



**Investment
Agriculture
Foundation**
of British Columbia

Livestock Waste Tissue Initiative

List of Approved Projects
Updated: February 2, 2011

Funding for the Livestock Waste Tissue Initiative is provided by:



All project reports, publications and presentations can be found
on the Livestock Waste Tissue Initiative website
if indicated below as available. Visit: www.iafbc.ca/livestock

LWTI 001

An Evaluation of Gasification Technology as an Alternative Disposal Method for Specified Risk Material from Packing and Slaughterhouses in BC

Applicant: [Thompson Rivers University](http://www.thompsonrivers.ca)
Contact: Dr. Thomas E. Dickinson
Tel: (250) 828-5447
Email: tdickinson@tru.ca

Start Date: July 20, 2005

Completion Date: September 15, 2005

Project Description

- Determine the performance characteristics of commercially available gasification units (generically) using a blended mixture of pelletized wood and solid waste material typically produced at slaughterhouses.
- Validate the capacity of the technology to meet or exceed accepted (European) standards of heat generation and exposure at levels sufficient to ensure the destruction of BSE prions. And work within the BC standards for air emissions quality.
- Identify the range of situations and conditions under which gasification is an economically viable instrument to dispose of slaughterhouse solid waste.

Total Project Cost: \$60,800

IAF Contribution: \$24,800

Completed Project Reports

An Assessment of Gasification as an Alternative Technology for the Disposal of Slaughterhouse Wastes.
March 15, 2007 (available)

- Appendix 1 Flow Description Westwood Energy Gasification (available)
- Appendix 2 Emission Survey Monitoring Report (available)
- Appendix 3 Small Scale Gasification Systems (available)

LWTI 002:

Project terminated by applicant before being considered by LWTI Management Committee

LWTI 003

An Evaluation of High Temperature Incineration as a Disposal Method for Solid Waste Containing SRM from Packing and Slaughterhouses in BC

Applicant: [Thompson Rivers University](#)

Contact: Dr. Thomas E. Dickinson

Tel: (250) 828-5447

Email: tdickinson@tru.ca

Start Date: September 1, 2005

Completion Date: September 30, 2005

Project Description

- Determine the performance capacity of commercially available incinerators (generically) fitted with high performance diesel powered afterburners to destroy the kind of solid waste material that will contain SRM, typically produced at slaughterhouses and meat packing facilities in rural BC.
- Validate that these modified incinerators can meet or exceed accepted (European) standards of heat generation and exposure at levels sufficient to ensure the destruction of BSE prions, while working within the BC air emissions standards.
- Identify the range of situations, conditions, and waste disposal volumes under which enhanced incineration is an economically viable instrument to dispose of slaughterhouse solid waste.

Total Project Cost: \$60,400

IAF Contribution: \$24,900

Completed Project Reports

An Assessment of Enhanced Incineration as an Alternative Technology for the Disposal of Slaughterhouse Waste (available)

Appendix 1 Emission Survey Monitoring Report (available)

LWTI 004:

Project terminated by applicant before being considered by LWTI Management Committee

LWTI 005 – Phase I

Proposal to Update the Foreign Animal Disease Emergency Support (FADES) Plan for BC

Applicant: LWTI RFP: Smart Risk Control
Contact: Rick Van Kleeck
Tel: (604) 556-3145
Email: Rick.VanKleeck@gov.bc.ca

Start Date: October 12, 2005

Completion Date: March 31, 2006

Project Description

- Review the existing FADES Plan, Terms of Reference, our Proposal, and other materials to develop an initial Project Plan, including a detailed timeline and performance measures by which our progress may be tracked. In addition, we will prepare research questions and identify potential contacts for subsequent project tasks.
- Research the legislation, plans, responsibilities, and capabilities among the federal and provincial agencies involved in FADES.
- Work with agency representatives to resolve challenges in FADES planning and develop a good understanding of the objectives and options available for each issue.
- Depending on Steering Committee direction, prepare a series of components designed to support the FADES plan.
- Assemble Rough Draft FADES Plan and begin the important task of checking for inconsistencies and duplication of information. Write the body of the plan and all appendices to a standard understood by all intended readers, including graphic illustrations where appropriate.
- Incorporate comments from the Steering Committee to develop the final version of a draft FADES plan suitable for review and comment by other agencies.
- Prepare recommendations for Phase II tasks of the project, likely to include consultations with stakeholders regarding the draft FADES plan.

Total Project Cost: \$63,332

IAF Contribution: \$63,332

Completed Project Reports

2010 FADES Reports are available under LWTI 041

LWTI 005 – Phase II

FADES Planning Phase II – Consultation and Training

Applicant: LWTI RFP: Smart Risk Control

Contact: Rick Van Kleeck

Tel: (604) 556-3145

Email: Rick.VanKleeck@gov.bc.ca

Start Date: May 5, 2006

Completion Date: December 31, 2006

Project Description

- Consult with industry associations, local governments, and other agencies that are engaged in emergency planning for foreign animal disease.
- Form five targeted planning groups to address the following issues: JEOC Facilities and IT; Disposal Options; Information Collaboration; Data Mgmt. and Mapping; Compensation
- Develop training plans for three entities: CFIA, Ministry of Agriculture and Lands, and Industry in general. Working with senior managers for each group, identify the persons requiring training, specify the minimum and optimum course requirements for each response position (including Incident Commanders), and identify suitable trainer options.
- Facilitate table-top exercises of the FADES Plan at two locations: 1) Abbotsford (a poultry scenario), and 2) Kamloops (cattle and other hoofed animals).
- Consider all of the comments collected during the previous four tasks, and incorporate improvements into the FADES Plan content, format, and accessibility.

Total Project Cost: \$68,327

IAF Contribution: \$68,327

Completed Project Reports

20010 FADES Reports are available under LWTI 041

LWTI 006: Project Cancelled by Applicant

Economic Feasibility Study of Separating Existing Operation of Beef Slaughter and Pork Slaughter

Applicant: Johnston Packers (1995) Ltd.

Contact: Bonnie Windsor

Tel: (604) 858-4121

Email: bwjohnstonpackers@hotmail.com

Start Date: December 5, 2005

Completion Date: February 28, 2006

Project Description

In order to identify the most appropriate way to proceed, a feasibility study is needed. The proposed feasibility study will include:

- An initial meeting and study initiation process to obtain all project background
- A detailed assessment of current operations
- A documentation of proposed operations and an assessment of physical (building) requirements for meeting future needs (to a federal standard)
- An assessment of equipment needs taking into account what equipment is already in place.
- An assessment of costs of optional solutions:
 - new beef plant, renovate existing for pork, and
 - new pork plant, renovate existing for beef
- An assessment of future sales by species
- Sources of capital funding
- Provide various models for financial assessment to identify the best way to proceed
- Feasibility study report including recommendations on the best way to proceed

Total Proposed Project Cost: \$33,400

IAF Contribution: \$0

LWTI 007

Assessment of Economic Feasibility of Gasification System for Disposal of Carcass Waste Material at Blue Mountain Packers

Applicant: Blue Mountain Packers
Contact: Robert Kuziw
Tel: (250) 832-1914
Email: chuziw@telusplanet.net

Start Date: December 1, 2005

Completion Date: April 5, 2006

Project Description

The feasibility study will examine and report on the following topics.

- Technology, equipment and operating parameters of the three options (gasifier, incinerator, and in-house sorting, landfilling and small scale incineration) for Blue Mountain Packers' Salmon Arm plant, based on 5-6 waste material input scenarios
- Staffing and their educational and/or work experience requirements that would be attached to the proposed systems
- Sources and amounts of livestock carcass waste that could be obtained from the Salmon Arm plant and other slaughter facilities in the region to feed the disposal systems at the Salmon Arm plant
- Sources, amounts and costs of wood waste and wood pellets that could be obtained from the region to feed the gasifier at the Salmon Arm plant
- Creation of five or six waste material scenarios for feeding the proposed systems
- Identification of modifications that would be required to the current plant and/or its operation to accommodate the systems
- Identification and description of the regulatory requirements that would be required to operate the systems in full compliance with governmental regulations, including SRM regulatory requirements Estimation of costs associated with obtaining regulatory approvals and permits Estimated timeline for all regulatory and permit approvals
- Projection of operating costs of the three options including fuel, labour, and maintenance for three operating time scenarios and five to six waste material scenarios.
- Projection of energy savings benefits available from the gasifier and incinerator and sensitivity of these to natural gas prices.
- Calculation of payback period and other financial parameters to assess the project's financial feasibility
- Sensitivity analysis of key financial indicators based on revising key assumptions, such as natural gas prices
- Recommendations on implementation of an option for Blue Mountain Packers' Salmon Arm plant

Total Proposed Project Cost: \$71,688

IAF Contribution: \$30,000

Completed Project Reports

LWTI 007 Interim Report (available)

LWTI 008:

Project terminated by applicant before being considered by LWTI Management Committee

LWTI 009

Situation Analysis and Solution Identification Program

Applicant: LWTI

Contact: Rick Van Kleeck

Tel: (604) 556-3145

Email: Rick.VanKleeck@gov.bc.ca

Start Date: December 13, 2005

Project Description

- To encourage and assist existing commercial slaughter plant operators in thinking through the best available option for livestock waste tissue disposal for their specific situation.
 - By hiring an approved consultant to work with the plant operator; consultation with local government, the Ministry of Environment and CFIA; and preparation of a situation analysis/solution identification report that will drive activities to focus on an attainable solution.
 - Approved projects will receive reimbursement for 100 per cent of eligible activity expenditures to a maximum of \$2,000.

Applicants approved to April 16, 2007:

- Kawano Farms Ltd
- Rainer Custom Cutting
- Rodear Meats Ltd
- Spokin Lake Meats
- Medallion Meats

Final Reports Received:

- Kawano Farms Ltd
- Rainer Custom Cutting
- Rodear Meats Ltd
- Spokin Lake Meats
- Medallion Meats

LWTI 010

Assistance in Applying for a Ministry of Environment Permit Program

Applicant: LWTI

Contact: Rick Van Kleeck

Tel: (604) 556-3145

Email: Rick.VanKleeck@gov.bc.ca

Start Date: December 13, 2005

Project Description

- Encourage and assist slaughter plant operators who have developed an acceptable Situation Analysis and Solution Identification Report in obtaining a permit (in a timely manner) from Ministry of Environment for disposal of livestock waste tissue.
- Hire an approved consultant to work with the plant operator in all areas related to obtaining a permit, such as: filling application forms, modeling air emission, public consultation, or setting up a groundwater monitoring program
- Approved projects will receive reimbursement up to 75 per cent of eligible activity expenditures to a maximum of \$15,000.

Applicants approved to April 16, 2007:

- Rainer Custom Cutting

Final reports received:

- Rainer Custom Cutting

LWTI 011

Anaerobic Digestion as a Cost-effective and Environmentally Safe Option for the Disposal of Livestock Waste Tissue

Applicant: New Energy Eco-Systems Ltd.

Contact: Lynda Skene

Tel: (403) 242-3321

Email: genesisprojects@shaw.ca

Start Date: February 28, 2006

Completion Date: August 31, 2006

Project Description

- Olds College will investigate the impact of adding energy rich co-substrates during anaerobic digestion of manure on fermentation efficiency, biogas yield and biogas quality. These co-substrates include slaughterhouse offal, used cooking oil, restaurant waste and grocery store waste products. The objective is to determine the viability of anaerobic digestion of these waste streams and the advantages of co-digesting various waste mixtures.
- Genesis will research integrated 'mixed' waste to energy systems in Europe and other areas of the world to assess the success of previous efforts to combine waste streams in relation to the BC projects. Efforts will be made to identify waste combinations that have resulted in increased biogas production, added revenue and overall profitability.
- Valley Ag will conduct a waste audit to determine the availability, location, suitability, accessibility and sustainability of high quality feedstock in the Fraser Valley. The waste audit will involve both quantitative (available) and qualitative (suitable) analysis of existing or available organic feedstocks within the region. A series of interviews will be conducted to evaluate accessibility, i.e. the willingness of waste providers to participate in the project by allowing project developers access to their waste streams.

Total Proposed Project Cost: \$77,803

IAF Contribution: \$15,000

Completed Project Reports

Anaerobic Digestion Report (available)

LWTI 012: Project Cancelled by Applicant

Separation of Pet Food Material from Inedible Products

Applicant: Blue Mountain Packers

Contact: Peter Philip

Tel: (250) 372-8162

Email: psphilip@telus.net

Start Date: March 13, 2006

Completion Date: June 30, 2006

Project Description

- Blue Mountain Packers will create a system where all inedible material goes to the basement on stainless steel shoot ending up on a perforated table where any excessive water could go to the floor drains and ultimately the water treatment plant.
- From this table all useable products for pet food would be separated and put in a bin in the pet food production room via another stainless steel shoot, next the paunch (stomach) would be opened and the contents put in an auger going to a truck used to haul away for fertilizer. The tripe (empty paunch) would be rinsed and sent to the pet food room.
- This project will install the sorting table and related conveying systems.

Total Proposed Project Cost: \$33,000

IAF Contribution: \$0

LWTI 013

Situation Analysis and Solution Identification

Applicant: Nicola Valley Meats Inc.

Contact: Mino Kuiper

Tel: (250) 378-5174

Start Date: February 28, 2006

Completion Date: September 1, 2006

Project Description

- Encourage and assist Nicola Valley Meats Inc. in thinking through the best available option for livestock waste tissue disposal for their specific situation.
- An approved consultant will work with Nicola Valley Meats, Inc; consult with local government, the Ministry of Environment and CFIA; and prepare a situation analysis/solution identification report that will drive activities to focus on an attainable solution.

Total Project Cost: \$2,000

IAF Contribution: \$2,000

Completed Project Reports

Final Report Received

LWTI 014

Situation Analysis and Solution Identification

Applicant: Tarzwell Farms
Contact Person: Tom Tarzwell
Tel: (250) 428-4316
Email: tarzwell@shaw.ca

Start Date: February 28, 2006

Completion Date: September 1, 2006

Project Description

- Encourage and assist Tarzwell Farms in thinking through the best available option for livestock waste tissue disposal for their specific situation.
- An approved consultant will work with Tarzwell Farms; consult with local government, the Ministry of Environment and CFIA; and prepare a situation analysis/solution identification report that will drive activities to focus on an attainable solution.

Total Proposed Project Cost: \$2,000

IAF Contribution: \$2,000

Completed Project Reports

Final report received

LWTI 015: Project Cancelled

Incineration Emission Survey and Operational Report

Applicant: LWTI RFP: A. Lanfranco and Associates Inc.
Contact: Rick Van Kleeck
Tel: (604) 556-3145
Email: Rick.VanKleeck@gov.bc.ca

Start Date: January 24, 2006

Completion Date: April 15, 2005

Project Description

- To test and report on the air emissions from a Easy-Burn model 428-RS incinerator burning typical waste tissue from a slaughter plant. The stack sampling test results are to be prepared in accordance with the "British Columbia Field Sampling Manual for Continuous Monitoring and Collection of Air, Air-Emission, Water, Wastewater, Soil, Sediment and Biological Samples (2003 Permittee Edition)" as required in the Ministry of Environment Approval number AA-17895.
- To produce a Technology Verification Report. This report to cover the following points:
 - Verification of specifications listed in Incinerator Specifications part (a) above (include photographs of the unit).
 - Document operational procedures followed and identify any procedures that deviated from the Operational Manual for Slaughter Plant Solid Wastes.
 - Prepare a summary of the Air Emission Report with results corrected to 11% O₂ and provide the results in a table form similar to the table below.
 - Comment on the secondary chamber temperatures and contact times for each run and an over-all average.
 - Recommend good practices to be considered when operating the unit.

Total Proposed Project Cost: \$9,940

IAF Contribution: \$1,985

LWTI 016:

Project terminated by applicant before being considered by LWTI Management Committee

LWTI 017

Slaughter Waste Composting Demonstration Project, Seminar and Field Day

Applicant: [Sylvis Environmental](#)

Contact: Ruth McDougall

Tel: (250) 546-3481

Email: nrmcd@telus.net

Start Date: May 5, 2006

Completion Date: August 31, 2006

Project Description

- Coordinate production of one windrow of slaughter waste compost on site at a slaughter facility using the static aerated pile method as used to compost slaughter wastes in New York State
- Organize a one day seminar and field day where interested individuals from the slaughter industry and government can learn about composting of slaughter wastes and about provincial and federal regulations concerning compost production and distribution
- Prepare proceedings from the seminar and field day including summaries of talks given by the various speakers

Total Project Cost: \$17,119

IAF Contribution: \$17,119

Completed Project Reports

Slaughter Waste Composting Seminar Project Summary (available)

June 26 2006 Presentations (see LWTI, Publications and Resources, Presentations)

June 27 2006 Presentations (see LWTI, Publications and Resources, Presentations)

LWTI 018

Development and Testing of a Template for Local Governments Use When Planning for Emergency Mass Carcass Disposal

Applicant: LWTI RFP: Bremner Consulting Services

Contact: Rick Van Kleeck

Tel: (604) 556-3145

Email: Rick.VanKleeck@gov.bc.ca

Start Date: May 5, 2006

Completion Date: December 31, 2006

Project Description

- Develop a template to be used by local governments when preparing their emergency plans for farmed animal mass carcass disposal
- Test the template by preparing emergency plans for two local governments selected by the project Steering Committee
- Modify the template from lessons learned in preparing the two plans
- Suggest a funding table to be used to guide funding for the preparation of further local government plans for mass carcass disposal

Total Project Cost: \$58,456

IAF Contribution: \$58,456

Completed Project Reports

Template for Farmed Animal Carcass Disposal Emergency Plan for Local Governments (see LWTI website under Projects and Results)

Farmed Animal Mass Carcass Disposal Emergency Plan for the City of Chilliwack (available)

Farmed Animal Mass Carcass Disposal Emergency Plan for Cariboo Regional District (available)

See LWTI 029 for other local government emergency plans

LWTI 019

Slaughterhouse Waste Disposal Options North Okanagan/Thompson

Applicant: North Okanagan / Thompson Waste Tissue Disposal Project Steering Committee

Contact: Anam Kour

Tel: (250) 375-2588

E-mail: MedallionMeats@hughes.net

Start Date: July 11, 2006

Completion Date: October 30, 2006

Project Description

- Identify, characterize, and quantify the slaughterhouse industry that includes operators within the following broadly defined area: Vernon and the North Okanagan, Sicamous to Savona and Clearwater to Merritt.
- Investigate four identified options, each with sub-options for waste disposal that focus on trucking, landfill, incineration, and composting.

Total Project Cost: \$34,704

IAF Contribution: \$34,704

Completed Project Reports

North Okanagan/Thompson Slaughterhouse Waste Disposal Options November 2006 (available)

LWTI 020

British Columbia Finfish Aquaculture Waste Tissue/Finfish Kill Contingency Plan

Applicant: LWTI RFP: [Golder Associates Ltd.](http://www.golder.com)

Contact: Dave Munday

Tel: (250) 881-7372

E-mail: dmunday@golder.com

Start Date: December 12, 2006

Completion Date: July 31, 2007

Project Description

- Review existing finfish mortality disposal systems
 - Evaluation of current capabilities and capacities for mortality disposal
 - Gap analysis of existing mortality disposal systems
- Identification of roles and responsibilities for industry, government agencies and other applicable parties.
- Risk / hazards / vulnerability analysis.
- Development of emergency response / management plan

Total Project Cost: \$42,397

IAF Contribution: \$42,397

Completed Project Reports

British Columbia Finfish Aquaculture Waste Tissue / Finfish Kill Contingency Plan (available)

Supplemental Report for British Columbia Finfish Aquaculture Waste Tissue / Finfish Kill Contingency Plan (available)

LWTI 021

Landfill Requirements for Poultry Processing and Slaughter Waste

Applicant: LWTI RFP: [Sperling Hansen Associates](#)

Contact: Scott Ferraro

Tel: 604 986-7723

E-mail: sperling@sperlinghansen.com

Start Date: July 26, 2006

Completion Date: October 31, 2006

Project Description

- Review and recommend preferred waste disposal techniques - including on-site naturally controlled landfills.
- Review and recommend preferred site characteristics - including on-site naturally controlled landfills.
- Review and recommend environmental management for landfills accepting slaughter waste.
- Review regulatory frameworks affecting the landfilling of slaughter waste.

Total Project Cost: \$23,400

IAF Contribution: \$23,400

Completed Project Reports

Landfill Requirements for Poultry Processing & Slaughter Waste (available)

LWTI 022

Technical Standards/Requirements for Air Emissions for Poultry Processing and Slaughter Waste

Applicant: LWTI RFP: [Levelton Consultants Ltd.](#)

Contact: Klym Bolechowsky

Tel: (604) 207-5128

E-mail: klymb@levelton.com

Start Date: September 21, 2006

Completion Date: December 31, 2006

Project Description

- Review and recommend air emission standards/requirements for any size of slaughter and poultry processing facilities.

Total Project Cost: \$31,471

IAF Contribution: \$31,471

Completed Project Reports

Review of Technical Standards and Requirements for Air Emissions for Poultry Processing and Slaughter Waste (available)

LWTI 023

Options and Challenges Related to Emergency Disposal of Large Animals in the Fraser Valley

Applicant: Agri-Business Consortium
Contact: Hubert Timmenga
Tel: (604) 321-1242
E-mail: htimmenga@telus.net

Start Date: July 4, 2007

Completion Date: December 21, 2007

Project Description

- Generate background information regarding disposal challenges in the Fraser Valley
- Quantify the volume of materials requiring disposal
- Identify all viable means of disposal options for the Fraser Valley
- Qualify all viable means of disposal options
- Recommend an array of disposal options
- Recommend actions to unblock barriers to disposal options where required
- Quantify and describe current disposal capacity in or near the Fraser Valley
- Compare the status quo to a scenario where barriers to disposal are removed

Total Proposed Project Cost: \$46,913.24

IAF Contribution: \$46,913.24

Completed Project Reports

Options and Challenges Related to Emergency Disposal of Large Animals in the Fraser Valley (available)

LWTI 024

Risk Assessment of BC Landfills for SRM Disposal

Applicant: LWTI RFP: [DNV Consulting](#)
Contact: Philip J. Comer
Tel: 44 20 7357 6080
E-mail: Philip.Comer@dnv.com

Start Date: December 1, 2006

Completion Date: March 1, 2007

Project Description

- Define the scenario for the assessment
- Hazard and Pathway Identification
- Risk Evaluation
- Reporting

Total Project Cost: \$41,896

IAF Contribution: \$41,896

Completed Project Reports

Risk Assessment of Landfill Sites for DRM Disposal (available)

LWTI 025: Project Cancelled by Applicant

Site Investigation for a SRM Incineration System at Medallion Meats

Applicant: Medallion Meats Corp.
Contact: Anam Kour
Tel: (250) 375-2588
E-mail: medallionmeats@hughes.net

Start Date: April 1, 2007

Completion Date: May 31, 2007

Project Description

- The project will conduct the necessary due diligence studies in regard to the regulations, the location, and the choice of equipment; review the applications of permits and approvals for incineration of slaughter wastes at Medallion meats.

Total Proposed Project Cost: \$25,000

IAF Approved Contribution: \$15,000

LWTI 026

Review of Incineration Options for Specified-Risk-Material

Applicant: Golder Associates Innovative Applications Inc.
Contact: Neil McQuitty
Tel: (604) 298-6604
E-mail: Neil_McQuitty@golder.com

Start Date: March 22, 2007

Completion Date: May 18, 2007

Project Description

- To contact manufactures and suppliers of incineration and gasification regarding technologies, cost of implementation, cost of operation and maintenance.
- Conduct a desktop study to examine available regional and individual incinerator technologies.

Total Project Cost: \$6,148

IAF Contribution: \$6,148

Completed Project Reports

Incineration report (available)
Appendix 1 to 20 (available)

LWTI 027

Assessment of a TNRD and Surrounding Area In-Vessel Composting Facility

Applicant: Sylvis Environmental
Contact: Ruth McDougall
Tel: (250) 546-3481
E-mail: rmcdougall@sylvis.com

Start Date: March 22, 2007

Completion Date: June 15, 2007

Project Description

- Selection of composting system, obtaining background information for project development
 - Compost system selection
 - Tables of: volumes, types and cost of wood waste materials; sale value of similar composts; and expected slaughter waste volume.
- Detailed assessment of proposed sites and system costs

Total Proposed Project Cost: \$33,536.58

IAF Contribution: \$33,537

Completed Project Reports

Assessment of a TNRD and Surrounding Area Enclosed Composting Facility for Slaughter Waste (available)

LWTI 028: Project cancelled

In-vessel Slaughter Waste Compost Pilot Project

Applicant: Riverside Natural Meats
Contact: Bill Meikle
Tel: (250) 832-0012

Start Date: August 1, 2007

Completion Date: December 31, 2007

Project Description

- Pilot-scale enclosed aerated bin composting facility as outlined in Transformed Compost Systems proposal
- Odour log for first 4 weeks of composting plus record of any public complaints about the pilot
- One field day on site for City staff, slaughter industry personnel and other interested persons
- One complete batch of slaughter waste compost tested for OMRR compliance
- Short project summary report including odour log, compost data and final compost quality data

Total Proposed Project Cost: \$11,000

IAF Contribution: \$11,000

LWTI 029

UBCM Farmed Animal Mass Carcass Disposal Emergency Planning Program

Applicant: [Union of British Columbia Municipalities](#)

Contact: Danyta Welch

Tel: (250) 356-5193

E-mail: dwelch@ubcm.ca

Start Date: July 27, 2007

Proposed Completion Date: August 31, 2010

Project Description

- The purpose of the project is for the Union of British Columbia Municipalities (UBCM) to manage and administer a program that will fund local government emergency planning for mass livestock carcass disposal.
- Objective of improving the preparedness of local governments to handle mass carcass disposal generated by an emergency event and are related to updating or developing a mass carcass disposal sub-plan to existing emergency plans.
- Updating or developing a mass carcass disposal sub-plan should include: assessing farmed animal-related threats to human health and the environment; identifying resources and key personnel to deal with the threats; outlining methods of utilizing resources; identifying activities that must be performed in the event of an emergency; and conducting a disposal capacity analysis which identifies existing disposal options and examines whether existing disposal infrastructure is sufficient in the event of an emergency.

Total Proposed Project Cost: \$705,000

IAF Approved Contribution: \$705,000

Completed Project Reports

Bulkley-Nechako Regional District (available)
Capital Regional District (available)
Cariboo Regional District (available)
Central Kootenay Regional District (available)
Central Okanagan Regional District (available)
City of Abbotsford (available)
Chilliwack (available)
Coldstream (available)
Columbia Shuswap Regional District (available)
Comox Valley Regional District (available)
Cowichan Valley Regional District (available)
Delta (available)
Fraser-Fort George Regional District (available)
Kent (available)
Kootenay-Boundary Regional District (available)
Maple Ridge and Pitt Meadows (available)
Mission (available)
Nanaimo Regional District (available)
North Okanagan Regional District (available)
Peace River Regional District (available)
Spallumcheen (available)
Squamish-Lillooet Regional District (available)
Strathcona Regional District (available)
Surrey (available)

See LWTI 018 for templates and other local government emergency plans

LWTI 030

FADES Planning Phase III – Exercises

Applicant: Smart Risk Control Inc.
Contact: Jim LaMorte
Tel: (250) 383-4090
E-mail: jlamorte@telus.net

Start Date: November 7, 2007

Completion Date: April 30, 2008

Project Description

- Involve key stakeholders in advanced FADES training, using a highly contagious disease as a scenario.
- Test the CFIA mobile command centre as a Joint Emergency Operations Centre (JEOC) facility, including workstations, information technology, communications, and day-to-day operations in an emergency setting.
- Facilitate a meeting of CCG members to offer another opportunity to work together, and to resolve any issues identified in the program and plan.
- Upgrade the FADES Plan, including all checklists and appendices, for 2008.

Total Proposed Project Cost: \$34,216

IAF Contribution: \$32,531

Completed Project Reports

2010 FADES reports are available under LWTI 041

LWTI 031

Slaughter Waste Composting Land Application

Applicant: Sylvis Environmental
Contact: Ruth McDougall
Tel: (250) 546-3481
E-mail: rmcdougall@sylvis.com

Start Date: November 26, 2007

Completion Date: January 31, 2008

Project Description

- Analysis of the compost from LWTI 017 project before it is spread on land.
- Prepare a land application plan.

Total Proposed Project Cost: \$1,400

IAF Contribution: \$1,467

Completed Project Reports

Land Application (available)

LWTI 032

Project terminated by applicant before consideration by LWTI Management Committee

LWTI 033
Gasification Technology Workshop

Applicant: Natural Resources Canada
Contact: Dr. Ben Anthony
Tel: (613) 996-2868
E-mail: bathony@nrcan.gc.ca

Start Date: February 1, 2008

Completion Date: January 31, 2009

Project Description

- Prepare and present a one-half day technical presentation on Fluidized Bed Combustion and Gasification
- Serve as a technical resource on the potential application of fluidized combustion and gasification technologies

Total Proposed Project Cost: \$5,463

IAF Contribution: \$5,463

Completed Project Reports

CD of information

LWTI 034
FADES Planning Phase IV – Advanced Planning

Applicant: Smart Risk Control
www.smartriskcontrol.com
Contact: Jim LaMorte
Tel: (250) 383-4090996-2868
E-mail: jl@smartriskcontrol.com

Start Date: October 6, 2008

Completion Date: September 8, 2009

Project Description

- Communicate the principles of the FADES Plan with various stakeholders, a BC regional district engaged in exercises, members of the agriculture industry and the training of Ministry of Agriculture and Lands staff
- Advance FADES planning for information exchange among key organizations and for just-in-time training
- Upgrade the FADES Plan, including all checklists and appendices, for 2009

Total Proposed Project Cost: \$32,735

IAF Approved Contribution: \$32,735

Completed Project Reports

2010 FADES Reports are available under LWTI 041.

LWTI 035

Organize, Host and Report on a BC FMD Workshop

Applicant: LWTI RFP: Centre for Coastal Health

www.centreforcoastalhealth.ca

Contact: Craig Stephen

Tel: (250) 740-6366

E-mail: CCH@viu.ca

Start Date: April 24, 2009

Completion Date: December 31, 2009

Project Description

- Finalize project goals, objectives and outcomes
- Strategic selection of invitees
- Logistical planning
- Preparation and distribution of background material
- Conduct conference and workshop
- Preparation of final products

Total Proposed Project Cost: \$64,729

IAF Contribution: \$53,191

Completed Project Reports

FMD Workshop (available)

LWTI 036

FMD Economic Impact Study

Applicant: Serecon Management Consulting, Inc.

www.serecon.ca

Contact: Ralph Ashmead

Tel: (403) 216-2101

E-mail: rashmead@serecon.ca

Start Date: April 20, 2009

Completion Date: December 31, 2009

Project Description

- The economic impacts would measure costs and impacts related to each of the major phases of a foreign animal disease outbreak inclusive of:
 - Costs and impacts related to disease detection and control
 - Disposal costs, quantities and implications
 - Direct and indirect farm level costs and impacts
 - Indirect costs on allied industry, suppliers, etc.
 - Costs of business recovery and investment subsequent to outbreak elimination
 - Trade losses
 - Impact on other sectors
- The study would provide indications of how different control strategies might change the impacts and the level of preparedness of industry and government
- Particular emphasis of the analysis would be with respect to measuring the quantities of livestock that may need to be disposed of in the event of an outbreak and the alternatives to doing so

Total Proposed Project Cost: \$33,574

IAF Contribution: \$33,564

Completed Project Report

FMD Economic Impact Study (available)

LWTI 037: Program ended with no applications
Bridging Assistance to Waste Generators Affected by Increase in Waste Tissue Pick-up Fees

Applicant: LWTI
www.iafbc.ca
Contact: Rick van Kleeck
Tel: (604) 556-3145
E-mail: rvankleeck@iafbc.ca

Start Date: May 8, 2009

Completion Date: December 31, 2010

Project Description

- Applications for this program will be accepted from June 1, 2009 until December 31, 2009.
- “Bridging Assistance” is to be the amount between what the applicant is presently paying and the amount they will be paying when they can implement their long-term disposal plan.
- “Bridging Assistance” is available starting the date of application approval and ends on proposed long-term completion date or earlier if long-term disposal plan completed earlier. Extensions for completion of long-term disposal plans may be granted. Regardless of proposed completion dates or extensions, the Bridging Assistance Program will end December 31, 2010.
- The Bridging Assistance Program ends when the budgeted funds are fully committed on December 31, 2010, whichever occurs first.

Total Proposed Project Cost: \$200,000

IAF Contribution: \$0

LWTI 039
Feasibility Study for Gasification of Poultry Litter and Animal Carcass Tissue

Applicant: LWTI RFP: Sandwell Engineering, Inc.
www.sanwell.com
Contact: David Kaukinen
Tel: (604) 684-9311
E-mail: dkaukinen@sandwell.com

Start Date: March 22, 2010

Completion Date: November 30, 2010

Project Description

- The project requires that the economic and operational feasibility of gasification of poultry litter, spent hens and specified risk material (SRM) be investigated. The feasibility study is to be based around a specific example site and a defined volume of feedstock with known characteristics. The main goal of the studied gasification project will be to turn waste management problems into renewable energy production and net environmental benefits. As with all projects of this nature, air emissions will be one of the most important issues to solve. To gain community acceptance, the gasification facility should aim to both replace air emissions from existing energy production facilities and reduce overall emissions compared to the current situation.

Total Proposed Project Cost: \$208,820

IAF Approved Contribution: \$208,820

Completed Project Report

Project Definition and Feasibility Study for Poultry Litter and Animal Carcass Gasification Plan (available)

LWTI 040

Emergency Carcass Disposal in the Peace River Regional District Area

Applicant: LWTI
www.iafbc.ca
Contact: Rick van Kleeck
Tel: (604) 556-0128
E-mail: rvankleeck@iafbc.ca

Start Date: October 21, 2009

Completion Date: December 31, 2011

Project Description

- This project will develop emergency carcass disposal capacity at the Regional District and individual livestock producer levels across the Peace River Regional District livestock production areas.

Total Proposed Project Cost: \$50,000

IAF Approved Contribution: \$50,000

LWTI 041

FADES Planning Phase V – Facilitated Planning

Applicant: Smart Risk Control, Inc.
www.smartriskcontrol.com
Contact: Jim LaMorte
Tel: (250) 383-4090
E-mail: jl@smartriskcontrol.com

Start Date: October 21, 2009

Completion Date: December 31, 2010

Project Description

- This proposal addresses a series of individual tasks designed to advance and support the BC FADES Plan for 2010. Specifically the objectives are to:
 - Work with multiple stakeholders to develop and approved protocols for coordinated response activities
 - Advance the understanding of the FADES Plan among industry representatives in BC
 - Explore best practices in animal disease response to identify further opportunities to advance the FADES Plan
 - Upgrade the FADES Plan, including all checklists and appendices, for 2010

Total Proposed Project Cost: \$54,818

IAF Approved Contribution: \$54,818

Completed Project Reports

2010 FADES Plan (available)
2010 FADES Checklists (available)
2010 FADES Annexes (available)
2010 FADES Self-Training Module (available)

LWTI 042

Farmed Fish Mass Mortality Disposal Workshop

Applicant: BC Salmon Farmers Association

www.salmonfarmers.org

Contact: Mary Ellen Walling

Tel: (250) 286-1636

E-mail: mwalling@salmonfarmers.org

Start Date: April 19, 2010

Completion Date: December 31, 2010

Project Description

- This proposal is to hold a workshop with the following goals
 - Better understanding of each legitimate option based on its use in other agricultural sectors and each option's possible application to salmon farming
 - Identifying capacity and regulatory hurdles restricting various technology uses
 - Better understanding by authorities and emergency response representatives of the particular constraints and problems of finding on-land disposal solutions to a marine event
 - Identification of specific next steps, responsibilities and timelines to moving forward with a mass mortality disposal plan

Total Proposed Project Cost: \$14,809

IAF Approved Contribution: \$7,079

Completed Project Report

Salmon Farming Industry Mass Mortality Disposal Workshop Report (available)

LWTI 043

Project terminated as a result of a Letter of Intent; an application was invited but was not received.

LWTI 044

Project terminated as a result of a Letter of Intent; an application was invited but was not received.

LWTI 045

Project terminated as a result of a Letter of Intent; an application was invited but was not received.

LWTI 046

Non-SRM Slaughter Waste Composting Facility

Applicant: Spa Hills Farm
Contact: Jake Mitchell
Tel: (250) 833-2578

Start Date: May 15, 2010

Completion Date: December 31, 2010

Project Description

- The project will be to build and operate a composting facility to process non-SRM slaughter waste from three local abattoirs that are provincially licensed and inspected. The slaughter waste composting facility has a wastes receiving area, a material mixing area and six composting bins complete with computer controlled aeration in the floor. Waste receiving, mixing and composting will be done inside a building. The composting bins are covered with a bio-filter layer. The finished compost will be screened and stored in a covered pad. Both the composting building and the curing area have leachate collection systems.

Total Proposed Project Cost: \$465,000

IAF Approved Contribution: \$189,750

LWTI 048

SRM / Litter Fuel Analysis

Applicant: LWTI to carry out the project
Contact: Rick van Kleeck
Tel: (604) 556-0128
Email: rvankleeck@iafbc.ca

Start Date: April 19, 2010

Completion Date: December 31, 2010

Project Description

- To increase the accuracy of the gasification feasibility study (LWTI 039), it is important that fuel analysis information be as precise as possible. There is a need to sample and analyze:
 - Broiler litter
 - Straw-based broiler litter to see how it differs from wood-based litter
 - The deadstock pick-up part of the SRM stream

Total Proposed Project Cost: \$7,000

IAF Approved Contribution: \$7,000

Completed Project Reports

Lab analyses are available from the initiative coordinator.

LWTI 049

Coldstream Farm Animal Mass Carcass Disposal Tabletop Exercise

Applicant: District of Coldstream

www.districtofcoldstream.ca

Contact: Brent Watson

Tel: (250) 550-3246

Email: bwatson@vernon.ca

Start Date: August 15, 2010

Completion Date: February 28, 2011

Project Description

- The District of Coldstream would like to hire the Justice Institute of BC to develop, facilitate and report on a basic tabletop exercise focusing on a mass carcass disposal event.

Total Proposed Project Cost: \$6,035

IAF Approved Contribution: \$6,035

LWTI 050

Spallumcheen Farm Animal Mass Carcass Disposal Tabletop Exercise

Applicant: Township of Spallumcheen

www.spallumcheentwp.bc.ca

Contact: Brent Watson

Tel: (250) 550-3246

Email: bwatson@vernon.ca

Start Date: August 15, 2010

Completion Date: February 28, 2011

Project Description

- The Township of Spallumcheen would like to hire the Justice Institute of BC to develop, facilitate and report on a basic tabletop exercise focusing on a mass carcass disposal event.

Total Proposed Project Cost: \$6,035

IAF Approved Contribution: \$6,035

LWTI 051

Nanaimo Farm Animal Mass Carcass Disposal Tabletop Exercise

Applicant: Regional District of Nanaimo

www.rdn.bc.ca

Contact: Jani M. Drew

Tel: (250) 390-6526

Email: jdrew@rdn.bc.ca

Start Date: August 15, 2010

Completion Date: February 28, 2011

Project Description

- The Regional District of Nanaimo would like to hire the Justice Institute of BC to develop, facilitate and report on a basic tabletop exercise focusing on a mass carcass disposal event.

Total Proposed Project Cost: \$8,854

IAF Approved Contribution: \$8,854

LWTI 052

Central Kootenay Farm Animal Mass Carcass Disposal Tabletop Exercise

Applicant: Regional District of Central Kootenay

www.rdck.bc.ca

Contact: Alanna Garrett

Tel: (250) 428-0299

Email: agarrett@rdck.bc.ca

Start Date: November 1, 2010

Completion Date: February 28, 2011

Project Description

- The Regional District of Central Kootenay would like to hire the Justice Institute of BC to develop, facilitate and report on a basic tabletop exercise focusing a mass carcass disposal event.

Total Proposed Project Cost: \$8,546

IAF Approved Contribution: \$8,546

LWTI 053

Chilliwack Farm Animal Mass Carcass Disposal Tabletop Exercise

Applicant: City of Chilliwack

www.chilliwack.com

Contact: Jim MacDonald

Tel: (604) 792-8713

Email: jimmacd@canada.com

Start Date: November 1, 2010

Completion Date: February 28, 2011

Project Description

- The City of Chilliwack would like to hire the Justice Institute of BC to develop, facilitate and report on a basic tabletop exercise focusing a mass carcass disposal event.

Total Proposed Project Cost: \$8,165

IAF Approved Contribution: \$8,165

LWTI 054

Cariboo Farm Animal Mass Carcass Disposal Tabletop Exercise

Applicant: Cariboo Regional District

www.caribooregionaldistrict.com

Contact: Paul McCarthy

Tel: (250) 392-3351

Email: pmccarthy@cariboord.bc.ca

Start Date: November 1, 2010

Completion Date: January 31, 2012

Project Description

- The Cariboo Regional District wants to hire the Justice Institute of BC to develop, facilitate and report on a basic tabletop exercise focusing on a mass carcass disposal event.

Total Proposed Project Cost: \$9,302

IAF Approved Contribution: \$9,302

LWTI 055

Compost Berm

Applicant: Rainer Farm
Contact: Karl Rainer
Tel: (250) 672-9407
Email: rainer_farm@mercuryspeed.com

Start Date: November 30, 2010

Completion Date: July 30, 2011

Project Description

- The project is to build a compost storage area that meets Ministry of Environment requirements.

Total Proposed Project Cost: \$6,920

IAF Approved Contribution: \$2,760

LWTI 056

FADES Plan Phase VI – Functional Exercise

Applicant: Smart Risk Control, Inc.
www.smartriskcontrol.com
Contact: Jim LaMorte
Tel: (250) 383-4090
Email: jl@smartriskcontrol.com

Start Date: January 25, 2011

Completion Date: December 31, 2011

Project Description

- This proposal addresses a series of individual tasks designed to advance and support the BC FADES Plan for 2011. Specifically, the objectives are to:
 - Develop Area Command for FADES
 - Prepare 24/7 Contact List
 - Hold BC Cattlemen Training
 - Facilitate field exercises
 - Upgrade the FADES Plan, including all checklists and appendices, for 2011

Total Proposed Project Cost: \$129,696

IAF Approved Contribution: \$129,696

LWTI 057

Prince George Farm Animal Mass Carcass Disposal Tabletop Exercise

Applicant: Regional District of Fraser-Fort George

www.rdffg.bc.ca

Contact: Donna Munt

Tel: (250) 960-4446

Email: pmccarthy@cariboord.bc.ca

Start Date: January 4, 2011

Completion Date: June 30, 2011

Project Description

- The Regional District of Fraser-Fort George would like to hire the Justice Institute of BC to develop, facilitate and report on a basic tabletop exercise focusing on a mass carcass disposal event.

Total Proposed Project Cost: \$12,503

IAF Approved Contribution: \$12,503