

AGRICULTURAL OPERATION PRACTICES ACT
REVISED STATUTES OF ALBERTA 2000 CHAPTER A-7

ENFORCEMENT ORDER NO. 03-03

Date Issued: May 2, 2003
File Number: LC02014
Inspector: Karl Ivarson

Paragon Livestock Exchange Inc.
Box 971,
Coalhurst, Alberta
T0L 0V0

This letter constitutes an order under Section 39(1) of the Agricultural Operations Practices Act Chapter A-7 to Paragon Livestock Exchange Inc., and to Jerry Beusekom, Operator and Owner of Paragon Livestock Exchange Inc. of Coalhurst, Alberta, a livestock truck wash operation located on the South East Quarter of Section Twenty Seven, Township Nine, Range Twenty Two, West of the Fourth Meridian.

Background:

On January 3, 2002 Paragon Livestock Exchange Inc. (Paragon) applied to the Natural Resources Conservation Board (NRCB), pursuant to Part 2 of the Agricultural Operation Practices Act, for an Authorization to construct and operate liquid manure storage facilities associated with a livestock truck wash located on the SE Sec 27, Tp 9 Rg 22 W of 4 to satisfy a Chinook Health Region (CHR) Order requirement for manure storage construction.

On February 1, 2002 Paragon's application was deemed complete by the NRCB.

On March 26, 2002 the NRCB issued an Authorization for Paragon to construct a liquid manure storage facility. The Authorization permitted the construction of a third cell (Cell #3) to handle aerated effluent from the pre-existing Cell #2, prior to irrigation. Cell #1, also pre-existing, receives wash water and manure solids from the wash bays. Solids separate out in Cell #1 and it is anaerobic by nature.

On July 5, 2002 a post-construction inspection of the Paragon site was conducted by NRCB and CHR inspectors. The NRCB Approval Officer who issued the related Authorization was also in attendance. No non-compliance issues were identified during the inspection.

On July 8, 2002 the CHR lifted the Health Order and granted Paragon approval to reopen the facility to wash agricultural trucks and trailers.

Between July 2002 and April 30, 2003, the NRCB received a total of 55 complaints concerning Paragon. Of these 55 complaints, 43 were specifically odour/nuisance related; the remaining 12 were potential non-compliance or water quality issues.

The first odour/nuisance related complaint concerning the Paragon facility was received on July 2, 2002. The number of odour/nuisance related complaints concerning Paragon increased during the fall of 2002 with an additional 7 complaints logged between September and December of 2002.

From January to February of 2003, 3 odour/nuisance complaints concerning Paragon were received by the NRCB. The number of complaints concerning Paragon jumped markedly in late March of 2003 with an additional 31 odour/nuisance complaints being logged by the NRCB. This spike in the number of complaints coincided with the melting of the winter ice on the three manure containment cells at Paragon and with the arrival of typical southern Alberta spring weather; fairly strong winds, mostly from the south west but at times from the north and the east. These winds appear to carry the odour off site to neighbouring residences.

Callers commonly described the smell as a “septic” or “sewage” type of smell with the severity ranging from strong... bad...very bad...reeks... to absolutely reeks. Callers indicated they had concerns with their health with the long-term exposure to the odours from Paragon. Some callers indicated the odour from Paragon’s operation gave them headaches.

Inspection:

As of April 30, 2003 there have been 20 onsite inspections/visits of the Paragon operation by NRCB staff plus 49 random drive by trips to monitor odour emissions originating from Paragon’s operation.

During many of the on-site inspections conducted during 2002, some indications of odour were evident originating from the Paragon facility. Frequently, the source of the odour was the strongest at Cell # 1, especially if one was at the edge of the cell and down wind. At times, odour was noticeable coming off of Cell #2, particularly if one was beside the cell and downwind. Typically however, the odours originating from Cell # 2 were not found to be as noticeable as those originating from Cell #1. Odour from Cell #3 was rarely present at all. Random drive bys of the Paragon operation indicated that at times, odours in the area of the facility were quite strong, particularly when adjacent to and downwind from the facility.

In early October of 2002 a crust was observed to be forming on Cell #1. Consultation with NRCB Approval staff indicated that once a crust completely covers the surface of a lagoon, it generally significantly reduces the odours emanating from the lagoon. Based upon this information it was felt that the formation of a crust on Cell #1 should help contain the odour in Cell #1 and that with sufficient aeration in Cell #2, the odour level should be minimal at the Paragon facility. Unfortunately the crust never completely covered the surface of Cell #1 in the fall of 2002. Maximum crust cover was observed during an October 25, 2002 site visit (approximately 85% crust cover). The crust cover on Cell #1 did not progress after this date.

It is suspected that a seasonal drop in temperature diminished the bacterial activity in the cell thereby reducing the anaerobic gas production giving rise to the floatation of the organic material on the cell surface. In early November of 2002, Paragon initiated aeration in Cell #1 in an

attempt to reduce odour produced as a result of anaerobic degradation. It is suspected that the aeration by its nature alone would have interfered with the crust production. High winds usually from the southwest may have also interfered with crust formation. Open areas of the surface of Cell #1 were observed on the windward side during windy days.

On November 28, 2002, a straw cover for Cell #1 was proposed to Paragon by the NRCB. At this point in time, Paragon was of the opinion that the cells would freeze over shortly, thereby lowering or diminishing the odour. Paragon also believed the straw cover would be a needless expense should the cell freeze over.

On December 2, 2002, the NRCB approached Alberta Agriculture Food and Rural Development, Technical Services Division (AAFRD) for expertise in assessing the odour situation at Paragon. AAFRD indicated it would be willing to assist where possible.

Paragon was approached on December 9, 2002 as to the possibility of AAFRD conducting an on-site assessment of Paragon and make recommendations to control the odour issue. Paragon was agreeable to this proposal.

On December 17, 2002 the NRCB and AAFRD completed a site assessment of the Paragon facility. Possible odour control options were discussed with Paragon, including the use of either straw or synthetic covers and upgrading the aeration system. AAFRD agreed to produce a report of its recommendations to the NRCB. Information concerning synthetic and straw covers and biogas digesters were provided to Paragon.

Warmer temperatures and strong southwest winds during the last week of March 2003 thawed the ice on all the containment cells at Paragon. Odour emissions became quite strong. Thirteen odour /nuisance complaints were logged by the NRCB for the last week of March 2003. On March 31, 2003 the NRCB verbally directed Paragon to place a straw cover on Cell#1 in an effort to minimize the odour emissions.

On April 3, 2003 an onsite inspection confirmed that a straw cover had been placed on Cell # 1 but it did not cover the entire cell as expected. Straw was placed only on the area that was not previously crusted over, in effect about 15% of the cell surface had straw placement. Odour originating from Cell #1 at the time could be described as moderate.

Warmer weather and strong winds in April 2003 resulted in an additional 19 odour complaints logged by the NRCB. Winds had disrupted the crust on Cell #1. An onsite inspection on April 7, 2003 to deal with an odour complaint confirmed very strong odour traced to the Paragon facility. Paragon had pumped the contents of Cells #1 and #2 in an effort to consolidate the crust on Cell #1, resulting in raising the level of fluid in Cell #3 to within 3 to 4 inches of the full mark. Odour at Cells #2 and #3 were very strong with Cell #3 being the worst it's ever smelled. It is assumed that this was due to the non-aerated and less aerated effluent from Cell #1 and Cell #2 entering Cell #3 in the draw down process.

AAFRD staff was contacted April 8, 2003 for an update on their development of recommendations for improved odour control at Paragon. AAFRD indicated that their recommendations would be forthcoming shortly.

On April 10, 2003 the NRCB discussed with Paragon options to control the odours originating from their facility. Options discussed included covering Cell #1 and upgrading the aeration system in Cell #2 to better deal with the loading and ensure the cell remained in a non-anaerobic state. Mr. Beusekom was requested to submit in writing by Monday, April 14, 2003 a plan as to

how they proposed to initiate these options. Mr. Beusekom was contacted on Monday, April 14, 2003 and he advised the NRCB that he would not be able to provide the proposal today due to other commitments. He offered he should be able to provide it the following day, Tuesday, April 15, 2003. No proposal was received on this date or any subsequent date up to and including the date of this order.

On April 17, 2003 AAFRD provided the NRCB with recommendations as discussed on April 8, 2003. A summary of these recommendations is as follows:

1. Cover Cell #1 with a synthetic cover, as it would be more effective at controlling odour from Cell #1 than the existing crust/straw cover. This would also require the existing top feed to the cell to be replaced with a bottom feed system
2. Remove all the manure from the trailers manually and deposit on the solid manure storage pad and wash the trailers with a high-pressure wash wand only as opposed to the fire hose currently used. This is to reduce effluent entering into Cell #1.
3. Monitor volume of trucks washing at the facility. Paragon's manager, Mr. Beusekom has indicated he expects a decrease of truck washings by up to 60% when an alternate truck wash opens up in Lethbridge in the next few months
4. Upgrade the aeration system for Cell#2. An aeration system design for Cell #2 will be provided to Paragon shortly.

On May 1, 2003 an onsite inspection of Paragon's facilities was done to assess compliance with the NRCB Authorization LA02001 with respect to the April 30, 2003 deadline for Paragon to complete construction. NRCB Approval staff for reference also attended the inspection.

The inspection of the facility indicated that Paragon has completed the required construction conditions.

Of concern though is the odour emanating from Cell #2 and #3 on the day of the inspection. The odour was quite strong with a distinctive sewage or septic smell. Cell #2 was considerably stronger in odour; Cell #3 has some noticeable odour. It is apparent then, that the aeration of Cell #2 is not sufficient to maintain Cell #2 and Cell #3 in a non-anaerobic condition even though Paragon has had aeration to Cell #2 since the summer of 2002. As such it is my view that Paragon is not compliant with its Authorization LA02001 condition 4.b., which states: "Aeration equipment is to be operated in order to maintain Cell #2 and Cell #3 in a non-anaerobic condition to the satisfaction of the NRCB"

Reasons:

Under Section 39(1) of the Agricultural Operation Practices Act, the Natural Resources Conservation Board may, if in the opinion of the Board a person is creating a risk to the environment or an inappropriate disturbance or is contravening or has contravened an approval, registration, authorization, variance, terms or conditions of a cancellation, this Act or the regulations, the Board may, whether or not the person has been charged or convicted in respect of the contravention, issue an Enforcement Order to that person directing them to stop engaging in anything that is described in the Enforcement Order or to undertake any investigation, construction, alteration, repair or other measures required to rectify the situation.

Based on observations made during the site inspections and associated drive-bys conducted during 2002 and 2003, it is my belief that the Paragon facility is creating an inappropriate disturbance to neighbours and the community in the vicinity of this operation. Furthermore, it is my belief that Paragon is not in compliance with Condition 4.b. of NRCB Authorization

LA02001, which states: "Aeration equipment is to be operated in order to maintain Cell #2 and Cell #3 in a non-anaerobic condition to the satisfaction of the NRCB."

ORDER:

Therefore, I, Karl Ivarson, Field Inspector, Natural Resources Conservation Board, pursuant to Section 39(1) of the Agricultural Operation Practices Act do hereby direct that Paragon Livestock Exchange Inc., and Gerry Beusekom, owners of a livestock truck wash operation on the South East Quarter of Section Twenty Seven, Township Nine, Range Twenty Two, West of the Fourth Meridian, shall take all necessary and appropriate measures to address the inappropriate disturbance caused by odour emanations at it's facility.

These reasonable measures shall include, but are not limited to:

1. Cell #1 is to be covered by a synthetic cover by June 2, 2003.
2. The discharge pipe from the wash bays to Cell #1 is to be changed from a top loading system to a bottom loading system by June 2, 2003.
3. As Cell # 1 is an engineered containment structure, the installation of the synthetic cover and the modification to the discharge pipe is to be overseen by a consulting engineer to ensure that the structural integrity of the storage cell is maintained. The consulting engineer will provide written confirmation to the NRCB that this condition has been met by June 2, 2003.
4. The existing fire hose washing system is to be replaced by a high-pressure wand system by June 2, 2003. Manure must be removed manually from livestock trailers before washing.
5. The aeration system in Cell #2 is to be upgraded by June 2, 2003 to maintain the contents of Cell # 2 and Cell # 3 in a non-anaerobic condition as required in NRCB Authorization LA02001.
6. If conditions 1, 2,3,4 & 5 are not completed by June 2, 2003, the operator is to:
 - a. Immediately take any and all steps necessary to prevent any liquid or solid manure and associated wash water from entering Cells 1,2 or 3 until such time as all of these conditions are met, and
 - b. By June 16, 2003 remove the contents of Cells #1, 2 & 3 and either subsurface inject; surface apply and incorporate within 48 hours; or otherwise dispose of the contents in manner that does not create a risk to the environment or an inappropriate disturbance and meets the requirements of the Agricultural Operations Practices Act.

Karl Ivarson, Inspector
Natural Resources Conservation Board

CONSEQUENCES OF NON-COMPLIANCE

Agricultural Operations Practices Act, section 42(1) states “If a person to whom an enforcement order is directed fails to comply with the enforcement order, the Board may apply to the Court of Queens Bench for an Order of the Court directing the person to comply with the enforcement order.”

SERVICE OF ORDER:

Delivered to: _____

Method of Delivery: _____

Date of Delivery: _____

RIGHT TO REQUEST A REVIEW

Under Section 41 of the Agricultural Operation Practices Act, you have the right to request that the Natural Resources Conservation Board (the Board) conduct a review of this enforcement order:

41(1) The Board may, on the request of a person to whom an enforcement order is directed, review and confirm, vary, amend or rescind the enforcement order.

(2) An enforcement order takes effect at the time prescribed in the enforcement order and its operation is not suspended by a request for a review, but the Board may, if it thinks fit, suspend the operation of an enforcement order when a review is requested until a decision on the review is rendered.

(3) A written copy of the Board's decision under subsection (1) must be served on the persons to whom the enforcement order that is being reviewed is directed.

If you wish to have the Board review this order, please submit a written request to John Thompson, Head, Hearing Coordination, 4th Floor, Sterling Place, 9940 - 106 Street, Edmonton, Alberta T5K 2N2. **Your request must be received by May 16, 2003 and you must clearly explain whether you want the Board to vary, amend or rescind the enforcement order and provide your reasons.** If you want the enforcement order suspended until the Board review is completed, you must also include this in your written request and provide your reasons for suspending the order. If you have any questions about requesting a review or about the review process please call John Thompson at (780) 422-2960.

May 2, 2003