

**IN THE MATTER OF
THE HUTTERIAN BRETHREN CHURCH OF STARLAND
APPLICATION RA 20032**

**AND IN THE MATTER OF
NATURAL RESOURCES CONSERVATION BOARD**

**STATEMENT OF CONCERN OF
JAMES AND CYNTHIA KRYWCUN**

July 16, 2020

Submitted by:

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I. Introduction

1. This Statement of Concern is filed on behalf of James and Cynthia Krywcun (the “Krywcun’s) in response to a Notice of Application issued by the Natural Resources Conservation Board (“NRCB”) on June 17, 2020 with respect to Application RA 20032 filed by the Hutterian Brethren Church of Starland (“HBCS”).
2. The Application is for the construction and use of a new dairy barn (with an attached bull barn) on the NW 15-33-21 W4M to house 200 milking cows (plus associated dried and replacements). The Application also includes an earthen liquid manure storage, and an outdoor dry cow shed (the “Project”, “CFO” or “Application”).
3. It is unclear in the Application but it is expected that the CFO will spread manure on lands (NE 22-33-21-W4M, SE 22-33-21-W4M, NW 23-33-21-W4M, NE 15-33-21 W4M, and the NW 15-33-21-W4M, the proposed location of the CFO the (“Proposed Site”). These Lands are adjacent or kitty corner to the Krywcun Farm.
4. This Application was filed the same day the HBCS removed their Application RA 20001 for the same facility at NW 23-33-21-W4M. The Krywcuns filed a Statement of Concern on Application RA 20001
5. While this Application relates to different Lands than the previous Application, the HBCS did not include a technical report for the Proposed Site.
6. In one part of the subject Application HBCS seeks to rely on a borehole tests for the site of their previous Application and not the Proposed Site. The borehole report is not included with this Application.
7. The letter the NRCB issued to Statement of Claim filers giving notice of HBCS’s withdrawal of Application RA 20001 curiously references the NW 15-33-21-W4M where that Application RA 20001 was proposed on NW 23-33-21 W4M. The NW 15-33-21-W4M is the proposed site for this Application.
8. The Krywcun’s are the registered owners of SW 23-33-21-W4M (the “Krywcun Lands” or “Krywcun Farm”) and rent the NW 14-33-21-W4M and the SW 14-33-21-W4M Lands (the Krywcun Family Land) and all of these Lands are in close proximity or adjacent to Lands that will be used by the HBCS for this project.
9. The Krywcun’s son, Dallas Krywcun, rents the quarter of land to the northwest of the Proposed Site. The legal land description on his rented land is SE & SW 22-33-21-W4M.
10. The Proposed Site has recently been purchased by HBCS and is kitty corner to the Krywcuns Farm. The Krywcuns are directly affected parties in accordance with Agricultural Operation Practices Act (“AOPA”).

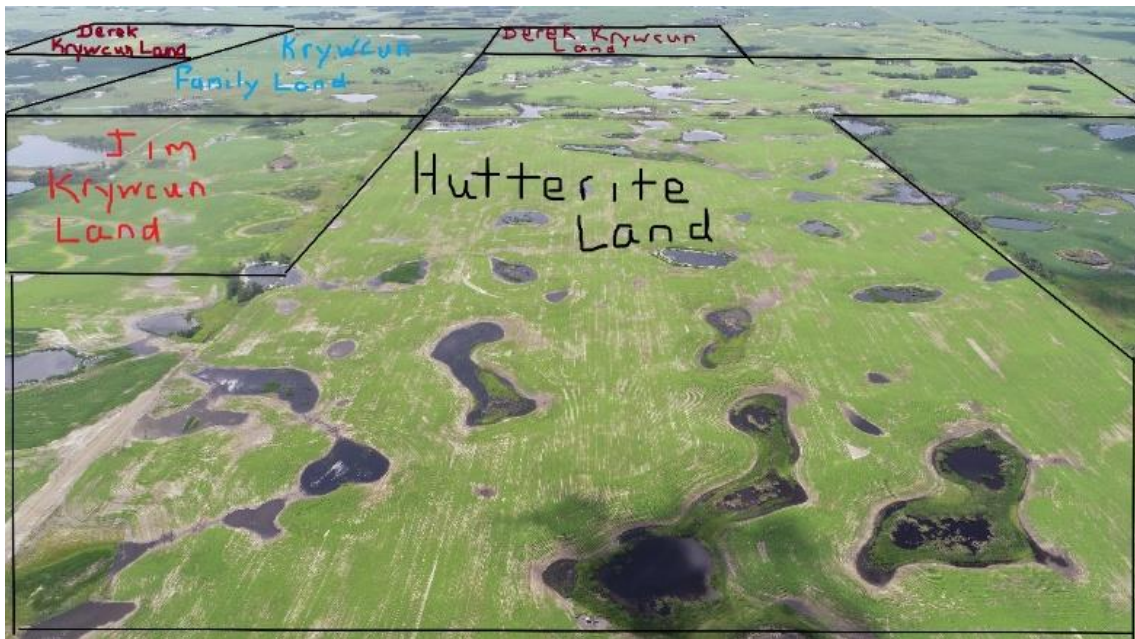
11. The Krywcun's own and operate a family run farm and their direct descendants have been in the Rumsey area since 1907. The Krywcuns are active participants in the Rumsey community; they curl and support every function that is held in Rumsey. If this operation is allowed to move forward, they fear they will be placed in an untenable situation where they would be forced to move from the residence that they have lived in for 35 years where they had intended on living in for at least 20 more years.
12. James' mother lived on the quarter section across the road for almost 60 years until she passed away at 89 years of age. The Krywcuns farm with their two sons and are a fourth-generation farm.
13. The Krywcun's submit that the Application should be denied for the following reasons.
 - a) Water is a key issue, Application is silent on both drainage and water supply. The Application does not explain how the drainage will be impacted, how run off will be managed, whether the aquifer is sufficient or how waste products will be removed from the Proposed Site.
 - b) There has never been a water well on the Proposed Site and the Application does not explain what water source the HBCS plan to use. Clearly there is no exemption and there is no license or registration on the Land. It is obvious that a Water Act Application is required. The Application does not disclose that a Water Act license is required.
 - c) The Application does not include the Water Act Applications that are required for such an Application, nor does the Application include the appropriate hydrogeology and hydrology studies showing that ground water and surface water can be protected.
 - d) The location of the proposed facility is simply too close to the Krywcun's Lands and the Hamlet of Rumsey. There is a high risk of both surface and ground water contamination as well as a high likelihood of nuisance odors and other disturbances to the Krywcuns and other Landowners in the area.
 - e) Range Road 21-3 south of Highway 585 is a soft narrow road that is not built to withstand the numerous loads of cement required to build the CFO or the milk truck traffic. It is intersected by sloughs on both sides creating soft shoulders. Highway 585 is quickly deteriorating because of the increase in traffic due to the HBCS hauling truck loads of grain from the grain bins located on NW 23-33-21-W4M and will further deteriorate because of increased traffic to the proposed development. The alternate route to the proposed development is from Highway 839 onto Range Road 33-2. Range Road 33-2 has sloughs on both sides of the road and it cannot endure heavy traffic without degeneration.
 - f) The Project is not consistent with the County's Land Use Bylaw.
 - g) The Application is incomplete and not in accordance with AOPA. The subject lands contain water bodies that connect directly to water bodies on the Krywcuns

Lands. The Lands where the manure storage lagoon and where manure spreading is to occur include water bodies that cannot be contained to the subject Lands.

- h) The Application seems to be based on information for a different location (not included in the subject Application) and HBCS has not completed an Application for the Proposed Site.
- i) The excerpt of the Starland County Map that is included in the Application is from an outdated map that shows Lands owned by HBCS as being owned by other Landowners.
- j) The CFO should be built on another site further from Rumsey in compliance with the County's MDP and AOPA with a proven water supply.
- k) HBCS has not been transparent as there is no information regarding their future development plans.

II. The Location of the Proposed Facility

- 14. The aerial Photograph below taken from a drone looking North that shows: the location of the Krywcun's Farm and Krywcun rented Lands ("Krywcun Family Land") with respect to the Proposed Site for the CFO, and other Lands owned by HBCS.



Photograph 1-Aerial Photograph of the Proposed Site

- 15. As can be seen from Photograph 1 the Proposed Site and the neighboring HBCS Lands include numerous wetlands and sloughs. Many of which connect to neighboring non-HBCS Lands.

16. The Krywcuns are very concerned that manure spreading combined with the CFO and manure storage lagoon will cause odors that are not consistent with the Krywcuns continued residential use of their property. The prevailing wind is from a northerly direction. Winds come from the north, the northwest and the northeast, the Krywcuns live south of the HBCS property. Manure spreading will occur to the north, west and southwest of the Krywcun Farm.
17. The Application does not include a calculated Minimum Distance Separation (“MDS”). Starland County’s Municipal Development Plan (“MDP”) includes a specific section on CFO’s and states:

(4) Due to the fact that this area has remained at a low population density for generations with the tradition of allowing a comfortable space between neighbours, the minimum distance separation as defined in the Agricultural Operations Practices Act (AR 267/2001) should be doubled. Anything less would not be acceptable in this community and may have a detrimental effect on the rural population.

Section 8 of Starland County’s MDP is attached hereto as Tab 1.

18. Section 11 of *AOPA Standards and Administration Regulation* states;

If an approval officer or the Board determines that a confined feeding operation that has manure storage facilities or manure collection areas located on adjacent land parcels, is under the control of a single owner or operator, the approval officer or the Board must determine, for the purposes of calculating the minimum distance separation, whether that confined feeding operation is one or more operations.
19. The Krywcuns request that the NRCB approval office consider whether the MDS for the CFO proposed site accurately represents this Application situation where the Krywcuns Lands are adjacent to HBCS Lands where manure spreading will occur from three sides of their property by this Project.
20. The size of the proposed manure storage lagoon is unprecedented, the Application states “[a]s proposed, the EMS [manure storage] lagoon will be 96m by 42m and 4.9m deep...with a design capacity of 10,748 m3.” The Krywcuns question whether the MSD guidelines in AOPA and the Regulation will be sufficient to buffer them from the odors and noise from the Project.
21. The Krywcuns submit that the NRCB must consider the combined odors from the CFO, the barns and the manure spreading operation surrounding the Krywcun farm on three sides rather than the CFO alone.

III. Water Drainage from the CFO and Manure Spreading Locations

22. The potential for water contamination from spreading the manure is one of the Krywcun’s main concerns.

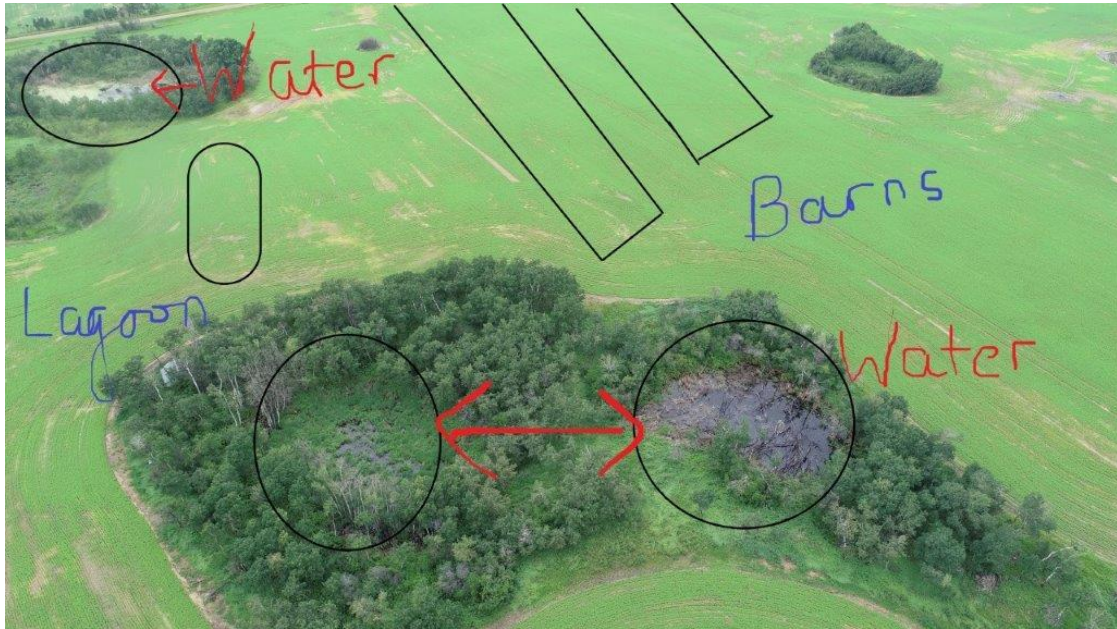
23. The Application does not explain how the drainage will be changed and HBCS has not submitted a hydrological study. There is no way for the NRCB to know how what the impacts will be on the neighboring Lands and whether the Application is protective of their property rights.
24. The water from the HBCS Lands drains either onto the Krywcun's Farm, the Krywcun Family Lands or onto Derek Krywcun's land or land that he rents.
25. The Krywcuns feel that none of the quarters around them in the area are suitable for spreading manure because of the abundance of water and the possibility for groundwater and run off contamination. Once the water reaches the sloughs, it eventually makes its way into the aquifer.
26. The aerial Photograph below is a drone Photograph looking North from the Krywcun's home quarter towards the NW 23-33-21-W4M the previously proposed site, now to be used for manure spreading.



Photograph 2- Aerial Photograph of the Krywcun Farm Looking North to NW-23-33-21-W4M.

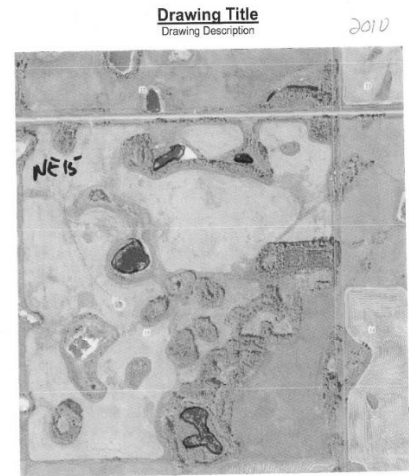
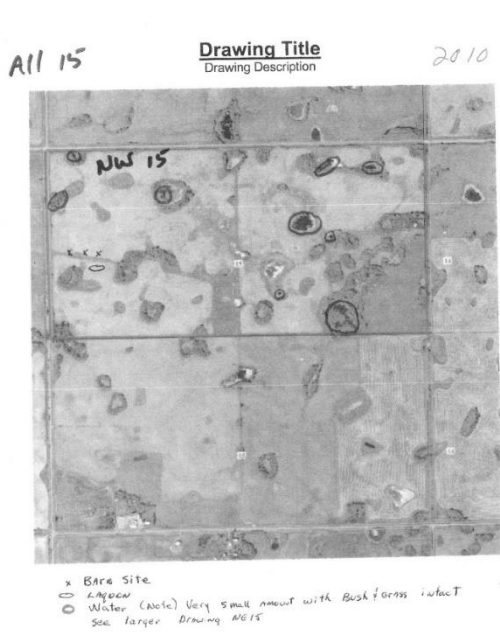
27. The slough in the southeast corner of the farmyard (area in the bottom right hand of the Photograph) is 10 acres. There is another slough to the northeast of the Krywcuns Lands (in the top right-hand side of the Photograph) that extends onto the NW 23-33-21-W4M. The Krywcuns use these sloughs for personal use. Both of these sloughs hold an abundance of wildlife and waterfowl and are an aesthetic part of their yard. They are deeply concerned that the expansion and the spreading of liquid manure will contaminate the surface water.

28. Photograph 3 of the NW 15-33-21 W4M, the Proposed Site, below is a recent drone Photograph that shows that there are water bodies on the Proposed Site within a few metres of the proposed site of the Lagoon.



Photograph 3: Drone Photograph of Proposed Site and water bodies located thereon

29. The HBCS Application under Part 2 – Technical Requirements state the nearest distance from the lagoon to a water source is 192 m. This information is inconsistent with Photograph 3 of the Proposed Site above.
30. The Krywcuns have provided aerial pictures from 2010. The first picture shows both HBCS owned quarters; the proposed site, the NW-15-33-21-W4M and adjoining NE 15-33-21-W4M. The second Photograph to the right zooms in on the NE 15-33-21-W4M.



Photographs 4 & 5: Aerial pictures from 2010

31. Photograph 6 below shows the drainage from the Proposed Site (NW-15-33-21-W4) flowing into the NE-15-33-21-W4. From the NE-15-33-21-W4 it flows into the Krywcun Family Land, the NW and SW 14-33-21-W4 and Derek Krywcun's rented land SE-15-33-21-W4.



Photograph 6: Drainage from Proposed Site flowing into NE-15-33-21-W4

32. Since the HBCS purchased the NE 15-33-21 W4M and the NW-15-33-21 W4M a few years ago, they have made changes to the Lands that have increased the standing water on neighboring Lands.
33. HBCS bulldozed trees and bushes on the Proposed Site (NW-15-33-21-W4) and put up a berm on the NE-15-33-21-W4. The water from the bermed slough now runs onto Derek's rented land
34. HBCS has bulldozed many of the trees on NE 15-33-21-W4M to the center of the slough, displacing the water and changing the water patterns. With the water displaced, there has been a significant rise in the amount of water drainage onto the neighboring lands (the Krywcun Family Lands). The drainage ditches on the NE-15 in the past were on pasture land. However now the land is tilled this is causing greater water movement and erosion.
35. The NE 15-33-21-W4M quarter drains onto the Krywcun Family Lands. Photograph 7 below shows a picture of the trees pushed into the large slough by the HBCS on the NE 15-33-21-W4M.



Photograph 7: Picture of trees pushed into large slough by HBCS on NE-15-33-21-W4M

36. Photograph 8 below shows a view of the drainage looking West from the Proposed Site to the NE 15-33-21-W4M and then to the Krywcun Lands and the Krywcun Family Lands.



Photograph 8: View of drainage looking West from Proposed Site to NE 15-33-21-W4M

37. The Krywcuns are concerned that the HBCS will continue to change the drainage patterns to flow from the HBCS Lands to their Lands as they have seen the HBCS do this before. This spring HBCS purposely created trenches that caused water to drain from the HBCS Lands and flooded the Krywcun Family Lands. If this occurs on Lands where manure is spread not only will the neighboring Lands be flooded, but they will also be contaminated by the manure.
38. Photograph 9 below shows the standing water on the NW 14-33-21-W4M (one of the parcels of the Krywcun Family Lands that the Krywcun's Farm) that remains today after the HBCS built a trench on NE-15-33-21-W4M this spring to drain the water from the HBSC Lands onto the Krywcun Family Lands. The standing water has caused Jim Krywcun to access his field from a different approach. As can be seen in the Photograph it is too wet to cross the usual route from the yard site to the field with the tractor and air drill. The line on the Photograph shows the preferred and historical access to the field.



Photograph 9: Standing water on NW 14-33-21-W4M

IV. Nuisance Caused by Noise and Dust

39. Currently the NW 23-33-21-W4M is used by the HBCS as a grain drying and distribution center with a capacity of 600,000 bushels. The Krywcuns already experience noise and light pollution from the current operation on the HBCS Lands. Trucks enter and leave the site at all hours of the day and night. The noise from the fans that run 24 hours per day on the grain bins is affecting their sleep. Additionally, the very bright lights on the HBCS site are on all night and they shine directly into the Krywcuns house, which again affects their sleep. The Krywcuns have approached HBCS and asked them to rectify this situation, but to date, they have not done so.
40. Mrs. Krywcun has severe environmental allergies and has been under a doctor's care for allergies for years and from time to time has required emergency care as a result. She is concerned that the Hutterite expansion will bring airborne allergens into her farmyard endangering her life.
41. The Krywcuns expect that construction of the Proposed CFO will cause additional noise and disturbance and the HBCS will not respect the Krywcuns enjoyment of their property. During the construction of the current grain drying and distribution facilities the Krywcuns Lands were littered with construction wrapping paper and debris and HBCS made no effort in the past two years to clean it up.
42. If the odors and noise from the facility are as the Krywcuns expect or if their water supply from their wells is contaminated or runs dry, they fear that they will have to move. However, they believe that at such a time no one will choose to live in their residence without a water supply and next to the Project. The Krywcuns will be precluded from seeking damages for their losses from HBCS as legal action is precluded by s. 2(1) of AOPA when an Approval from the NRCB is issued. AOPA states:

Nuisance claims

2(1) A person who carries on an agricultural operation and who, in respect of that operation, does not contravene

(a) the land use bylaw of the municipality or Metis settlement in which the agricultural operation is carried on, RSA 2000 Section 2 Chapter A-7 AGRICULTURAL OPERATION PRACTICES ACT 10,

(b) the regulations or an approval, registration or authorization, or

*(c) the generally accepted agricultural practice **is not liable to any person in an action in nuisance resulting from the agricultural operation** and is not to be prevented by injunction or other order of a court from carrying on the agricultural operation because it causes or creates a nuisance.*

*(1.1) **If subsection (1)(a) is contravened but the contravention is authorized by an approval, authorization or registration; the approval, authorization or***

registration prevails over the land use bylaw with which it conflicts. (emphasis added)

V. Starland County's MDP Prohibits the Development in the Proposed Location



Photograph 10- Aerial Photograph with Hand drawn Indication of the Location of the Hamlet of Rumsey.

43. The County filed a Statement of Concern in the matter of Application RA 20001 dated May 19, 2020 that states that the Project Application at that time being, 2.0 km from the Hamlet of Rumsey, is not consistent with the County's MDP for the following reasons:
- a) The MDP has carefully considered the areas where CFO's are not allowed within the County's Planning documents including their MDP and Land Use Bylaws. These have been set in order to "provide an appropriate buffer separation...to limit incompatible land uses within the County."
 - b) Some of the HBCS Lands that will be used by the CFO are in a land use area designated as Agricultural General and CFO's are neither permitted or discretionary. CFO's are to be built in an area that is designated as Agricultural Intensive.
 - c) Some of the HBCS Lands that will be used by the CFO are in an area called an Exclusion Zone as shown on Map 6. Section 8 of the MDP states "Confined Feeding Operations shall not be located within 3.2 km (2 miles) of any urban areas, this area shall be considered an Exclusion Zone."
 - d) Some of the HBCS Lands that will be used by the CFO are within 3.2 km of the Rumsey water supply contrary to the MDP.
 - e) The County has "concerns with the proposed development in relation to contamination of ground water, waste retention facilities, the disposal of waste and existing water retention ponds or wetlands situated on the property."

- f) The County comments that the actual water use of the facility has not been described in the Application, nor has a hydrogeological study been completed. It is impossible to judge whether the aquifer has capacity to support its current use and the large expected water requirements from the Project.
- 44. Section 8 of the County's MDP is attached as Tab 1 and Map 6 from the MDP that shows CFO Exclusion Zones in the MDP is attached as Tab 2 to these submissions.
- 45. While the quarter section where the Barns will be built may now be slightly more than 3.2 km away (possibly by 0.4 km), the other Lands including NW 23-33-21-W4M and other quarters where manure spreading will occur, which will be part of the CFO, are within the exclusion zone and therefore, the concerns for the Rumsey water supply and the exclusion of intensive livestock operations in the Land Use Bylaw remains valid.

VI. The Application is Incomplete

- 46. The Application is incomplete and not in accordance with the Agricultural Operation Practices Act ("AOPA").
- 47. The subject lands contain water bodies that connect directly to water bodies on the Krywcuns Lands. *AOPA Standards and Administration Regulation* requires in s 7(1) that the Applicant demonstrate that water bodies on or near the Project Site will not drain onto neighboring properties.
- 48. The Krywcuns wish to emphasize that the borehole test that is referenced in Part 2 – Technical Requirements of the HBCS Application RA20032 is NOT for the Proposed Site. In fact, it is for the quarter of land NW-23-33-21-W4M the proposed site for the HBCS previous Application RA20001. The borehole test should not have been submitted for consideration as these are not the applied for Lands and therefore, the test is not relevant to the Proposed Site.
- 49. The Krywcuns request that the NRCB require a hydrological report and that a hydrogeological test be completed as the Proposed Site NW 15-33-21-W4M has never had a water well drilled on it.
- 50. There is a historical Indian burial site slightly less than 2 miles away that was catalogued by the Glenbow Museum in 1962 as the Rumsey Cairn.
- 51. The Application is silent on many of the most salient issues and the Krywcuns are left with more questions than answers, for example:
 - a) How will HBCS drain the Proposed Site prior to construction?
 - b) How will the drainage and run off be contained on the Proposed Site when the current drainage runs from HBCS Lands to the Krywcun Lands and the Krywcun Family Lands, also considering that the Proposed Site and the Krywcun Lands have water bodies that communicate?

- c) How can HBCS or the NRCB judge whether the aquifer will be sufficient for water withdrawal when the Application neither discloses the water usage requirements or characterizes the capacity of the aquifer?
- d) Where does the HBCS plan to spread manure?
- e) What are the future plans for the adjacent HBCS owned lands and what will the future water requirements be for future developments?
- f) Why has HBCS not provided a full development plan for the Lands? Even with just the dairy barns being built on this quarter, they will need a silage pit for the feed and a mill to mill the grain. It appears that HBCS has bigger plans than just the barns due to the fact the lagoon is oversized for the current Application? It seems unlikely to the Krywcuns that the dairy barn will be left unattended. The NRCB should require a full development plan from the Applicants to be communicated with the neighboring Landowners rather than a piecemeal approach that the HBCS seems to be keeping this quiet.
- g) Why does HBCS reuse dated material like the County Map in their Application that does not show the HBCS as Landowners?
- h) Where will the contaminated milk be stored and how will it be disposed of?

VII. Application for Water Act and EPEA Approvals Have Not Been Granted Nor have they been Included in this Application

- 52. The Application does not include the *Water Act* and *EPEA* Applications that are required for an Application such as this one.

VIII. The CFO Should be Built on Another Site in Compliance with the MDP and AOPA.

- 53. The HBCS owns 70 quarter sections of land immediately surrounding their home colony. The home colony is an area outside of the County's MDP CFO exclusion zone and is where HBCS previously operated a dairy barn that burned down and has not been rebuilt. A large portion of these Lands near the home colony are open quarter sections where there are no inhabited residences. The Krywcuns suggest that a better place to build this project is on those unoccupied Lands that are away from adjacent farms and residences. The Proposed Location is too close to the Krywcun farm, the Hamlet of Rumsey and other residences in the area.

IX. Applicant has Not Been Transparent and Application Not in the Public Interest

- 54. In the Rumsey area water is the key concern. Water is not always available and some wells are over 400 ft deep. This Application does not mention what source HBCS intends to use for water. Such an important issue should not be allowed to go unanswered by the NRCB. HBCS should be transparent about the Lands they will use, the water they will use and their future development plans. Their neighbors, the County of Starland, the

Hamlet of Rumsey and the NRCB must be able to see all the impacts to decide if this project is in the public interest.

X. Requested Disposition

55. The NRCB’s jurisdiction is set by parliament and its enabling legislation, in this case the AOPA and its Regulations. Section 20 of AOPA states:

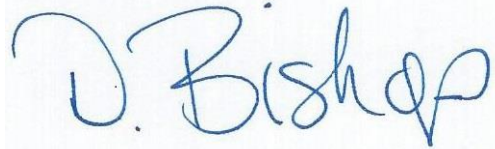
Considerations on approvals

20(1) In considering an application for an approval or an amendment of an approval, an approval officer must consider whether the applicant meets the requirements of this Part and the regulations and whether the application is consistent with the municipal development plan land use provisions, and if in the opinion of the approval officer,

(a) the requirements are not met or there is an inconsistency with the municipal development plan land use provisions, the approval officer must deny the application, ... (emphasis added)

56. Based on these submissions and those from Starland County it is clear that the NRCB “must deny the application”.

All of which is respectfully submitted July 16, 2020:



Per:

Debbie Bishop, P. Eng., L.L.B

8.0 CONFINED FEEDING OPERATIONS (CFO's)

INTENT: Confined feeding operations (CFO's) have become a prominent land use within Starland County. The Provincial government, through the Natural Resources Conservation Board (NRCB), currently has legislative and administrative control over CFO's. The Agricultural Operations Practices Act, Chapter A-7; Alberta Regulation 257/2001 and 268/2001 contain the legislative requirements regarding CFO's. According to the Provincial legislation "In considering an application for an approval or an amendment of an approval, the approval officer must consider..... whether the application is consistent with the municipal development plan land use provisions....." and in respect to approvals, "must consider the effects on the environment, the economy, and the community and the appropriate use of land".

The following policies are intended to protect existing Confined Feeding Operations from incompatible land uses such as country residential and to protect the quality of life of existing residents by providing an appropriate buffer separation between incompatible land uses and separation between CFO's and appropriate environmentally significant areas such as floodplains and hazard land areas. **Map 6: Confined Feeding Operations Restricted Areas** displays the policies outlined below in regards to protection of Environmentally significant areas, existing urban and/ or country residential areas, and future areas for country residential subdivision and development that have been identified through area structure plans or alternative planning document.

GOAL: *To protect and enhance conforming Confined Feeding Operations and the quality of life of existing and future residents by providing an appropriate buffer separation that would limit the negative impacts between these incompatible land uses within the County and to ensure the location of new or expanded CFO's are directed away from areas where contamination risks of groundwater, and development of other resources, are eminent.*

Policies:

- (1) The following County policies regarding CFO development have been thoroughly researched to ensure that CFO locations are determined in accordance with the most appropriate studies and County information available. The Natural Resources Conservation Board (NRCB) approval officers, CFO developers and operators shall abide by the following policies when considering confined feeding operations and manure storage facilities within Starland County.
- (2) For the purpose of this section, the term "urban areas" includes the Town of Drumheller, Villages of Delia, Morrin, and Munson, and the Hamlets of Rowley, Rumsey, Michichi, and Craigmyle. Where grouped country residences are located, they shall be considered an Exclusion Zone. No new and/or expanding

Confined Feeding Operations shall be permitted within the Exclusion Zone as identified on Map 6.

- (3) In respect to Exclusion Zones identified in this section and on Map 6, the Exclusion Zone shall be:
 - (a) The boundary of the grouped residential area shall be utilized for the purpose of measuring minimum setback distances. If an area structure plan or alternative planning document has been established for a multi-lot country residential area, the country residential land use district boundary shall be used to determine the minimum distance separation.
 - (b) With the exception of residential areas identified in 3(a), the setback shall be measured from the middle of the defining feature (i.e. calculate the setback from the middle of the waterbody/road/ravine).
 - (c) Any quarter section that touches any area identified on Map 6 as being an Exclusion Zone.
- (4) Due to the fact that this area has remained at a low population density for generations with the tradition of allowing a comfortable space between neighbours, the minimum distance separation as defined in the Agricultural Operations Practices Act (AR 267/2001) should be doubled. Anything less would not be acceptable in this community and may have a detrimental effect on the rural population.
- (5) Due to a high dependence on groundwater for residential, municipal, and agricultural use, new confined feeding operations and expansions thereto shall not be located within an area of 'very high risk' of groundwater contamination as determined in the County of Starland County Groundwater Assessment 1999 or successor thereto.
- (6) In areas of 'high risk' of groundwater contamination, new confined feeding operations and expansions thereto should not be allowed unless it can be proven that the groundwater contamination risk has been minimized and appropriate mitigation measures have been taken to prevent possible groundwater contamination in accordance with best practices and scientific methods.
- (7) Due to this region's unique natural landscapes and the reliance on this landscape for tourism and recreational pursuits, expansion of existing confined feeding operations and new confined feeding operations shall not be located:
 - (a) within the valley of the Red Deer River, Michichi Creek, Wolf Creek, Farrell Creek, or any other major creek or river;
 - (b) within the shores of any recognized lake or within the banks of an inlet creek,
 - (c) within 3.2 kilometres (2 miles) of any recognized recreational area.
 - (d) Areas identified in Section (6) shall be considered an Exclusion Zones. No new and/or expanding Confined Feeding Operations shall be permitted within the Exclusion Zone as identified on Map 6.
- (8) There are a number of Environmentally Significant Areas (ESA's) as determined by the 'Environmentally Significant Areas' (March 1991) document that continue to have significance within the County today. The major types of features of ESA's include significant landscapes, significant wildlife habitats, key fish

habitats, other areas of biological importance, and significant geological sites.

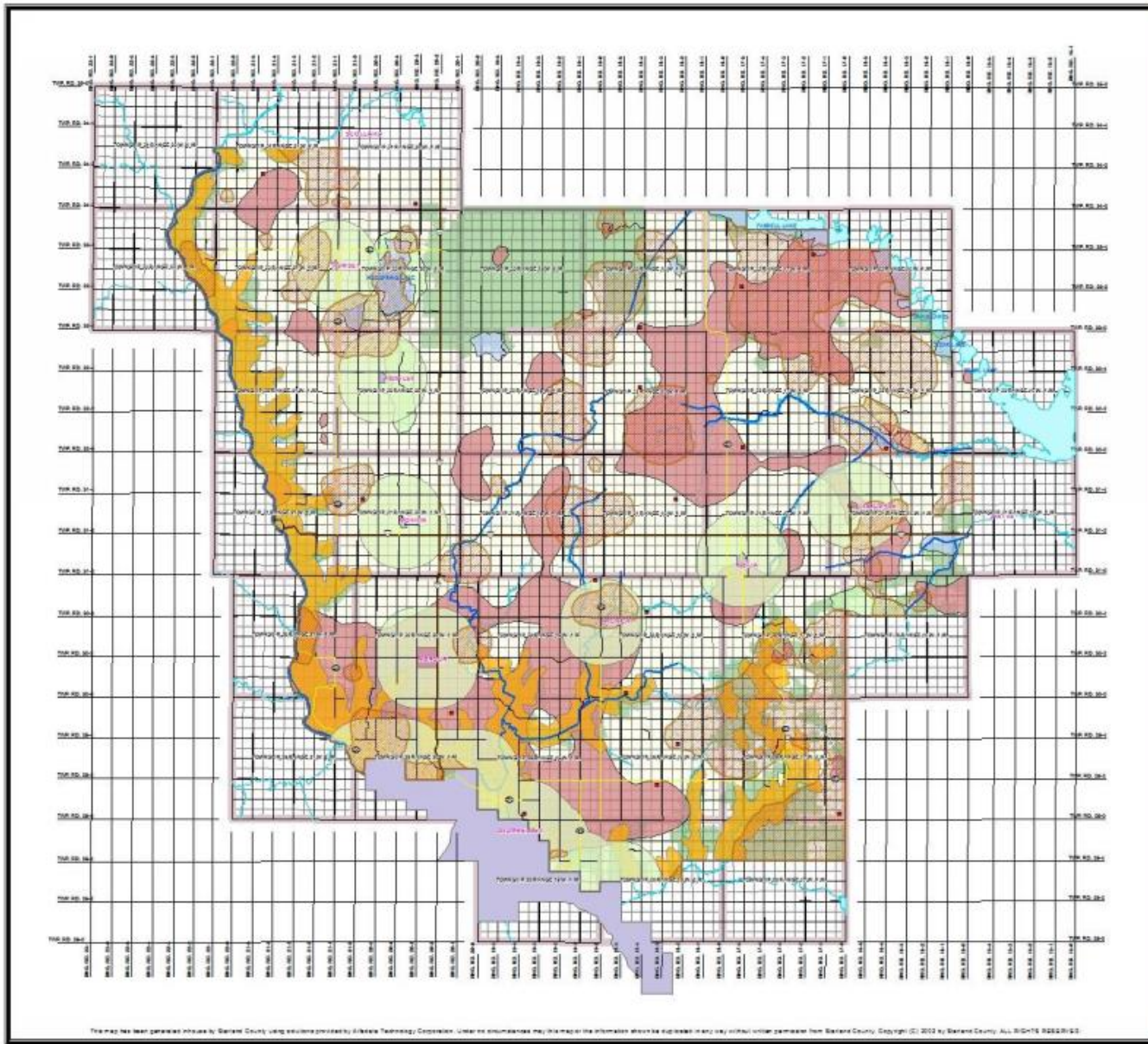
The Environmentally Significant Areas within Starland County are:

- (a) Handhills Ecological Reserve (Handhills Fescue)
- (b) Rumsey South
- (c) Tolman Badlands
- (d) Mudspring Lake
- (e) Willow Creek
- (f) Victor Wetlands
- (g) Michichi Creek
- (h) Drumheller Badlands
- (i) Chain-Farrell Lakes
- (j) Bullpound Creek

These ESA's may potentially be affected by Confined Feeding Operations and all CFO applications should be evaluated on an individual basis. Confined Feeding Operations should not be allowed within Environmentally Significant Areas.

- (9) Confined feeding operations shall not be located within 3.2 kilometres (2 miles) of any urban areas, this area shall be considered an Exclusion Zone. No new and./or expanding Confined Feeding Operations shall be permitted within the Exclusion Zone as identified on Map 6. This policy is based on a concern for the residents' quality of life and the potential future growth of the urban areas.
- (10) Confined Feeding Operations shall not be located within 3.2 kilometres (2 miles) of any municipal water source this area shall be considered an Exclusion Zone. No new and./or expanding Confined Feeding Operations shall be permitted within the Exclusion Zone as identified on Map 6.
- (11) Prior to a submission of the affected party comments from Starland County to the NRCB on any Confined Feeding Operation application, the County shall organize a meeting with the applicants to discuss the relevant policies within this Municipal Development Plan and any other related County policies and documents whereby the operational requirements of mutual interest, and that may affect the quality of life of County residents, are to be discussed and negotiated to a fair and mutually agreeable settlement:
 - (a) For those confined feeding operations, which require an approval from the Natural Resources Conservation Board, or its provincial successor, all liquid manure shall be injected.
 - (b) The application of all manure that is not covered by (a) above must either involve the notification of adjacent landowners prior to application or shall follow the guidelines of the Agricultural Operations Practices Act or its provincial successor.
 - (c) Manure incorporation and/ or application shall not be allowed within 3.2 Kilometres (2 miles) of any urban or multi-lot country residential boundary.
 - (d) Manure incorporation by direct injection shall be allowed within 1.6 Kilometres (1 mile) of an urban or multi-lot country residential boundary.
 - (e) Nutrient management plans shall be required for all confined feeding operations as well as the accompanying soil tests. A copy of all nutrient management plans shall be submitted to the County for their record.
 - (f) Odor control devices and methods, such as covers and wind diffusers, shall be employed in all manure storage facilities of confined feeding operations. Natural crust formation does not constitute odor control.

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- (g) The location of lands for manure incorporation are to be identified and mutually agreed upon between the applicants and the County.
 - (h) Spreading of manure on weekends and holidays shall not be permitted.
 - (i) Recognizing its responsibility to effectively manage the road infrastructure to the location of a confined feeding operation and/or manure storage facility, the County will require as a condition of any registration, approval or authorization it grants, that the applicant enter into an agreement with the County to do any or all of the following:
 - (i) to construct or pay for the construction of a road required to give access to the operation and/or
 - (ii) to maintain or pay for the maintenance of any and all roads that service the development including the application of dust control, to the most reasonable extent possible, taking into account all other traffic using the roads.
- (12) The County may initiate a public meeting to inform residents of all Confined Feeding Operation applications with an invitation to the CFO applicants to explain the details of the application and an invitation to the NRCB to explain the details of the NRCB approval process.



**MUNICIPAL DEVELOPMENT PLAN
MAP 6: CONFINED FEEDING
OPERATIONS RESTRICTED AREAS
/ EXCLUSION ZONES**

LEGEND

CONFINED FEEDING OPERATIONS
EXCLUSIONARY AREAS:

- URBAN AREAS
- GROUNDWATER CONT RISK-HIGH
- GROUNDWATER CONT RISK-VERY HIGH

HAZARDS

- FLOODPLAIN
- STEEP UNSTABLE SLOPES
- PERMANENT WETLANDS
- ARTESIAN FLOW
- SAND DUNES

CONFINED FEEDING OPERATIONS
AREAS REQUIRING DETAILED ANALYSIS:

- INSUFFICIENT GROUNDWATER YIELD
- GROUNDWATER CONT RISK-HIGH
- ENVIRONMENTAL SIGNIFICANT AREAS

EXISTING CFO'S



MODIFICATIONS & ADDITIONS BY: