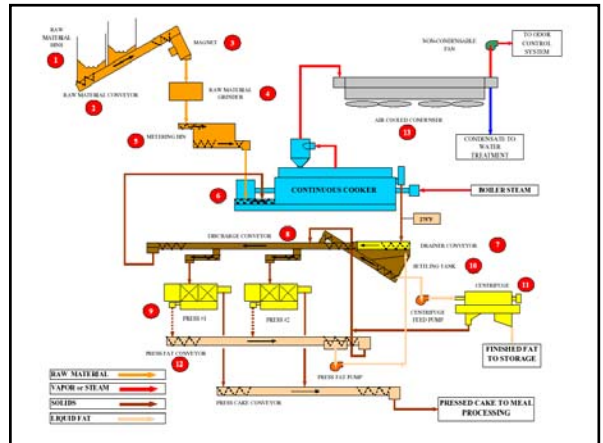
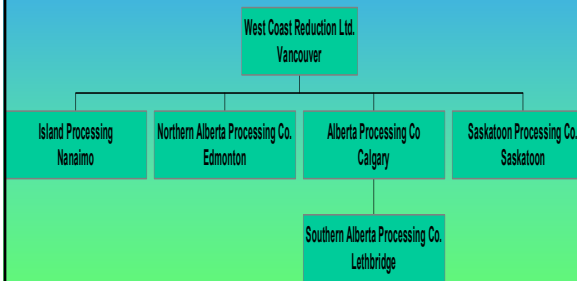


B.S.E Impact: A Rendering Perspective

December 9, 2003

- Introduction and background:
 - What is rendering ?
 - Rendering in Saskatchewan
 - B.S.E. impact before and after May 20,2003
 - Markets for rendered by products
 - The future?

Who are we?



Rendered Products



- Meat & Bone Meal
- Blood Meal
- Porcine Meal
- Feather Meal
- Poultry Meal
- Mixed Fish Meal
- Herring Meal
- Hake Meal
- Feeding Fat
- Poultry Tallow
- Bleachable Tallow
- WCR:
- Technical Tallow
- Herring Oil
- Fish Oil
- Lethbridge:
- Hides

Rendering in Saskatchewan

- Raw Material Sources:
 - Packing plants and meat processing facilities
 - Butcher shops, abattoirs, grocery stores
 - Hog growers and feedlots
 - Farms and ranches
 - Restaurants (used cooking oil)



B.S.E. Impact before May 20

- Aware of B.S.E. in England in 1986
- Rendering industry stopped collecting sheep over 12 months of age in 1989 due to Scrapie
- Ruminant to ruminant feed ban in North America in August 1997
- Discontinued collection of cervids(deer,elk,moose and road kill) from rendering cycle in April 2002 due to concerns with CWD.



B.S.E. Impact after May 20,2003

- Immediate closure of export markets for meat meal
- Oversupply of meat and bone meal in Canada within days
- Meat and bone meal markets dropped drastically as renderers competed for national business.
- Land filling and disposal of meat meal
- 5 cent per pound pickup fee implemented
- Affected all sectors of livestock and meat production



Markets Before BSE

- Canada (all products)
- USA (Blood meal, Meat meal, Fish meal)
- China (Meat meal, Poultry meal, Feather meal, Tallow)
- Taiwan (Meat meal, Poultry meal, Feather meal, Tallow)
- Korea, Mexico, Central America, Europe (Tallow)



Markets Since BSE

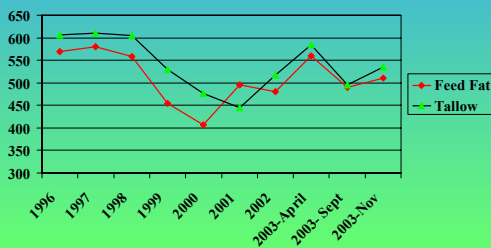
- Canada (all products)
- USA (rendered products from USDA approved, ruminant free plants)
- Japan (Tallow)
- Taiwan (Feather meal, Poultry meal, no tallow)
- Central America (some countries taking tallow)
- China, Korea, Europe (closed)

New Markets:

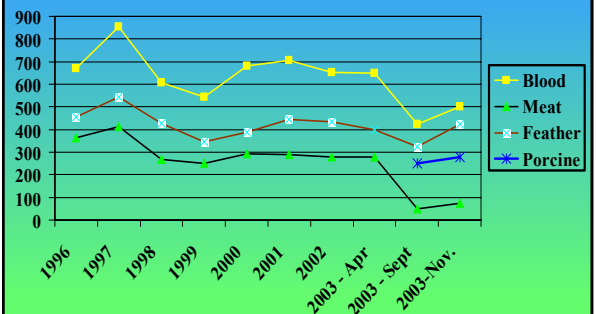
- Pakistan
- Bangladesh
- Australia
- New Zealand



Oil Markets



Meal Markets

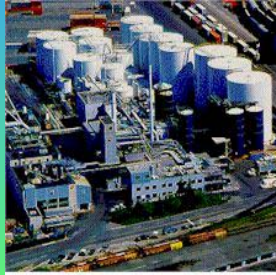




West Coast Reduction since BSE

Vancouver

- Ruminant product shipped to Calgary
- USDA Approved!
- Process Porcine, Poultry, Feather, Blood (avian)
- Herring, Mixed Fish
- Tank Farm handling all types of oils.



West Coast Reduction Ltd.
Vancouver, British Columbia



Saskatoon Processing Co.

Saskatoon

- Processing porcine and ruminant product in two separate lines.
- Working on separate milling rooms.
- Porcine, Meat, Blood (mixed specie)



Saskatoon Processing Co.
Saskatoon, Saskatchewan



The Future



CFIA - The Future

- **CFIA being influenced by USDA**
1. Complete animal protein ban in feeds – not likely
 2. Rules remain as they are today - unknown
 3. Some Ruminant proteins in feeds - likely
 - SRM material , MBM in pork rations?
 - Surveillance program



The Future

Oils:

- Prices will continue to follow canola oil & palm oil trends (majority of oils are exported).
 - Tallow still trading on export markets
- Biodiesel being looked at – probably not economical at this time!
 - Fuel prices in North America compared to Europe.



The Future

Meals: Assume meat meal export markets do not open :

- Prices for meat meal will remain at current levels.
- Meat meal as energy source being looked at
- Increased segregation of raw materials.
- USDA approved plants – export of poultry, porcine, and feather meal will push these commodity prices higher!
- Service charges to our suppliers could increase.



The Future

Meals: Assume meat meal export markets open to China, Taiwan and/or Indonesia!

- Prices for meat meal will jump to \$200 +/-mt
- Other proteins will follow meat meal increase.
- Increased segregation of raw materials will continue!
- Service charges for suppliers will decrease, but probably will not disappear.



B.S.E. Impact on Saskatchewan Rendering Industry

F.A.C.S. Annual Conference Dec. 9,2003