 (09/00)Designation: Original and Copy 2 to accompany animal; Copy 3 to owner; Copy 4 to Veterinarian

Appendix H - Commencement of Mandatory Meat Inspection in Ontario

Exempt as of	Exempt as of	Exempt as of	Exempt as of March	Exempt as of
April 1, 1967	Oct. 30, 1967	Jan. 15, 1968	17, 1969	June 22, 1970
Counties	Counties	Counties	Counties	Counties
Carleton	Carleton	Carleton		
Dundas	Dundas	Dundas		
Durham	Durham			
Frontenac	Frontenac	Frontenac		
Glengarry	Glengarry	Glengarry		
Grenville	Grenville	Grenville		
Hastings	Hastings	Hastings		
Lanark	Lanark	Lanark		
Leeds	Leeds	Leeds		
Lennox and Addington	Lennox and Addington	Lennox and Addington		
Northumberland	Northumberland	Northumberland		
Ontario	Ontario			
Peterborough	Peterborough			
Prescott	Prescott	Prescott		
Prince Edward	Prince Edward	Prince Edward		
Renfrew	Renfrew	Renfrew		
Russell	Russell	Russell		
Simcoe				
Stormont	Stormont	Stormont		
Victoria	Victoria			
York				
Provisional County of Haliburton	Provisional County of Haliburton	Provisional County of Haliburton	Provisional County of Haliburton	
Territorial District	Territorial District	Territorial District	Territorial District	Territorial District
Algoma	Algoma	Algoma	Algoma	
Cochrane	Cochrane	Cochrane	Cochrane	
Kenora	Kenora	Kenora	Kenora	
Manitoulin	Manitoulin	Manitoulin	Manitoulin	
Muskoka	Muskoka	Muskoka	Muskoka	
Nipissing	Nipissing	Nipissing	Nipissing	
Parry Sound	Parry Sound	Parry Sound	Parry Sound	
Rainy River	Rainy River	Rainy River	Rainy River	
Sudbury	Sudbury	Sudbury	Sudbury	
Thunder Bay	Thunder Bay	Thunder Bay	Thunder Bay	
Timiskaming	Timiskaming	Timiskaming	Timiskaming	

Note: Inspection of slaughter was made mandatory as of April 1, 1967 with the addition of "*no person shall slaughter an animal, except in the manner and by the devices prescribed in the regulations*" to the *Meat Inspection Act (Ontario), 1962-63* due to the requirement for inspection contained in *Regulation made under the Meat Inspection Act (Ontario), 1962-63, O.Reg. 2065*, filed January 22, 1965.

Regulations made under the Meat Inspection Act (Ontario), 1962-63:

- O.Reg. 106/67, filed March 23, 1967
- O.Reg. 378/67, filed October 30, 1967
- *O.Reg.* 8/68, filed January 15, 1968
- O.Reg. 84/69, filed March 17, 1969
- O.Reg. 275/70, filed June 22, 1970 revoked 106/67, 378/67, 8/68, and 84/69

Appendix I - Slaughter Statistics for Provincially Inspected Abattoirs in Ontario

YEAR	NUMBER OF RED MEAT SPECIES ANIMALS SLAUGHTERED	NUMBER OF WHITE MEAT SPECIES ANIMALS SLAUGHTERED
1999	1,020,597	23,897,139
2000	966,578	19,246,866
2001	973,868	20,130,159
2002	1,023,445	19,274,740
2003	1,026,071	18,943,376

NOTES:

Red Meat Species slaughtered include, but were not limited to BBQ hogs, boars, buffalo, bulls, female calves, male calves, cows, elk, exotic, fallow deer, goats, heifers, lambs, market hogs, ratites, red deer, ridgling, sheep, sows, stags, steers, wild boars

White Meat Species slaughtered include, but were not limited to chickens, Cornish hens, ducks, fancy poultry, fowl, geese, guinea fowl, partridge, pheasants, pigeons, quail, rabbits, silkies, and turkeys

Tel: Fax

Website

Appendix J – Letter Inviting Submissions

THE MEAT INSPECTION REVIEW

The Honourable Roland J. Haines



80 Dundas St., 2nd Floor, Unit "Q" London, ON N6A 1E7

(519) 660-2700 (519) 660-2709 www.meatinspectionreview.com

RE: MEAT INSPECTION REVIEW

I have been authorized by the government of Ontario to review the meat regulatory and inspection regimes, including free standing meat processors, in order to strengthen public health and safety and business confidence.

This Review is **not** a public inquiry and, therefore, there will be no public hearings where testimony is taken under oath.

The mandate I have been given requires me to review regulatory standards, including existing legislation, and the interface among inspection, compliance and enforcement. I have been asked to make recommendations on approaches that might be taken to strengthen the meat inspection system, including strategies for harmonization with the government of Canada, which shares responsibility for meat inspection with the Ontario government.

In conducting this Review I am permitted to request information from any source and am interested in hearing from anyone who has any concerns about meat safety in Ontario and the current meat inspection regime.

I am advised that you have a potential interest in the subject matter of this Review. I am, therefore, inviting you to provide us with any information you have that may be relevant and to forward any written submissions you may wish to make with respect to the issues you believe I should be addressing in order to fulfill the mandate that I have been given.

Page 2

The Order in Council that sets out my mandate and the Information Sheet relating to written submissions can be found on the Review's website.

Since my written report is expected by April 30, 2004 I will require your response by no later than March 15, 2004.

Yours truly,

The Honourable Roland J. Haines

RJH:jb

Appendix K - List of Individuals and Groups Who Provided Written Submissions to the Review¹

(in alphabetical order)

Abate Rabbit Packers Ltd Animal Alliance of Canada Association of Ontario Chicken Processors Barron Poultry Limited Canadian Culinary Federation Canadian Federation of Humane Societies Canadian Meat Council Canadian Poultry and Egg Processors Council Canadian Supply Chain Food Safety Coalition Canadian Veterinary Medical Association Carol Libman Carol Winter Chicken Farmers of Ontario College of Veterinarians of Ontario Dairy Farmers of Ontario David McDowell DeBoer's Poultry Inc. Desboro Fur Farms Ed Peconi & Sons Ltd Elizabeth Locke Grand River Poultry Holly Park Meat Packers Inc. Humane Society of Canada Jain Society of Toronto on Ontario Multifaith Council on Spiritual and **Religious** Care Joseph MacDonald Judith Rinfret Ken Horst Machabee Animal Food Ltd Max Burt Michael Hermiston Mill Creek Farm

¹ A number of individuals elected to provide written submissions to the Review on the condition that their submissions would remain confidential. In accordance with their wishes, their names have not been included in this list. In addition, others provided comments in private meetings and they have not been listed in keeping with the private nature of the meetings.

Milton Scheel Packers National Farmers Union - Ontario Nick's Abattoir Ontario Cattlemen's Association Ontario Federation of Agriculture Ontario Federation of Anglers and Hunters Ontario Ministry of Natural Resources Ontario Pork Producers' Marketing Board Ontario Public Service Employees Union Ontario Sheep Marketing Agency Ontario Society for the Prevention of Cruelty to Animals Ontario Veal Association Otonabee Meat Packers People's Meat Market Randal Leavitt Teggart Farms Temiskaming Agricultural Development Association Timiskaming Health Unit Turkey Farmers of Ontario Town and Country Meats and Abattoir Valtoudis Brothers Meat Packers Vanessa Meats

Appendix L – Public Meeting in Peterborough – March 24, 2004

THE MEAT INSPECTION REVIEW The Honourable Roland J. Haines



Review into the Meat Regulatory and Inspection Regimes in Ontario

Public Meeting in Peterborough March 24, 2004 REVISED AGENDA

City Council Chamber, 500 George Street North, Peterborough, Ontario

9:30am to 1:00 pm and from 2:15pm to 5:00pm

<u>Time</u>	<u>Speaker</u>						
9:30 a.m.	Opening	Opening Remarks by The Honourable Mr. Justice Haines					
9:40 a.m.	OMAF	 Ontario Ministry of Agriculture and Food Dr. Deb Stark, Deputy Minister, Food Industry Division 					
9:45 a.m.	OMNR	 Ontario Ministry of Natural Resources Mike Kindree, Manager, Evaluation & Special Services Unit 					
10:15 a.m.	OPSEU	 Ontario Public Service Employees Union Leah Casselman, President Tim Hadwen, General Counsel Brian Burdick, OMAF Meat Hygiene Officer Doug Peebles, Co-Chair of OMAF Ministry of Enforcement and Renewal Committee 					
10:45 a.m.	MORNI	NG BREAK					
11:00 a.m.	ABP Rec	ycling Inc. - Joe Kosalle, General Manager					
11:15 a.m.	Ed Peconi & Sons Ltd. - Don Montague						
11:30 a.m.	OMOHLTC - Ontario Ministry of Health and Long-Term Care - Fred Ruf, Acting Coordinator, Food Safety and Safe Water Unit						
12:00 a.m.	Ontario Federation of Anglers and Hunters - Michael Reader, Executive Director						

12:10 a.m	Town & Country Farms Inc. - Mario Henry, owner	
12:30 p.m. to 2	:15 p.m.	LUNCH BREAK
<u>Time</u>	<u>Speaker</u>	
2:15 p.m.	Otonabee Meat Packers - Joe Taylor, co-owne	r
2:30 p.m.	Great North Premium Foods - Hank Albers, operato - Rick Albers - Melissa Wilkenson	r
2:45 p.m.	Animal Alliance of Canada - Liz White, Director Canadian Coalition for Farm Ani - Stephanie Brown	mals
3:30 p.m.	Heinz Frankfurt	
3:45 p.m.	Paul McQueen	
4:00 p.m.	Joanne O'Hara	
4:20 p.m.	Holly Park Meat Packers Inc. - Mary Vacca - Tony Facciolo, Vice-F	President

Note: Items in **bold** indicate the agenda as the meeting proceeded.

Appendix M – Public Meeting in London – March 31, 2004

THE MEAT INSPECTION REVIEW The Honourable Roland J. Haines



Review into the Meat Regulatory and Inspection Regimes in Ontario

Public Meeting in London March 31, 2004

City Council Chamber, 300 Dufferin Avenue, London, Ontario

9:30am to 1:00 pm and from 2:15pm to 5:00pm

<u>Time</u>	<u>Speake</u>	<u>.</u>
9:30 a.m.	Opening	Remarks by The Honourable Roland J. Haines
9:40 a.m.	OMAF	 Ontario Ministry of Agriculture and Food Dr. Deb Stark, Acting Deputy Minister
9:45 a.m.	OMNR	 Ontario Ministry of Natural Resources Mike Kindree, Manager, Evaluation & Special Services Unit
10:15 a.m.	OIMP	 Ontario Independent Meat Processors Laurie Nichol, Executive Director
10:45 a.m.	NFU	National Farmers UnionAnn Slater
11:05 a.m.	OSPCA	 Ontario Society for the Prevention of Cruelty to Animals Michael Draper, Chief Inspector
11:40 a.m.	OPSEU	 Ontario Public Service Employees Union Ron Elliot, Regional Vice President of OPSEU Doug Peebles, Co-Chair of OMAF Ministry Employee Relations Committee Robert Lowry, OMAF Meat Hygiene Officer (ie. meat inspector) Tim Hadwen, OPSEU General Counsel
12:15 a.m.	СМС	 Canadian Meat Council James M. Laws, P.Ag., Executive Director Carla Abbatemarco, Technical Director

1:00 p.m. to 2:15 p.m. LUNCH BREAK

<u>Time</u>	<u>Speaker</u>	
2:15 p.m.	Toronto F	Public Health Unit - Sylvanus Thompson, Quality Assurance Manager - Jane Urquhart, Food Safety Manager, Healthy Environments
2:45 p.m.	alPHa	 Association of Local Public Health Agencies Andy Papadopoulos, Executive Director
3:00 p.m.	CIPHI	 Canadian Institute of Public Health Inspectors, Ontario Branch Inc. Brad Colpitts, Food Safety Chair of Branch Executive
3:15 p.m.	ASPHIO	 Association of Supervisors of Public Health Inspectors of Ontario Ron De Burger Pamela Scharfe, Manager of Environment Programs, Huron County Health Unit Jim Reffle, Director of Environmental Health & Chronic Disease Prevention, Middlesex-London Health Unit
3:45 p.m.	OFA	 Ontario Federation of Agriculture Paul Mistlele, Executive Director, OFA Ian McKillop, Vice President of Ontario Cattlemen's Association
4:05 p.m.	John Gau	ult
4:20 p.m.	NFU	 National Farmers Union, Perth / Oxford Local Bruce Hunter Robert Passmore
4:45 p.m.	Islamic S	ociety of North America-Canada - Mohammad Ashraf, Ph.D., Secretary General
5:15 p.m.	Lantz Me	at Market - Steven Lantz, operator

Appendix N - Documents Relating to Reprisal Protection

Ministry of Agriculture and Food Ministère de l'Agriculture et de l'Alimentation

Office of the Deputy Minister 77 Granville Street, 11* Floor Torento, Ontane M65 183 Tel: (416) 325-3101 Fax: (416) 325-3108 Bureau du sous-ministre 77, rue Grenville, 11° écape Teronto (Ontario) MSS 183 TéL.: (416) 326-3101 Téléc.: (416) 328-3105



January 9, 2004

HUMAN RESOURCES BRANCH

Dear Human Resources Branch Staff:

As you may be aware, the government of Ontario has announced the appointment of Justice Roland J. Haines to examine and report on the province's meat regulatory and inspection regimes. I am writing to encourage your participation in that exercise.

Justice Haines will examine current processes and make recommendations, as appropriate, regarding improvements to the meat regulation and inspection system to ensure the high quality of Ontario's meat industry. The focus of his mandate is not on specific incidents.

Please be assured that your cooperation, absent any wrongdoing, will not result in any negative disciplinary repercussions. The grievance provisions pursuant to the *Public Service Act* and the provisions of collective agreements protect employees regarding inappropriate discipline.

Meat inspection is an important component of food systems in Ontario, and consumers have come to expect a high quality system designed to protect them and their families.

I am sure you will agree that this is an important endeavor and, with your cooperation, provides a real opportunity to work together to ensure the highest standards of safety in the meat industry.

Should you have any questions about your participation, please contact your Human Resources Director, Jim Felker, at 519-826-3739.

Yours very truly,

Frank Ingratta Deputy Minister

Enclosure

Meistry Headquarters: 1 Store Road West, Guelon, Ontario N1G 4Y2 Bureau principal du ministère: 1, rue Store cuest, Guelon (Ontario) N1G 4Y2 Invite Ontario Home Invitez l'Ortario chez sol



Ministry of Agriculture	Ministère de l'Agriculture et de l'Allmentation	🕅 Ontario
Office of the Deputy Minister	Bureau du sous-ministre	_
77 Grenville Street, 11" Floor Toronto, Ontario M5S 183 Tel: (416) 326-3101 Fex: (416) 326-3105	77, rue Granville, 11º étage Terente (Ontario) M55 183 Tél.: (416) 326-3101 Téléc.: (416) 326-3108	
February 27, 2004		
MEMORANDUM TO:	All Staff	

SUBJECT: Meat Inspection Review

Further to the memorandum issued on February 24, 2004 regarding Justice Haines' review of Ontario's meat regulation and inspection system, I would like to address two issues raised by the bargaining agents.

Firstly, a question was asked as to whether the assurances that no adverse employment action by the government will be taken against employees or contractors who, acting in good faith, make representations to or disclose evidence to the Meat Inspection Review apply to former employees of the Ontario Public Service (OPS). I would like to confirm that these assurances are also intended to apply to any former OPS employee.

Secondly, it was asked whether it is appropriate for staff to speak to their bargaining agent. In response to this question, it is appropriate for employees to contact their bargaining agent, should they choose to discuss their involvement in or questions pertaining to the meat inspection review.

Above all, it is essential to stress the importance of cooperating and assisting with Justice Haines and his team in any way possible. We want to work together to ensure safety of Ontario's meat industry.

Frank Ingratta Deputy Minister

Ministry Headquarters: 1 Stone Road West, Guelph, Ontario N1G 4Y2 Bureau principal du ministère: 1, rue Stone ouest, Guelph (Ontario) N1G 4Y2 Invite Ontario Home Invitez l'Ontario chez sol



Ministry of Agriculture

Ministère de l'Agriculture et de l'Alimentation



Office of the Deputy Minister 77 Grenvie Street, 11[®] Floor Foronic, Ontano MSS 183 Tet: (416) 326-3101 Fax: (416) 325-3106 Bureau du sous-ministre 77, rue Grenwile, 11^e étage Toronto (Ontarro) MSS 183 Tél.: (416) 326-3101 Téléc.: (416) 326-3106

February 27, 2004

MEMORANDUM TO:

All Contracted Meat Inspection and Audit Staff

SUBJECT: Meat Inspection Review

As you may be aware, the government of Ontario has announced the appointment of Mr. Justice Roland J. Haines to examine and to report on the province's meat regulation and inspection system. Under the Order-in-Council making the appointment, all ministries, Cabinet Office, the Premier's office, and all boards, agencies and commissions of the government are required to assist Mr. Justice Haines.

It seems appropriate to avoid any misunderstandings by clarifying the assurances issued earlier. Please be assured that no adverse employment action will be taken against any employee or any contractor because that person, acting in good faith, makes representations to or discloses evidence to the Meat Inspection Review. These assurances are also intended to apply to any former OPS employee.

Should you have any questions about your participation, please contact the ministry's Human Resources Director, Jim Felker, at 519-826-3739. It is also appropriate for you to contact the bargaining agent representing OPS staff, should you choose to discuss your involvement in or questions pertaining to the meat inspection review.

Assisting Mr. Justice Haines is of great importance because we want to continue to ensure the highest standards of safety in the meat industry. It is very important that we assist with this review in any way that we can.

Frank Ingratta Deputy Minister

c: Mr. Tony Dean, Secretary of the Cabinet Ms. Kathryn Bouey, Deputy Minister, Management Board Secretariat Mr. Kevin Wilson, Management Board Secretariat

Ministry Headquarters: 1 Stone Road West, Guelph, Ontario N1G 4Y2 Bureau principal du ministère: 1, rue Stone ouest, Guelph (Ontario) N1G 4Y2

Invite Ontario Home



Appendix O - Biographies of Reviewers of the Expert Advisory Panel Report

John Blatherwick, M.D., has been the Medical Health Officer in Vancouver since March 1984 and is the Chief Medical Health Officer of the Vancouver Coastal Health Authority. Prior to coming to Vancouver, he was the Medical Health Officer in the Simon Fraser Health Unit for nine years. He started in public health with the Vancouver Health Department in 1971, leaving a residency in Internal Medicine at Vancouver General Hospital to se up the Pine Street Youth Clinic. He left Vancouver in 1974 to take his Diploma in Public Health at the University of Toronto and to complete his Fellowship in Public Health at UBC. Dr. Blatherwick served in the Canadian Forces reserves for 39 years in total retiring in 2000. He retired with the rank of Commander and was the Senior Naval Reserve Medical Advisor when he retied. He was Canada's representative to the NATO Reserve Medical Officers' Congress form 1989 to 1995 and received only their sixth gold medal. Dr. Blatherwick has published 18 books, mainly about airplanes and about civilian and military medals. Dr. Blatherwick was awarded the Order of Canada in 1994 for his work in public health and received an award as a Canadian Health Hero from the Pan American Health Organization in 2002.

Larry Copeland, is Director, Food Protection Services, British Columbia Centre for Disease Control, Ministry of Health, British Columbia. Mr. Copeland's office is responsible for providing the Ministry of Health with the scientific advice the Ministry requires to develop provincial policy and legislation governing the safety of the province's food supply. As well, it provides similar specialized scientific resources to the regional Health Authorities to assist them in their mandate of administering/enforcing provincial food safety policy and legislation within their jurisdiction. Additional related services include undertaking necessary research, providing education/training programs, developing information management programs and collecting/analyzing data concerning food borne hazards/illnesses contributing to the burden of morbidity and mortality in the British Columbia population. Mr. Copeland's office is as well directly responsible for administering the provisions 3 provincial food safety Acts governing abattoirs, dairy and fish processing plants. This includes

provision of licensing, inspection and enforcement services to support the regulatory requirements under these Acts.

Gordon Dittberner, B.V.Sc., is a veterinary science graduate of the University of Pretoria. After leaving South Africa in 1966, he practiced in the United Kingdom for almost a year and then immigrated to Canada. He was a partner in a small animal practice in Calgary for 6 years, before beginning his career with Agriculture Canada as a field veterinarian in the Calgary District Office in 1974. In 1977 he moved to Ottawa where he accepted a variety of positions with Agriculture Canada related to regulatory veterinary medicine. In 1986 he was appointed the Veterinary Director General and then in 1991 the Assistant Deputy Minister, Corporate Services Branch, Agriculture and Agri-food Canada. In 1998, Dr. Dittberner retired from the federal government and founded AgriVet International, specializing in agriculture, veterinary and management consulting. His clients have included Health Canada, Agriculture and Agri-food Canada and the Canadian Veterinary Medical Association, as well as the National and Provincial Departments of Agriculture in South Africa.

Pat Dodsworth, is Director, Quality Assurance and Food Safety, Schneider Foods.

Kathryn Doré, B.Sc., M.H.Sc., is Senior Epidemiologist and A/Manager: Surveillance Section, Food-borne, Water-borne and Zoonotic Infections Divisions, Health Canada and Adjunct Professor, Department of Population Medicine, University of Guelph.

Sandra Fulton, is President, Fulton Food Safety Consultants, Rockwood, Ontario, a firm that specializes in regulatory requirements for the food industry and provides practical "hands-on" services to industry and government in HACCP development, auditing, on-site training, plant design and federal approvals. In 2002-03, her firm developed and delivered Further Meat Processing training to OMAF's inspection staff, and developed the HACCP approach (standards) for OMAF's HACCP Advantage Program. Ms. Fulton started her career with CFIA in 1980 as a federal meat inspector and worked progressively to the position of Area Supervisor for meat processing inspectors. Prior to resigning her position in 1998, Sandra held the position of Program Specialists, Blueprints, Plants and Equipment for the Ontario Region and was responsible for licensing, evaluating blueprints, enforcement, providing interpretation and direction to industry and inspection staff on standards, training inspection staff and auditing 60 establishments annually for compliance. In 1999, Ms. Fulton was contracted by the CFISIG to develop the 16-chapter Code for the National Meat & Poultry Regulations.

John Groenewegen, Ph.D., is President of JRG Consulting Group, a firm dedicated to providing consulting services to the agri-food sector. Dr. Groenewegen has a key role in providing consulting services to governments, industry associations and agri-business firms on issues such as business strategy, competitiveness, farm policy, trade policy, grain sector issues, horticultural, and livestock and poultry sector issues. In the food safety area, he has been involved in projects related to the costs of compliance with meat standards by abattoirs, developing an inventory of free standing meat plants, reducing the barriers to HACCP adoption in the meat industry, and an audit of a food safety program. Dr. Groenewegen was a partner with Deloitte & Touche Consulting Group responsible for the agrifood consulting practice (focusing on strategy, economics and policy issues). Prior to his consulting career, Agriculture Canada employed him as a policy analyst, and was on staff at the Unites States Department of Agriculture in agricultural policy. Dr. Groenewegen obtained his Ph.D. in Agriculture and Applied Economics from the University of Minnesota, and his B.Sc. (Agri) and M.Sc. in Agricultural Economics from the University of Guelph. John is also a Certified Management Consultant (CMC).

Sylvain Quessy, D.M.V., Ph.D., is Industrial Chair on Meat Hygiene, Associate Professor, Département de pathologie et Microbiologie, Faculté de médecine vétérinaire, Université de Montréal. Dr. Quessy is a graduate of the University of Montreal (DVM, 1984). He worked as a private practitioner and as a meat hygienist for Canadian Food Inspection Agency (CFIA) before the completion of his PhD in microbiology and immunology (Montreal, 1994). He then worked for Health Canada as scientific researcher and head of environmental microbiology section of the Health of Animals and Food Laboratory at St.-Hyacinthe where he studied the molecular epidemiology and the control of food-borne and water-borne pathogens. In 1999, he accepted a position as professor at the Faculty of Veterinary Medicine of the University of Montreal. He is currently responsible for a research chair in meat safety where he supervises the work of many graduate students working on the genetic characterization and epidemiology of food-borne and environmental pathogens. He acted as scientific counsellor for many governmental, professional or producer organizations in the development of policies, of on-farm HACCP-based models, or in risk analysis. He is recognized as an expert in microbial risk assessment by the World Health Organization. He published and presented numerous scientific papers on the molecular epidemiology, pathogenesis and control of pathogens such as *Salmonella, Yersinia, Cryptosporidium* and *Campylobacter*.

Bill Rannells, D.V.M., is an independent Contractor, Cook and Thurber, Ann Arbor, Michigan. Former Industry QA Manager and USDA Cooperative State-FSIS official.

Robin Williams, M.D., is the Medical Officer of Health for the Niagara Region and a Clinical Professor at McMaster University. Apart from being responsible for general public health programs including water and food safety, Dr. Williams and her staff were involved in an *E. coli* 0157:H7 foodborne investigation in Regional Niagara in the spring of 1998 involving 39 patients. This was subsequently sourced to Genoa salami and the case control study was published in the Canada Medical Association Journal.

Peter Willmott, MES, CPHI(c), is currently the Director, Health Protection Services, with the Halton Region Health Department, Oakville, Ontario, a position he has held since 1985. Prior to that time, he was employed by the Ontario Ministry of Health for 12 years in a variety of positions, including Chief of the Provinc ial Public Health Inspection Service and Co-ordinator of Public Health Legislation. In this latter capacity, he was one of the principal authors of the *Health Protection & Promotion Act*. From 1983-1995, Mr. Willmott taught environmental health management in the School of Occupational & Public Health, Ryerson University. Mr. Willmott's current portfolio includes responsibility for the Health Department's Communicable Disease Control and Food Safety Programs. His current interests in food safety include membership in the Canadian Food Inspection System Implementation Group and the Ontario Food Safety System Implementation Committee. Mr. Willmott trained as a public health inspection in the UK and Canada. His UK qualifications include certification as a meat inspector. He is a graduate of the School of Business & Economics, Wilfred Laurier University and holds a Master's Degree in Environmental Studies from York University. He is currently completing a PHD in Food Safety Policy from the University of Lincoln (UK).

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