Alberta



February 4, 2015

Subject: Memorandum of Understanding (MOU) Among Alberta Environment and Sustainable Resource Development (ESRD), Alberta Agriculture and Rural Development (ARD), and the Natural Resources Conservation Board (NRCB), Regarding On-Farm Storage and Land Application of Digestate

For this MOU:

- "Digestate" means any liquid or solid material formed from the production of biogas in a digester at a plant or facility that is regulated under the *Environmental Protection and Enhancement Act* (EPEA); and
- "Feedstock" means any substance that is used for the production of biogas in a digester at a plant or facility that is regulated under EPEA.

This MOU concerns the terms and conditions regarding the assumption of regulatory responsibility, between the NRCB and ESRD, for the following:

(1) The storage of digestate at "confined feeding operations" (CFOs) as defined in section 1(b.6) of the *Agricultural Operation Practices Act* (AOPA), and in "manure storage facilities" (MSFs), as defined in section 1(c.3) of AOPA; and

(2) The application of digestate to arable land, by any person. (For this MOU, the term "arable land" has the same meaning as that used in section 24(1) of the *Standards and Administration Regulation*, *Alta. Reg. 267/2001*, under AOPA.)

These will be referred to below as the "two activities."

There are questions as to how AOPA and EPEA apply to the two activities and as to how the NRCB and ESRD can coordinate their roles under these statutes to ensure that environmental risks from the two activities are adequately managed, while avoiding duplication of effort and unnecessary regulatory burdens. This MOU is intended to provide a coordinated and efficient regulatory approach to address these issues. This MOU is not, however, meant to preclude consideration of changes to AOPA and/or EPEA, or to regulations under one or both of those statutes, that would clarify the NRCB and ESRD roles.

The NRCB, ARD, and ESRD agree as follows:

- 1. The NRCB assumes regulatory responsibility under AOPA for the two activities, whenever both of the following circumstances apply:
  - a. "Manure," as defined in section 1(c.2) of AOPA, comprises at least 50% by weight of the feedstock; and
  - b. The remainder of the feedstock consists entirely of one or more of the feedstocks listed in Appendix A or, if not so listed, of feedstocks which the NRCB and ESRD agree to add to that list for a specific plant or facility.

- 2. The NRCB will, in its sole discretion, determine and adopt any necessary permit conditions, nutrient management plan requirements, and/or manure handling plan requirements for CFOs, persons, or other entities engaging in either of the two activities. If the NRCB, however, issues any such permit for a plant or facility that is regulated under EPEA, the AOPA permit will be solely for the purposes of enabling the NRCB to regulate one or both of the two activities. (Nothing in this MOU is intended to limit the NRCB board members' discretion in considering any such permit or nutrient management plan, or an order to enforce any such permit or plan, in a quasi-judicial review of any of those instruments.)
- 3. ESRD will not assume regulatory responsibility for the two activities where the NRCB assumes regulatory responsibility under Clause 1. ESRD will have regulatory responsibility under EPEA for the two activities where the NRCB does not assume regulatory responsibility under Clause 1.
- 4. To the extent permitted by law, the NRCB and ESRD will endeavor to share with each other all relevant information so that each party can fulfill their respective regulatory responsibilities.
- 5. The NRCB and ESRD agree that the applicability of this MOU to each plant or facility will be acknowledged using the form in Appendix B.
- 6. This MOU will take effect upon the latest signature date listed below.
- 7. This MOU will be amended from time to time, as required and as agreed by ESRD, ARD, and the NRCB.

Date: 9269/15 lizelish

Petro Wolsky

Date: 1664/15

Pefer Woloshyn, M.Sc. Chief Executive Officer Natural Resources Conservation Board

Matt Machielse ADM, Operations Division Alberta Environment and Sustainable **Resource Development** 

W Durdet Date: Feb 5/15

Dave Burdek ADM, Policy and Environment Alberta Agriculture and Rural Development

## Appendix A

Feedstock	Description	Sources		
A. LIVESTOCK MANURES				
Livestock manure as defined in AOPA	AOPA Section 1(c.2) "manure" means livestock excretia, associated feed losses, bedding, litter, soil and wash water, but does not include manure to which the Fertilizers Act (Canada) applies	Confined Feeding Operations regulated by the NRCB		
B. ORGANIC FOOD RESOURCES				
B.1 Fats, Oils and Greases (FOG)				
Dissolved Air Flotation Slurry (DAF)/ Centrifuged Dissolved Air Flotation Slurry (CDAF)	Fats & proteins skimmed from wash water	Slaughterhouses, meat packing operations		
Grease Trap Fat & Food Interceptor Solids	Fats, oils & greases captured in grease traps & food interceptors	Restaurants, food processors, cafeterias, grocery stores		
Used Vegetable Oil	Vegetable oil used for deep frying			
Mixed Processed Meat & Fish Wastes	Cooked & uncooked meat & fish residues	Food processors, meat packers, canneries		
<b>B.2 Food Processing Resid</b>	dues			
Oil Seed Processing Residues	Residues from extraction oils from seed incl. canola cake canola oil, bleaching clay	Oil seed processors		

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Feed Mill Residues	Dust & wet grain residues	Feed mills, farm operations		
Cereal, Grain & Spice Processing Residues	Grain dust, husks, hulls	Grain processors, elevators, flour mills, cereal processors		
Fruit & Vegetable Residues	Pomace, peelings, rinds, juices	Vegetable processors, juice processors, canneries, wineries		
Corn Processing Residues	Effluent from corn wet milling, stillage, distillers grain, silage, squeeze	Distillers, breweries, ethanol plants, food processors, starch producers		
Beet Processing Residues	Beets, beet tops, trash, tailings, molasses	Sugar producers		
Potato Processing Residues	Potato sludge, peelings, chips	Potato processing plants		
Dairy Processing Residues	Whey, milk, ice cream, proteins, wash water & other residues	Cheese factories, dairy processors		
Aerobic Sludge	Aerobic sludge from non-municipal wastewater treatment	Food processors		
Pet Food Residues	Pet food	Pet food processors		
Process Water	Liquid residues, wash water	Food processors		
B.3 Kitchen & Market Residues				
Bakery & Bread Residues	Dough, flour, yeast & crumbs	Bakeries, pizza parlours, restaurants, cafeterias		
Confectionary Residues	Candies & cookies	Food processors		
Mixed Food/Kitchen Residues	Cooked & treated vegetables, fruits & grains, frozen food	Food processors, restaurants, grocery stores, cafeterias, hospitals, universities		

C. OTHER				
Glycerin/Glycerol	Alcohol by-product	Industrial biodiesel production		
Horticultural Residues	Residues from plants & flowers	Greenhouses, garden centers, flower shops		
Green (Garden) Residues	Grass	Municipalities, house- holds		
Energy Crops	Silage (corn, grain, grass)	Farm operations		
Damaged / Rejected Crops	Crops which have been damaged and/or are unable to be marketed.	Farm Operations		
Crop Residues	Residues from the crop harvesting	Farm Operations		

## Appendix B – Designation of plant or facility under the Memorandum of Understanding

The Natural Resources Conservation Board (NRCB) and Alberta Environment and Sustainable Resource Development (ESRD) agree that the feedstock and digestate from the [plant or facility name] located at [legal land description] shall be regulated according to the *Memorandum of Understanding (MOU) Among Alberta Environment and Sustainable Resource Development (ESRD), Alberta Agriculture and Rural Development (ARD), and the Natural Resources Conservation Board (NRCB), Regarding On-Farm Storage and Land Application of Digestate* dated [date].

Date: \_\_\_\_\_

[name] ADM, Operations Division Alberta Environment and Sustainable Resource Development

Date:

[name] Chief Executive Officer Natural Resources Conservation Board

berta



August 14, 2015

Subject: Amendment to the Memorandum of Understanding (MOU) Among Alberta Environment and Sustainable Resource Development (ESRD), Alberta Agriculture and Rural Development (ARD), and the Natural Resources Conservation Board (NRCB), Regarding On-Farm Storage and Land Application of Digestate, dated February 4, 2015

Pursuant to clause 7 of the above-referenced Memorandum of Understanding (MOU), the MOU is hereby amended by adding the following clause:

8. The agreement titled "Interim Agreement Among Environment and Sustainable Resource Development, Alberta Agriculture and Rural Development, and the Natural Resources Conservation Board, Regarding Digestate Produced by the Lethbridge Biogas General Partner Inc." is hereby canceled.

Matt Machielse ADM, Operations Division Alberta Environment and Parks

Peter A. Woloshyn Chief Executive Officer Natural Resources Conservation Board

Dave Burdek / ADM, Policy and Environment Alberta Agriculture and Forestry

Date: ang 28/13

Date: Argust 14/2015

Date: Aug 21/15