

# ALBERTA ENVIRONMENTAL APPEALS BOARD

## Report and Recommendations

Date of Report and Recommendations – April 29, 2025

**IN THE MATTER OF** sections 91, 92, 94, 95, and 99 of the  
*Environmental Protection and Enhancement Act*, R.S.A. 2000, c. E-12;

-and-

**IN THE MATTER OF** appeals filed by Brenda Prestie and Barry Prestie, David Dalton and Amanda Dalton, and Norman Denney of the decision of the Director, Regulatory Assurance Division, South, Alberta Environment and Protected Areas to issue EPEA Approval No. 484778-00-00 under the *Environmental Protection and Enhancement Act* to Rimrock Renewables Ltd.

Cite as: *Prestie et al. v. Director, Regulatory Assurance Division, South, Alberta Environment and Protected Areas* (29 April 2025), Appeal No. 23-119-121, & 24-25-R (AEAB), 2025 ABEAB 8.

**HEARING BEFORE:**

Ms. Angela Aalbers, Panel Chair;  
Mr. Kyle Fawcett, Board Member; and  
Ms. Jo-Ann Riddell, Board Member.

**BOARD STAFF:**

Mr. Gilbert Van Nes, Board Counsel and  
Settlement Officer; Ms. Aurelia Gordon, Board  
Counsel; and Ms. Valerie Myrmo, Board  
Secretary.

**PARTIES:**

**Appellants:** Ms. Brenda Prestie and Mr. Barry Prestie;  
Mr. David Dalton and Ms. Amanda Dalton; and  
Mr. Norman Denney, represented by Mr. Gavin  
Fitch, K.C., McLennan Ross LLP.

**Approval Holder:** Mr. Denny Boisvert, Rimrock Renewables  
Ltd., represented by Mr. Alan Harvie, Norton  
Rose Fulbright LLP.

**Director:** Mr. Craig Knauss, Director, Regulatory  
Assurance Division, South, Alberta  
Environment and Protected Areas, represented  
by Ms. Erika Gerlock and Ms. Teresa Holmes,  
Environmental Law Section, Alberta Justice  
and Solicitor General.

**Intervenors:** Mr. Scott and Ms. Julie Allan; Mr. Allen  
Brander; Ms. Marnee Chubak; Ms. Melanie  
Collision; Ms. Carrie and Mr. David Derrish;  
Ms. Diane and Mr. John Dobson; Ms. Irene  
Plihal and Mr. Cliff Edwards; Ms. Brenda  
Emerson; Ms. Suzanne Fournie; Ms. Candi  
Galbraith; Mr. Fraser and Ms. Audrey Gray;  
Ms. Darlene and Mr. Julian Gushulak;  
Mr. Don and Ms. Jean Hoeft; Ms. Constance  
Hollick; Ms. Debora Hollick; Mr. Thomas and  
Ms. Judith Keeler; Ms. Judi Kemp; Ms. Irene  
Kerr; Ms. Cassidy Kollyer; Ms. Sarah Lee;  
Mr. Charles Leuw; Ms. Judy and Mr. John  
Mace; Ms. Amy Marcotte; Ms. Brenda  
Morgan; Mr. Frank Noble; Mr. David Nordlii;

Ms. Beryl Ostrom; Ms. Riseah Prock;  
Ms. Melinda and Mr. Vernon Proctor;  
Mr. Brent Schlenker; Ms. Allison Silverson;  
Ms. Angel and Mr. Jarret Ulrikson; Ms. Julia  
and Mr. Allan Venton; Mr. Michel Viricaire,  
Ms. Rosemarie and Mr. Peter Walter;  
Mr. Stephen and Ms. Jennifer Washington;  
Ms. Michele Credico and Mr. David Stonham;  
and Mr. Randall Worthington.

Ms. Eva and Mr. Dave Ayers; Ms. Ingrid and  
Mr. Theodore Baier; Mr. Gerard Mercier; and  
Ms. Rosemarie and Mr. Peter Walter;  
represented by Mr. Gavin Fitch, K.C.,  
McLennan Ross LLP;

Town of High River, represented by  
Mr. Anthony Burden, Field Law LLP.

**WITNESSES:**

**Appellants:** Mr. David Dalton and Ms. Amanda Dalton; and  
Mr. Norman Denney.

Mr. Jean-Yves Urbain.

**Approval Holder:** Mr. Michael Banner MSc PEng, ALARP  
Engineering Ltd.; Mr. Denny Boisvert,  
Rimrock Renewables Ltd.; Mr. Kevin Chow P.  
Eng., H<sub>2</sub>Safety; Mr. Garnet Dawes, Engineer,  
ISL Engineering and Land Services Ltd.; Dr.  
Roderick Facey, Engineer, Obsidian  
Engineering Corp.; Mr. Reid Fothergill,  
Engineer, Obsidian Engineering; Mr. Cody  
Halleran, Horizon Compliance; and Ms.  
Rachael Powell, EP, PMP, EXP Services Inc;

**Director:** Mr. Craig Knauss, Director, Regulatory  
Assurance Division, South, Alberta  
Environment and Protected Areas; and  
Ms. Ping Zhao, Industrial Approvals Engineer,

Regulatory Assurance Division, South, Alberta  
Environment and Protected Areas.

**Board Witness:** Dr. Greg Piorkowski, Science and Technology  
Manager, Natural Resources Conservation  
Board.

**Intervenors:** Ms. Eva and Mr. Dave Ayers; Ms. Ingrid and  
Mr. Theodore Baier; Mr. Charles Leuw;  
Mr. Brent Schlenker; and Mr. Randall  
Worthington.

Mr. Michael Nychyk, Council Member, Town  
of High River; and Mr. Craig Snodgrass,  
Mayor, Town of High River.

## EXECUTIVE SUMMARY

Alberta Environment and Protected Areas (EPA) issued EPEA Approval No. 484778-00-00 (the Approval) under the *Environmental Protection and Enhancement Act* to Rimrock Renewables Ltd. (the Approval Holder). The Approval authorizes the construction, operation, and reclamation of a 2.2 megawatt power plant and waste management facility for the collection and processing of waste or recyclables to produce fuel in Foothills County, Alberta (the Facility).

Ms. Brenda Prestie and Mr. Barry Prestie, Mr. David Dalton and Ms. Amanda Dalton, and Mr. Norman Denney (the Appellants) appealed the Approval to the Environmental Appeals Board (the Board). Mr. Steven James and Ms. Benita Estes, and the Town of High River also appealed the Approval and were granted intervenor status with full party status rights. The Board also accepted 41 limited intervenor applications (the Intervenors).

The Appellants' and Intervenors' primary concern was the impact the Facility would have on the existing odours, air quality, and emissions in the local area created by an onsite confined feeding operation (the CFO). Much of the Appellants' and Intervenors' concerns focussed on the present odour levels and nuisances in the local area which the Appellants and Intervenors attributed to the CFO's operations, and the Facility's potential to exacerbate these pre-existing issues.

The Appellants and Intervenors raised several concerns with the Approval including the scientific and technical studies on which the Approval decision was based, the appropriateness of the size of the Facility, the construction of an open liquid digestate pond, risk of surface and groundwater contamination caused by the liquid digestate pond, quantity of water proposed to be used by the Facility, and other terms and conditions of the Approval related to safety and monitoring. The Appellants and Intervenors argued the Director should not have issued the Approval, and that the Approval's terms and conditions did not adequately address health and safety concerns.

The Board held a hearing on January 27, 28, 30, and 31 of 2025. Based on the evidence and submissions presented at the hearing, the Board found that although there were existing regional air quality and odour concerns, the Approval met the objectives of ensuring the Facility did not exceed the Alberta Ambient Air Quality Objectives and Alberta Air Quality Guidelines. The Board found there was evidence to suggest the Facility may provide some benefit to the regional

air quality concerns of the Appellants and Intervenors, by providing a method of managing and processing the manure generated by the CFO and its associated greenhouse gases.

The Board recommended the Minister confirm the Director's decision to issue the Approval and vary the Approval by including additional conditions to further address the risk of fugitive emissions, monitoring, and emergency risk planning. These conditions include requiring the submission of a Fugitive Emissions Monitoring Program prior to the acceptance of feedstock at the Facility and commencement of operations, a secondary set of carbon filters in the Facility's odour abatement system, the requirement for an onsite meteorological monitoring station in a location approved by the Director, provision of all the monitoring data to be made available to the public, and the requirement for consultation with local authorities and the public regarding emergency response planning.

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## 1. INTRODUCTION

[1] This is the Report and Recommendations of the Environmental Appeals Board (the “Board”) in the appeals filed by Ms. Brenda and Mr. Barry Prestie (the “Presties”), Mr. David and Ms. Amanda Dalton (the “Daltons”), and Mr. Norman Denney (collectively, the “Appellants”) of EPEA Approval No. 484778-00-00 (the “Approval”) issued under the *Environmental Protection and Enhancement Act*, RSA 2000, c E-12 (“EPEA”). The Approval was issued on December 11, 2023, by the Director, Regulatory Assurance, South, Alberta Environment and Protected Areas (the “Director”) to Rimrock Renewables Ltd. (the “Approval Holder”). The Approval authorizes the construction, operation, and reclamation of a waste management facility for the collection and processing of waste or recyclables to produce fuel and an associated 2.2 megawatt (“MW”) power plant, in Foothills County, Alberta (the “Facility”).<sup>1</sup>

[2] The Appellants raised several concerns with the Approval including the scientific and technical studies on which the Approval decision was based, the appropriateness of the size of the Facility, the construction of an open liquid digestate pond, groundwater impacts from contamination caused by the liquid digestate pond, and the terms and conditions of the Approval. The core issue in the appeals was the impact the Facility would have on the air quality in the region and pre-existing odour concerns. The Appellants argued the Director should not have issued the Approval, and the Approval’s terms and conditions did not adequately address health and safety concerns.

## 2. FACTS

[3] The proposed Facility is to be located within Foothills County, approximately 5.5 kilometers (“km”) west of the Town of High River at NW 5-19-29-W4M and NE 6-19-29-W4M, adjacent to a confined feeding operation (“CFO”).<sup>2</sup> The nearest property line is located approximately 200 metres (“m”) north of the Facility’s footprint.<sup>3</sup>

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<sup>1</sup> See EPEA Approval 484778-00-00 at page 1.

<sup>2</sup> The CFO is located at Section 5-19-29-W4M in Foothills County and is operated by the Rimrock Cattle Company Ltd. The CFO is regulated by the Natural Resources Conservation Board pursuant to the *Agricultural Operation Practices Act*, RSA 2000, c A-7. The CFO is approved a maximum capacity of 35,000 beef finishers. See Natural Resources Conservation Board Decision RFR 2020-08 / PL20001 Rimrock Feeders.

<sup>3</sup> See Figure 2-1, Regional Map, *Rimrock Biodigester, Foothills County, Alberta*, attached to this Report and Recommendations as Appendix A. See also, Application, Director’s Record, Tab 14, at page 8.

[4] The Approval Holder submitted its application for the Approval to Environment and Protected Areas (“EPA”) on June 10, 2022. The application proposed a biodigester facility to produce renewable natural gas through the upgrading of biogas created by the anaerobic digestion of feedstock comprised of livestock manure and off-farm organic food resources (the “Application”).<sup>4</sup>

[5] The Approval Holder published public notice of the Application in the High River Times on July 22, 2022. Notice was also hand delivered to residences within 2 km of the property line of the proposed Facility on or about July 20, 2022.

[6] On July 26, 2022, the Environmental Impact Assessment Director determined the proposed activity is not a mandatory activity within the legislation for the purposes of requiring an environmental impact assessment, and that an environmental impact assessment of the proposed Facility was not required.<sup>5</sup>

[7] EPA received 11 Statements of Concern (“SOC”) between July 25 and October 23, 2022. The Director reviewed all the SOC’s and accepted 9 as valid SOC’s and rejected 2 which had been submitted outside the public notice period. The Director required the Approval Holder to respond to the concerns raised in the SOC’s.

[8] The Director issued the Approval to the Approval Holder on December 11, 2023, authorizing the construction, operation, and reclamation of the Facility for the collection and processing of waste or recyclables to produce fuel and an associated power plant.

[9] The Notice of Decision was communicated to the SOC filers by letter dated December 12, 2023.<sup>6</sup>

### **3. PROCEDURAL HISTORY**

[10] On January 4, 2024, the Board received Notices of Appeal from Mr. Alan Tuttle and Ms. Laurene Mitchell (“Mr. Tuttle and Ms. Mitchell”). On January 7, 2024, the Board

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<sup>4</sup> Rimrock Biodigester, Application to Alberta Environment and Parks for an *Environmental Protection and Enhancement Act* Industrial Approval, June 9, 2022, EXP Energy Services Inc. (“EXP”), Director’s Record at Tab 14.

<sup>5</sup> Letter from the Environmental Impact Assessment Director, July 12, 2022, Director’s Record at Tab 43.

<sup>6</sup> Notice of Decision Letters, Director’s Record at Tabs 4 through 13.

received a Notice of Appeal from the Presties. On January 8, 2024, the Board received Notices of Appeal from Mr. Denney, Mr. Mark McNeil and Ms. Lori Boyle (“Mr. McNeil and Ms. Boyle”), and the Daltons.

[11] On January 8, 2024, the Board wrote the Appellants, the Approval Holder, and the Director, acknowledging receipt of the Notices of Appeal and advising the Approval Holder and the Director of the appeals. The Board also requested the Director provide the Board with a copy of the records relating to the appeals (the “Director’s Record”).

[12] On January 8, 2024, the Board received a Notice of Appeal from Mr. Steven James and Ms. Benita Estes. On January 9, 2024, the Board wrote the Appellants, the Approval Holder, and the Director, acknowledging receipt of the Notices of Appeal from Mr. James and Ms. Estes, and advising the Approval Holder and the Director of the appeals. The Board also requested the Director provide the Board with a copy of the records relating to the appeals.

[13] On January 10, 2024, the Board received a Notice of Appeal from the Town of High River (the “Town”). On January 10, 2024, the Board wrote the Appellants, the Approval Holder, and the Director, acknowledging receipt of the Notice of Appeal from the Town, and advising the Approval Holder and the Director of the appeal. The Board also requested the Director provide the Board with a copy of the records relating to the appeal.

[14] On January 15, 2024, the Director advised that the Director’s Record would be available on March 28, 2024, which the Board acknowledged on January 16, 2024.

[15] On January 19, 2024, the Director advised that Mr. James and Ms. Estes, and the Town had not filed SOC’s, and stated that although the Director took no specific position in respect of the issue, these parties were not properly appellants to the appeals.

[16] On January 29, 2024, the Town wrote the Board advising that the Town had not been provided notice of the Application. The Town stated it was directly affected by the Approval and argued it was properly an appellant in the appeal.

[17] On February 7, 2024, the Board acknowledged the Town’s Letter and advised the Appellants, the Approval Holder, the Town, Mr. James and Ms. Estes, and the Director (the

“Parties”) that it would accept any motions the Parties wanted the Board to decide after receipt of the Director’s Record.

[18] On March 28, 2024, the Director provided the Director’s Record, which the Board subsequently distributed to the Parties.

[19] On April 2, 2024, the Board wrote the Parties asking them to submit any preliminary motions that the Parties may have upon reviewing the Director’s Record by April 9, 2024. The Board advised the Parties that an additional opportunity to provide preliminary motions would also be made available after the mediation meeting.

[20] On May 30, 2024, a mediation meeting took place, however it did not resolve the appeals.

[21] On June 3, 2024, the Board proposed two issues for the hearing:

1. Was the Director's decision to issue EPEA Approval No. 484778-00-00 appropriate?
2. Are the terms and conditions in EPEA Approval No. 484778-00-00 appropriate?

[22] On June 12, 2024, the Approval Holder advised that it had no concerns with the issues proposed by the Board. On June 17, 2024, the Director, the Appellants, Mr. James and Ms. Estes, and the Town advised they had no concerns with the proposed issues.

[23] On June 22, 2023, the Board held a mediation meeting that did not result in an agreement. The Board scheduled a hearing and set a process for the exchange of written submissions.

[24] On July 15, 2024, the Board set the issues for the hearing. The Board also proposed the Parties consider making the Town, Mr. James and Ms. Estes intervenors with the full party rights.<sup>7</sup> The Board further proposed hearing the appeals by way of a video conference and

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<sup>7</sup> See Board Correspondence to the Parties, July 15, 2024. In making its proposal to the Parties, the Board noted there were other appellants with valid appeals before the Board and the matter was proceeding to a hearing in any event, and the suggested solution would address the issue of the validity of those parties’ appeals without incurring additional time and costs associated with a preliminary motion.

requested dates the Parties had available in October or November of 2024 for the hearing of the appeals.

[25] On July 23, 2024, the Approval Holder advised that it took no position on the Town's or Mr. James' and Ms. Estes' standing to participate in the appeals, although it reserved the right to object to other persons participating in the appeals. On July 26, 2024, the Appellants advised that they agreed with the Board's proposal to make the Town, and Mr. James and Ms. Estes intervenors with full party rights. On August 27, 2024, the Town advised that it agreed with the Board's proposal to make the Town, and Mr. James and Ms. Estes intervenors with full party rights.

[26] On September 19, 2024, the Board noted there were no objections to its proposal to making the Town, and Mr. James and Ms. Estes intervenors with full party rights. The Board further noted there were no objections to holding the hearing by video conference, and requested the Parties provide additional dates in January of 2025.

[27] On September 23, 2025, the Board advised Parties that November 26 and 28 were available and the Board requested the Director revisit his availability on November 27. On September 30, the Director advised he was not available on November 27 and was no longer available for November 26 or 28.

[28] On October 4, 2024, the Board proposed four options to the Parties for the timely hearing of the appeals:

1. the Director become available November 26 and 28, 2024, and a full hearing be held;
2. proceeding with a written hearing and oral closing arguments on November 26 and November 28, 2024;
3. proceeding with a written hearing without oral arguments; or
4. proceeding with an oral hearing in December or January.

[29] On October 2, 2024, the Director advised he was available for a hearing of the appeals on November 26 through November 28, 2024.

[30] On October 2, 2024, the Board notified the Parties a hearing by video conference was scheduled for November 26, 27, and 28, and set a schedule for written submissions.

[31] On October 3, 2024, the Appellants and Mr. James and Ms. Estes (the “Appellant/Intervenor Group”) wrote the Board objecting to the November hearing dates, arguing scheduling conflicts and the need for the opportunity to be provided to other interested parties to participate as intervenors. The Approval Holder also wrote the Board objecting to a rescheduling of the hearing, arguing the Appellants and potential intervenors had seven weeks to prepare for the hearing, and it was uncertain what information intervenors would add to the hearing of the appeal.

[32] The Board confirmed the November hearing dates and schedule for the written submissions on October 8, 2024, and provided the Notice of Hearing to the Parties.

[33] On October 8, 2024, the Board provided a copy of the Notice of Hearing to Foothills County (the “County”) and the Town to be placed on their respective public bulletin boards or websites. The Board also published a Notice of Hearing in the Okotoks Western Wheel on October 9, 2024, and the High River Times on October 11, 2024. A news release was forwarded to the Public Affairs Bureau for distribution throughout the province, and the news release was posted on the Board’s website. The Notice of Hearing provided an opportunity for persons who wanted to make a representation before the Board to apply to intervene by October 18, 2024. In response to the Notice of Hearing, the Board received 41 applications from individuals to intervene.

[34] On October 11, 2024, the Appellant/Intervenor Group made a preliminary motion that the Board compel a witness from the Natural Resources Conservation Board (the “NRCB”) such as an Approval Officer or an Inspector with knowledge of the CFO.

[35] On October 15, 2024, the Board acknowledged receipt of the Appellant/Intervenor Group’s preliminary motion and requested comments from the Parties.

[36] On October 21, 2024, the Board provided the Parties with copies of the applicants’ intervenor applications and asked the Parties to provide comments on the applicants’ potential

involvement in the hearing by October 24, 2025. The Board received comments between October 24 and October 25, 2024.

[37] On November 1, 2024, the Board notified the Parties and the applicants, with reasons to follow,<sup>8</sup> that the Board had granted limited intervenor status to all the applicants (the “Intervenors”. The Board further advised the Parties that the following five applicants would be permitted to speak at the hearing as representatives of the applicants (the “Representative Intervenors”):

1. Ms. Eva and Mr. Dave Ayers;
2. Ms. Ingrid and Mr. Ted Baier;
3. Mr. Charles Leuw;
4. Mr. Brent Schlenker; and
5. Mr. Randall Worthington.

The Board further advised the Parties that it had decided to subpoena Dr. Greg Piorkowski, Science and Technology Manager, NRCB, to speak to his report *Community-level Odour Monitoring in High River, Alberta*, dated November 14, 2024 (“Odour Monitoring Report”), as it relates to the baseline conditions in the area of the proposed Facility.

[38] The written submissions and materials for the hearing were received between October 29 and January 7, 2024. These included the:

1. Appellant/Intervenor Group’s Initial Written Submissions, received October 29, 2024 (the “Appellant/Intervenor Group’s Initial Submissions”);
2. Town’s Initial Written Submissions, received October 29, 2024 (the “Town’s Initial Submissions”);
3. Approval Holder’s Written Response Submissions, received November 13, 2024 (the “Approval Holder’s Response Submission”);
4. Director’s Written Response Submissions, received November 13, 2024 (the “Director’s Response Submissions”);

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<sup>8</sup> See Board Decision: Intervenor Decision: *Tuttle et al. v. Director, Director, Regulatory Assurance Division, South, Alberta Environment and Protected Areas* re: Rimrock Renewables Ltd. 2025 ABEAB 7.

5. Appellant/Intervenor Group's Written Rebuttal Submissions, received November 22, 2024 (the "Appellant/Intervenor Group's Rebuttal Submissions");
6. Town Written Rebuttal Submissions, received November 22, 2024, (the "Town's Rebuttal Submissions"); and
7. Supplemental Written Submissions of the Presties received January 7, 2025 (the "Presties' Supplemental Submissions").

[39] On November 6, 2024, the Board provided the Parties the procedures for the hearing.

[40] On November 7, 2024, the Appellants wrote the Board advising that although the Appellant/Intervenor Group had requested that Dr. Piorkowski attend the hearing, he was not the Appellants' witness. As such, the Appellant/Intervenor Group requested the right to question Dr. Piorkowski. The Board acknowledged the Appellant/Intervenor Group's request on November 7, 2024, and requested comments from the Parties.

[41] On November 13, 2024, the Director stated he was of the view that Dr. Piorkowski be treated as an independent witness. The NRCB also wrote the Board advising the Board that it was of the view that Dr. Piorkowski was an independent witness and would not be a witness for any of the parties or intervenors.

[42] On November 18, 2024, the Appellant/Intervenor Group wrote the Board asking for an adjournment of the hearing. The Appellant/Intervenor Group noted the Approval Holder filed three expert reports and there was insufficient time to respond to the reports, and more time was required in the hearing to allow for examination of witnesses and to complete the hearing in normal sitting hours. The Board acknowledged the Appellant/Intervenor Group's letter and requested comments from the Parties on extending the hearing from three days to four or five days.

[43] On November 19, 2024, the Board asked the NRCB to confirm Dr. Piorkowski would be speaking to the Odour Monitoring Report. The NRCB confirmed he would be speaking to the Odour Monitoring Report.

[44] On November 19, 2022, the Approval Holder argued against an adjournment of the hearing, suggesting instead that the timing in the schedule for each day be revised.



[45] On November 19, 2022, the Town advised that it was in favour of adjourning the hearing and adding additional days to the hearing schedule.

[46] On November 21, 2022, the Appellant/Intervenor Group restated the need for additional days in the hearing and for an adjournment.

[47] On November 22, 2024, the Board advised the Parties it had determined that Dr. Piorkowski would be appearing as an independent witness and would be subject to cross examination by the Parties. The Board further advised the Parties that it would be adjourning the hearing to January and adding additional days to the hearing schedule.

[48] On December 3, 2024, the Board requested the Parties annotate a map for the purposes of the Board Panel and staff conducting a site visit.

[49] On December 4, 6, and 7, the Appellant/Intervenor Group's counsel, the Approval Holder, Ms. Ostrum, and Mr. Leuw wrote to the Board regarding the map and site visit. The Board acknowledged their correspondence on January 7, 2025, advising the parties that a site visit took place on the afternoon of December 9, 2024, and that the Board Panel had visited the locations identified by the Appellant/Intervenor Group's counsel, the Approval Holder, and Ms. Ostrum, but that the site visit did not include the Claresholm Feedlot as identified by Mr. Leuw.

[50] On January 6, 2025, the Appellant/Intervenor Group's counsel advised the Board that Mr. Tuttle and Ms. Mitchell had emailed him and advised him that they were withdrawing their appeals.

[51] On January 7, the Board acknowledged the withdrawal of Mr. Tuttle and Ms. Mitchell's appeals and confirmed that EAB Appeal Nos. 23-117 and 23-118 were withdrawn and closed.

[52] On January 12, 2025, Mr. McNeil and Ms. Boyle wrote the Board advising they were withdrawing their appeals. On January 13, 2025, the Board acknowledge receipt of their email withdrawing their appeals and confirmed that EAB Appeal Nos. 23-122 and 23-123 were withdrawn and closed.

[53] The Board held the hearing by video conference on January 27, 28, and 30, 31, 2025.

[54] The Board received closing arguments from the Parties between February 8 and March 3, 2025, which included:

1. Appellant/Intervenor Group's Initial Closing Comments, received February 7, 2025 (the "Appellant/Intervenor Group's Initial Closing Comments");
2. Town's Initial Closing Comments, received February 7, 2025 (the "Town's Initial Closing Comments");
3. Daltons' Closing Comments, received February 7, 2025, (the "Daltons' Closing Comments");
4. Presties' Initial Closing Comments, received February 6, 2025 (the "Presties' Initial Closing Comments");
5. Approval Holder's Response Closing Comments, received February 14, 2025 (the "Approval Holder's Closing Comments");
6. Director's Response Closing Comments, received February 14, 2025 (the "Director's Closing Comments");
7. Approval Holder's Supplemental Response Closing Comments, received February 24, 2025 (the "Approval Holder's Supplemental Closing Comments");
8. Director's Supplemental Response Closing Comments, received February 24, 2025 (the "Director's Supplemental Closing Comments");
9. Appellant/Intervenor Group's Final Closing Comments, received February 28, 2024 (the "Appellant/Intervenor Group's Final Closing Comments");
10. Town Final Closing Comments, received March 3, 2024, (the "Town's Final Closing Comments"); and
11. Presties' Final Closing Comments received March 2, 2024 (the "Presties' Final Closing Comments").

[55] The Board notified the Parties that it had closed the hearing on March 11, 2025.

#### **4. DEFINITIONS**

[56] There are several terms used in this Report and Recommendations which the Parties used in their submissions, that are defined under one common abbreviation below for ease of reference and clarity:

1. “AAAQO,” means the Alberta Ambient Air Quality Objectives and Guidelines, February 1, 2019, Alberta Environment and Parks, established by EPA pursuant to section 14 of EPEA;
2. “AER,” means the Alberta Energy Regulator;
3. “AOPA,” means the Agricultural Operations Practices Act, RSA 2000, c A-7;
4. “Appellant/Intervenor Group,” refers to the Appellants, and Mr. James and Ms. Estes, who are represented by the same legal counsel. The term is used when applications and submissions are made on behalf of the Appellants, and Mr. James and Ms. Estes as a group;
5. “Appellant/Intervenor Parties,” refers to the Appellants, Mr. James and Ms. Estes, and the Town. These parties have mixed status as appellants and intervenors with full party status, and this term is used when their arguments and submissions align and to distinguish this group’s arguments from the limited intervenors’ arguments which are noted as “Intervenors”;
6. “AQA,” refers to the Air Quality Assessment prepared by the Horizon Compliance Group, April 2022, submitted with the initial Application; the updated AQA submitted by the Approval Holder as a part of the response to SIR No 1, prepared by the Horizon Compliance Group, February 2023; and the updated 2023 AQA submitted by the Approval Holder in response to SIR No. 2, prepared by the Horizon Compliance Group, July 2023. Unless there is a need to distinguish between versions, it means the July 2023 AQA, reflecting the Parties use of “AQA” or “air modelling” in their respective submissions and testimony;
7. “AUC,” means the Alberta Utilities Commission;
8. “Base Case,” means the AQA for the CFO operations only;
9. “BATEA Study,” means the Best Alternative Technology Economically Achievable study that was completed by the Approval Holder as a part of its response to SIR No. 2;
10. “CFO,” means the confined feeding operation adjacent to the Project Site operated by the Rimrock Cattle Company Ltd.;
11. “Compliance Directive,” means Compliance Directive CD No. 25-04, issued January 20, 2025, by the NRCB to the CFO under AOPA;

12. “CO<sub>2</sub>,” means carbon dioxide;
13. “Cumulative Case,” means the AQA for both the CFO and the proposed Facility’s operations;
14. “Dark Sky Bylaw,” means the Council of the Municipal District of Foothills No. 31 Dark Sky Bylaw, 27/2009;
15. “Digestate Directive” means the *Storage and Application of Digestate on Agricultural Land Directive*, Alberta Agriculture and Irrigation, 2023;
16. “Digestate MOU,” means the Memorandum of Understanding regarding the storage and application of digestate on agricultural land between EPA and Alberta Agriculture and Irrigation, June 26, 2023;
17. “Facility,” means the proposed waste management and biodigester facility approved under the Approval;
18. “H<sub>2</sub>S,” means hydrogen sulphide;
19. “NH<sub>3</sub>,” means ammonia when described as an emission, and ammonia is used when describing ammonia as an odour;
20. “MGA,” means the *Municipal Government Act*, RSA 2000, c M-26;
21. “OU,” means an odour unit by cubic metre. 1 OU is the threshold limit where 50 percent of a population perceive an odour and the other 50 percent do not perceive that odour. The number of OU is the dilution factor required to achieve 1 OU;
22. “Pond,” means the open liquid digestate pond for the Facility; note that the Pond will be comprised of two cells, “Cell 1” and “Cell 2”;
23. “Project Case,” means the AQA for the proposed Facility’s operations only;
24. “Project Site,” means the property on which the Facility and the Pond are to be located, at NW 5-19-29-W4M and NE 6-19-29-W4M;
25. “RCC,” means roller compacted concrete, in the context of this Report and Recommendations, used to describe the concrete that was used as flooring for the pens at the CFO and is planned for use at certain staging areas at the Facility;
26. “Rimrock Cattle,” means the Rimrock Cattle Company Ltd.;
27. “RNG,” means renewable natural gas;
28. “SIR No. 1,” means the supplemental information request sent to the Approval Holder by EPA during the Application review process on November 8, 2022; and

29. “SIR No. 2,” means the second supplemental information request sent to the Approval Holder by EPA during the Application review process on March 23, 2023.

## **5. PRELIMINARY MATTERS**

### **5.1. Presties’ Absence from the Hearing**

[57] The Board notes the Presties did not attend the hearing of the appeals. However, the Presties submitted written submissions and written closing arguments for the hearing and advised the Board that they had not withdrawn their appeal.

### **5.2. NRCB Evidence**

[58] Prior to the hearing the Appellant/Intervenor Group made a motion for the Board to compel a witness from the NRCB with knowledge of the CFO to speak at the hearing.<sup>9</sup> The Board granted the Appellant/Intervenor Group’s application and issued a Notice to Attend to Dr. Piorkowski as an independent witness subject to cross-examination by all the Parties,<sup>10</sup> and that the Compliance Directive was also admissible.<sup>11</sup> Dr. Piorkowski was asked to speak to the Odour Monitoring Report as it related to the current ambient air quality and background conditions regarding odour in which the Facility is proposed to be built.

[59] The Board notes Dr. Piorkowski was also questioned about the recent Compliance Directive issued to the CFO. The information contained in the Odour Monitoring Report and the Compliance Directive were relevant to the extent of informing the Board there were other sources of odour that do not come from the Approval Holder, and the Board permitted the Parties to cross-examine on both documents.<sup>12</sup> As the Compliance Directive was issued shortly before the hearing, there was insufficient time to call the author of the Compliance Directive. While Dr. Piorkowski was not the author of the Compliance Directive, Dr. Piorkowski was able to provide some information regarding the Compliance Directive.

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<sup>9</sup> See the Appellant/Intervenor Group’s Motion dated October 11, 2024.

<sup>10</sup> See the Board’s Letter to the Parties January 23, 2025. See also the Notice to Attend issued to Dr. Greg Piorkowski, January 23, 2025.

<sup>11</sup> See the Board’s Letter to the Parties January 24, 2025, at page 1.

<sup>12</sup> See the Board’s Letter to the Parties January 24, 2025, at page 2.

[60] The Board asked the Parties to provide submissions on the weight that should be given to Dr. Piorkowski's evidence.

[61] The Appellant/Intervenor Group argued that it was critical for the Board to consider the CFO and that the Board could only determine whether the decision to issue the Approval was appropriate or whether the terms and conditions of the Approval were appropriate, if the Board understood the existing impacts the CFO causes to the community.<sup>13</sup>

[62] The Appellant/Intervenor Group argued the Facility and the CFO will operate as a single facility and further argued that how the CFO is operated is therefore very relevant.<sup>14</sup>

[63] The Appellant/Intervenor Group stated the Approval Holder argued the Facility will result in operational changes at the CFO, because it will change the manure handling practices at the CFO, such as the frequency of pen cleaning and reducing manure storage time. The Appellant/Intervenor Group noted the Approval Holder had argued the Facility will result in reduction in the cumulative regional odorous air emissions and the operational changes as benefits of the Facility. The Appellant/Intervenor Group noted that on one hand the Approval Holder was arguing a benefit of the Facility in helping manage impacts of the CFO, but on the other hand, argued the Appellant/Intervenor Group are not permitted to discuss the impacts and regulation of the CFO.<sup>15</sup>

[64] The Town argued the Approval Holder had included data regarding the CFO's current odour levels and commitments to odour mitigation in the Application and that the Approval contained a number of odour mitigation measures. The Town further argued that there was already information in the Board's file regarding the odour levels at the CFO, and that many parties including the Town, had raised concerns about the potential odour impacts of the Facility.<sup>16</sup>

[65] The Town argued that the Facility will not exist in a vacuum. The Town argued the objective facts and data about the current odour conditions of the CFO are set out in the

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<sup>13</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 4.

<sup>14</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 5.

<sup>15</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 6 and paragraph 7.

<sup>16</sup> Town's Initial Closing Comments at paragraph 9 and paragraph 10.

Compliance Directive and are reliable, as opposed to speculation and projections which have been questioned by Dr. Piorkowski, the Appellants, several Intervenors, and Mr. Urbain.<sup>17</sup>

[66] The Town argued that while the Approval was not issued with respect to the CFO, the Facility will receive 100 percent of its manure from the CFO, and the CFO modified its pens to integrate the CFO with the Facility.<sup>18</sup> The Town argued therefore, that the odour conditions at the CFO are relevant in determining the appropriateness of the Approval conditions. The Town further argued that the compliance history of the CFO should form part of the Board's decision-making.<sup>19</sup>

[67] The Town argued the integration of the two facilities meant the odour compliance history of the CFO should be a part of the Board's decision-making. The Town argued that the CFO has a history of horrendous odours which have not been abated due to inaction by the CFO. The Town stated this history must be considered in determining whether to give a related entity the benefit of doubt on its proposed odour mitigation at the Facility.<sup>20</sup>

[68] The Town argued that as opposed to the Application materials on odours from the Facility which are based on speculation and projections, the accuracy of which has been questioned by Dr. Piorkowski and Mr. Urbain, the Odour Monitoring Report and Compliance Directive are based on facts and evidence.<sup>21</sup>

[69] The Town argued the Board should give more weight to the existing extensive evidence, including the Compliance Directive and the Odour Monitoring Report in considering whether the Approval Holder's projections can be relied upon.<sup>22</sup>

[70] The Approval Holder noted much of the submissions at the hearing focused on the CFO, its operations, the NRCB's regulation of the CFO, and suggestions on regulatory improvement of the CFO. The Approval Holder argued all this information is irrelevant to the

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<sup>17</sup> Town's Initial Closing Comments at paragraph 11, paragraph 12, and paragraph 18.

<sup>18</sup> Town's Initial Closing Comments at paragraph 16, citing Exhibit "3" of the Hearing, Letter from Rimrock Cattle Company Ltd. to Mayor Snodgrass dated August 25, 2020.

<sup>19</sup> Town's Initial Closing Comments at paragraph 17.

<sup>20</sup> Town's Initial Closing Comments at paragraph 17.

<sup>21</sup> Town's Initial Closing Comments at paragraph 18.

<sup>22</sup> Town's Initial Closing Comments at paragraph 14, paragraph 18, and paragraph 19.

appeal, noting the Board had confirmed before the hearing that the CFO is only relevant in the context of the background or baseline conditions.<sup>23</sup>

[71] The Director argued the Odour Monitoring Report and Compliance Directive are relevant as background information relating to odours and odour complaints in the local area, and noted the appeals are related to the Approval and not the CFO. The Director argued greater weight should be given to the Odour Monitoring Report as Dr. Piorkowski was the author of that report and able to attend the hearing to speak to its contents. The Director argued that as the Inspector who issued the Compliance Directive was not present to speak to the factors and rationale for his decision to issue the Compliance Directive, it ought to be given less weight.

[72] During the hearing, in the context of the CFO's compliance history, the Board heard from Mr. Knauss that regardless of any common ownership of the legal entities, the Approval Holder and the CFO are separate legal entities, and he is required to consider them as separate legal entities when issuing the Approval. In this context, the Compliance Directive could not be considered as an indication of the Facility's future compliance with the Approval or used to inform conditions on an allegation of increased likelihood of non-compliance.

[73] The Board accepted and gave weight to Dr. Piorkowski's remarks, the Odour Monitoring Report, and the Compliance Directive as evidence of the background conditions of the local area in which the Facility was approved. Further, the Board noted the Director's comments regarding the inappropriateness of using the Compliance Directive issued against the CFO to inform Approval conditions structured around an alleged greater risk of non-compliance, and noted that the Compliance Directive cannot be used in this manner. Finally, the Board noted that although the author of the Compliance Directive was not in attendance at the hearing, the Compliance Directive uses clear language and is self-explanatory.

## **6. SUBMISSIONS**

### **6.1. Intervenors**

[74] The presentations of the Representative Intervenors have been summarized and

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<sup>23</sup> Approval Holder's Closing Comments at paragraph 8 and paragraph 11, citing the Board's Letter to the Parties, January 24, 2025, wherein the Board stated, "the Board agrees with the Approval Holder that it is not responsible for the odours or odour abatement from other sources."



attached to this Report and Recommendations as Appendix C – Summary of Presentations of the Representative Intervenor.

[75] The remaining concerns and submissions of the Intervenor are summarized and attached to this Report and Recommendations as Appendix B – Summary of the Submissions from the Intervenor.

#### **6.1.1. The Appellant/Intervenor Group’s Submissions**

[76] The Appellant/Intervenor Group stated they objected to the issuance of the Approval and requested the Board recommend the Minister reverse the Director’s decision to issue the Approval or in the alternative, they recommend the Minister vary the Approval.

[77] The Appellant/Intervenor Group also argued an acceptable alternative would be to include the requested amendments to the Approval, suspend the Approval until a revised AQA had been submitted and reviewed by EPA, and the Director was satisfied that the odour emissions from the CFO and Facility have been properly assessed.

[78] The Appellant/Intervenor Group submitted that the Director’s decision to issue the Approval was not appropriate.

[79] The Appellant/Intervenor Group stated they each live near the existing CFO and the proposed Facility.<sup>24</sup>

[80] The Appellant/Intervenor Group stated the area already experiences a strong and sometimes overpowering smell of cattle waste because of the CFO and that they already have had to modify their behaviour by limiting outdoor activities and keeping their windows closed. The Appellant/Intervenor Group expressed concern that the existing odour issue would worsen with the approval of the Facility. The Appellant/Intervenor Group expressed skepticism regarding the claims that the Facility will reduce odours, noting the open storage of manure and the Pond. The

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<sup>24</sup> See location of the Appellant/Intervenor Group’s residences marked on the Rimrock Biodigester Location Map, attached to this Report and Recommendations as Appendix B” from the Appellants/Intervenor Group’s Initial Submissions, October 29, 2024 (“Appellant/Intervenor Group’s Initial Submissions”) as Schedule A – Rimrock Biodigester Location Map.

Appellant/Intervenor Group expressed concern for the potential of the Pond to grow blue-green algae blooms and other contaminants that may release more foul smells.<sup>25</sup>

[81] The Appellant/Intervenor Group stated flies are already attracted to the area because of the local odours. According to the Appellant/Intervenor Group they have experienced fly infestations, and some Appellants and Intervenor expected to purchase additional pest control supplies to maintain some comfort. The Appellant/Intervenor Group stated they anticipated the presence of local pests to worsen. The Appellant/Intervenor Group argued the increase in exposed waste created and stored by the Facility would exacerbate the fly infestations.<sup>26</sup>

[82] The Appellant/Intervenor Group stated they were worried about the likelihood of increased mosquito proliferation due to the Pond, and the potential health risks associated with mosquito borne illnesses such as West Nile Virus.<sup>27</sup>

[83] The Appellant/Intervenor Group stated the noise from the CFO affects nearby residents, primarily due to frequent truck traffic and the operation of machinery, such as loaders scraping the pens in the CFO. The Appellant/Intervenor Group stated they were concerned the Facility would amplify these problems by introducing new sources of continuous noise, such as power generators, compressors, pumps for the liquid digestate, and additional noise caused by increased local truck traffic hauling additional waste to the Facility or in draining the Pond.<sup>28</sup>

[84] The Appellant/Intervenor Group expressed concern regarding the visual impact arising from the large visual structures such as the flare stacks and the large storage tanks that are planned for the Facility. The Appellant/Intervenor Group stated the Facility is incompatible with the surrounding rural landscape and will disrupt their scenic views. The Appellant/Intervenor Group stated the visual impacts and height of the flare stacks were of particular concern.<sup>29</sup>

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<sup>25</sup> Appellant/Intervenor Group's Submissions at paragraph 6.

<sup>26</sup> Appellant/Intervenor Group's Submissions at paragraph 7.

<sup>27</sup> Appellant/Intervenor Group's Submissions at paragraph 7.

<sup>28</sup> Appellant/Intervenor Group's Submissions at paragraph 8.

<sup>29</sup> Appellant/Intervenor Group's Submissions at paragraph 9.

[85] The Appellant/Intervenor Group also expressed concern that certain lighting may be used for overnight operations which could potentially disrupt the sleep of the Facility's neighbours.<sup>30</sup>

[86] The Appellant/Intervenor Group also raised concerns regarding the potential for particulates from the digestate stored in open piles at the Facility to disperse onto their properties. The Appellant/Intervenor Group stated this was not just an aesthetic concern, as some were concerned this may harm their property and pose a health risk.<sup>31</sup>

[87] The Appellant/Intervenor Group expressed concern about the potential for local groundwater contamination caused by runoff from manure storage areas or potential leaks from the Pond. The Appellant/Intervenor Group stated that several of the Appellants noted their reliance on well water, and raised a concern that contamination poses a risk to their health and property; other Appellants were concerned with the threat of local water way contamination in the event of overland flooding or poor waste management, and the impact this would have on wildlife and waterfowl native to the surrounding environment.<sup>32</sup>

[88] The Appellant/Intervenor Group also raised concerns regarding the Facility's high demand for water and noted the volume of water the Facility required may exacerbate local water scarcity in a region already affected by drought.<sup>33</sup>

[89] The Appellant/Intervenor Group expressed concern that the Approval Holder was not required to produce its plans for the decommissioning and reclamation of the Facility in advance of the Facility ceasing operations. The Appellant/Intervenor Group stated they would like to know who is responsible for dismantling the Facility and restoring the Project Site should the Approval Holder become insolvent or abandon the project. The Appellant/Intervenor Group argued that without clear guarantees for reclamation, there is a fear they could be left with a deteriorating industrial site which would be both an environmental hazard and an eyesore.<sup>34</sup>

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<sup>30</sup> Appellant/Intervenor Group's Submissions at paragraph 9.

<sup>31</sup> Appellant/Intervenor Group's Submissions at paragraph 10.

<sup>32</sup> Appellant/Intervenor Group's Submissions at paragraph 11.

<sup>33</sup> Appellant/Intervenor Group's Submissions at paragraph 12.

<sup>34</sup> Appellant/Intervenor Group's Submissions at paragraph 14.

[90] The Appellant/Intervenor Group stated the Approval Holder's public consultation for the Facility was flawed. In particular, the Appellant/Intervenor Group noted the consultation process was marked by a lack of transparency, where requests for project application details and supporting details were frequently met with either no response or partial, vague answers. The Appellant/Intervenor Group further stated project expansions and details were learned only after the initial consultation period.<sup>35</sup>

[91] The Appellant/Intervenor Group stated the public notices for the project were posted in locations unlikely to reach all interested parties or were provided with incomplete information, such as unclear submission deadlines. The Appellant/Intervenor Group stated these experiences led to a strong perception that the Approval Holder is not interested in addressing the community's concerns.<sup>36</sup>

[92] The Appellant/Intervenor Group stated they hired Mr. Jean-Yves Urbain, a Professional Environmental Engineer with over 45 years of experience in environmental impact assessment, odour and noise measurement, odour scrubber control design and construction, dispersion calculation and public consultation.<sup>37</sup> The Appellant/Intervenor Group, noted it was Mr. Urbain's opinion that while EPA "had asked the right questions" in reviewing the [Approval Holder's] Application and SIR responses ... it should not have issued the Approval" because the Application contained numerous errors.<sup>38</sup> The Appellant/Intervenor Group stated in particular, the AQA contained errors in the calculation of emission rates from the CFO and Facility, such that EPA cannot rely on it providing an accurate assessment of the cumulative environmental effects of the two operations.<sup>39</sup>

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<sup>35</sup> Appellant/Intervenor Group's Submissions at paragraph 15.

<sup>36</sup> Appellant/Intervenor Group's Submissions at paragraph 15.

<sup>37</sup> Appellant/Intervenor Group's Submissions at paragraph 16.

<sup>38</sup> Appellant/Intervenor Group's Initial Submissions at paragraph 6, page 7, citing Mr. Urbain's Witness Statement, Schedule G to the Appellant/Intervenor Group's Initial Submissions. Note the numbering of the paragraphs in the Appellant/Intervenor Group's Submissions restarted halfway through the submissions, and the Board has cited the page number where the paragraph numbering was duplicated.

<sup>39</sup> Appellant/Intervenor Group's Initial Submissions at paragraph 6, page 7, citing Mr. Urbain's Witness Statement, Schedule G to the Appellant/Intervenor Group's Initial Submissions.

[93] The Appellant/Intervenor Group stated that Mr. Urbain recommended the Approval Holder be required to re-do the AQA and resubmit the Application to EPA based on the revised AQA. The Appellant/Intervenor Group argued acceptance of this recommendation would require a reversal of the Approval, as the foundation for the Approval, being that the environmental effects would be acceptable, would no longer exist.<sup>40</sup>

[94] The Appellant/Intervenor Group further noted that Mr. Urbain had opined that the issuance of the Approval was not appropriate because the Application documents do not properly assess odour from the Facility and the CFO but rather, they refer only to specific chemicals that were selected as proxies for odour. The Appellant/Intervenor Group stated Mr. Urbain had indicated that odour could be modelled and measured as “Odour Units” (“OU”) distinct from constituent chemicals such as H<sub>2</sub>S and NH<sub>3</sub>. The Appellant/Intervenor Group argued that given the significant concerns about odour from the CFO, the Approval Holder should have assessed odour emissions and not simply H<sub>2</sub>S and NH<sub>3</sub> emissions.<sup>41</sup>

[95] The Appellant/Intervenor Group noted that Mr. Urbain had opined that the Approval Holder would likely not be able to achieve the predicted reductions in H<sub>2</sub>S and NH<sub>3</sub> emissions, and that even if the Approval Holder were able to achieve them, they would likely have little to no impact on the overall odour impact from the Facility and the CFO.<sup>42</sup>

[96] The Appellant/Intervenor Group submitted that should the Board determine that it is not appropriate to recommend that the Minister reverse the Director’s decision to issue the Approval, the Approval should be varied as recommended by Mr. Urbain.

[97] The Appellant/Intervenor Group stated Mr. Urbain recommended the Approval be varied as follows:

1. A wet scrubber recirculation pump and activated carbon media vessel should be required, with redundancy to ensure that the odour management system will be operational even during maintenance events;

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<sup>40</sup> Appellant/Intervenor Group’s Initial Submissions at paragraph 7, page 8, citing Mr. Urbain’s Witness Statement, Schedule G to the Appellant/Intervenor Group’s Initial Submissions.

<sup>41</sup> Appellant/Intervenor Group’s Initial Submissions at paragraph 8, page 8, citing Mr. Urbain’s Witness Statement, Schedule G to the Appellant/Intervenor Group’s Initial Submissions.

<sup>42</sup> Appellant/Intervenor Group’s Initial Submissions at paragraph 9, page 8, citing Mr. Urbain’s Witness Statement, Schedule G to the Appellant/Intervenor Group’s Initial Submissions.

2. The Approval should contain a condition requiring the Approval Holder to meet an odour impact limit of 10 OU at the property fence line;
3. Odour sampling by odour panels and calculation of the odour impact should be required 6 months after the Facility's startup;
4. As part of the odour management program the Approval Holder should be required to install a weather station;
5. The Approval Holder's Fugitive Emission Monitoring Program should be filed with the Director 6 months prior to the start of the Facility's operation;
6. To gain public trust and acceptance, the Approval Holder should be required to post on a publicly accessible website all odour complaints and subsequent resolution within 48 hours of receipt of the complaint. As part of the posting the meteorological data should also be provided;
7. Measurement of dissolved oxygen in pond cells should be done on a daily basis to ensure the ponds do not emit odorous gases;
8. The Approval Holder should be required to take steps to stop offensive odours as required under the Approval, and all such steps must be taken within two weeks of receiving the odour complaint, unless the Director grants an extension;
9. The Approval should include a mechanism to address noise complaints and, if there are repeated noise complaints, there should be a means of ensuring the Approval Holder is required to initiate a reasonable noise assessment and mitigation plan;
10. The Approval should contain conditions requiring a litter and pest control monitoring or management program; and
11. The Approval should prescribe a deadline for the Approval Holder to publish an emergency response plan, including a neighbour notification system, emergency responder process, and potential evacuation or shelter in place processes to be implemented in the event of an emergency such as an onsite spill, release during transportation, release of air emissions, fire, or explosion hazards.<sup>43</sup>

[98] The Appellant/Intervenor Group argued that it was critical for the Board to consider the CFO. The Appellant/Intervenor Group noted the CFO is regulated by the NRCB and has been subject to thousands of complaints from area residents. The Appellant/Intervenor Group stated the CFO has and continues to have major adverse effects on the Appellant/Intervenor Group's quality of life, and their ability to enjoy and use their properties.

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<sup>43</sup> Appellant/Intervenor Group's Initial Submissions at paragraph 12, page 9 and page 10.

[99] The Appellant/Intervenor Group stated it was their position that the NRCB's regulation of the CFO was failing and noted that as of September of 2023, the NRCB had received over 1,700 odour complaints since Rimrock had purchased the CFO. The Appellant/Intervenor Group argued it was reasonable to assume that there had been thousands more complaints since September of 2023.<sup>44</sup>

[100] The Appellant/Intervenor Group stated the AQA submitted as a part of the Approval Holder's response to SIR No. 2 included the Baseline Case and the Cumulative Case, and showed maximum ground level concentrations of H<sub>2</sub>S and NH<sub>3</sub> which exceed the AAAQO.<sup>45</sup> The Appellant/Intervenor Group noted that contrary to this information, the NRCB maintained the CFO is in compliance with the applicable feedlot standards as CFOs are not regulated under the AAAQO in Alberta. The Appellant/Intervenor Group argued this suggested there was something wrong with how the CFO was being regulated and that they felt that the Compliance Directive confirmed their opinion.<sup>46</sup>

[101] The Appellant/Intervenor Group noted NRCB Bulletins on the odour complaints at the CFO indicated the NRCB has no regulatory authority over the Facility, and indicated the Facility was approved by EPA and any inquiries about the regulatory process or status of the Approval should be directed to EPA.<sup>47</sup>

[102] The Appellant/Intervenor Group submitted the result of the bifurcation of jurisdiction between EPA and the NRCB is that the CFO and the Facility, which are physically located adjacent to each other, functionally integrated and owned by the same company, are not being effectively regulated in the public interest, leaving the adversely affected individuals such as the Appellant/Intervenor Group in legal limbo.<sup>48</sup>

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<sup>44</sup> Appellant/Intervenor Group's Initial Submissions at paragraph 16, at page 11. Note this submission was made prior to the release of the Odour Monitoring Report.

<sup>45</sup> Appellant/Intervenor Group's Initial Submissions at paragraph 17, at page 11 and page 12, citing Table 2 and Table 3 of the AAAQO.

<sup>46</sup> Appellant/Intervenor Group's Initial Submissions at paragraph 18, at page 12.

<sup>47</sup> Appellant/Intervenor Group's Initial Submissions at paragraph 19, page 12, citing the NRCB Update Bulletins, "Odour Complaints at Rimrock Feeders."

<sup>48</sup> Appellant/Intervenor Group's Initial Submissions at paragraph 21, page 13.

[103] The Appellant/Intervenor Group noted the Board is required to submit a report and recommendations to the Minister which includes a summary of the representations made to the Board. The Appellant/Intervenor Group urged the Board to make a recommendation to the Minister that the CFO and the Facility be regulated as a single entity by a single regulator, preferably EPA, so that externalities such as emissions could be considered together.<sup>49</sup>

[104] The Appellant/Intervenor Group argued that if the NRCB is unable or unwilling to properly regulate the CFO and if EPA has no jurisdiction over the CFO, the CFO's neighbours including the Appellant/Intervenor Group and the Town "will be condemned to a status quo that is simply not acceptable."<sup>50</sup> The Appellant/Intervenor Group argued that because there is a jurisdictional divide between EPA and the NRCB, they appear to have no remedy.<sup>51</sup>

[105] The Appellant/Intervenor Group noted the Approval Holder asserts more than once that odour is regulated as a nuisance and not as a specific contaminant subject to prescribed limits. The Appellant/Intervenor Group further noted the Approval Holder had disagreed with Mr. Urbain and the possible inclusion of OU limits in the Approval as did the Director, and argued both the Approval Holder and the Director had exaggerated the differences between Alberta and Ontario's legislation.<sup>52</sup> The Appellant/Intervenor Group argued there was no legal reason the Director could not incorporate OU limits in the Approval.<sup>53</sup>

[106] The Appellant/Intervenor Group stated that in Ontario odour is listed as a contaminant under the *Environmental Protection Act*, RSO 1990, c E-19 ("Ontario EPA"), and is subject to regulation through approval terms for project-specific Environmental Compliance Approvals ("ECA"). The Appellant/Intervenor Group further stated that section 9 and section 14 of the Ontario EPA establish the framework for regulating the discharge of contaminants,

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<sup>49</sup> Appellant/Intervenor Group's Initial Submissions at paragraph 22, page 13.

<sup>50</sup> Appellant/Intervenor Group's Initial Submissions at paragraph 23, page 13 and page 14.

<sup>51</sup> Appellant/Intervenor Group's Initial Submissions at paragraph 23, page 13 and page 14.

<sup>52</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 8 and paragraph 9, citing the Approval Holder's Response Submissions at paragraph 118 and paragraph 119.

<sup>53</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 47.



including odour, which is prohibited unless authorized by an ECA or is unlikely to cause an adverse effect.<sup>54</sup>

[107] The Appellant/Intervenor Group stated Ontario does not have province-wide prescriptive limits for odour measured in OU. The Appellant/Intervenor Group stated that while the Ontario EPA regulations like *Air-Pollution – Local Air Quality*, O Reg 419/05 and the Registrations Under Part II.2 of the Act – *Activities Requiring Assessment of Air Emissions*, O Reg 1/17 address aspects of air emissions and odour, they focus on chemical concentrations and operational requirements. The Appellant/Intervenor Group further stated they do not impose universal odour thresholds that are applicable to all projects that have applied for an ECA.<sup>55</sup>

[108] The Appellant/Intervenor Group stated odour impacts are addressed on a case-by-case basis during the ECA process, and OU limits are imposed as conditions of an ECA.<sup>56</sup> The Appellant/Intervenor Group noted in *McNeil v. Ontario (Environment, Conservation and Parks)* the Director in Ontario had stated the Ministry of Environment had adopted a guideline of 1 OU as an interim measure for indicating the likelihood of a facility causing an adverse effect on nearby receptors.<sup>57</sup> The Appellant/Intervenor Group argued this was not a formal province-wide policy, but instead reflected the Ministry’s project-specific approach to odour management.

[109] The Appellant/Intervenor Group stated Mr. Urbain had referred to being the Principal Design Engineer for the Dufferin Waste Management Facility in Toronto in his Witness Statement and that this facility creates biogas from organic food waste. The Appellant/Intervenor Group noted that Mr. Urbain also stated that the ECA for the facility contains a requirement related to OU.<sup>58</sup>

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<sup>54</sup> Appellant/Intervenor Group’s Rebuttal Submissions at paragraph 12.

<sup>55</sup> Appellant/Intervenor Group’s Rebuttal Submissions at paragraph 13.

<sup>56</sup> Appellant/Intervenor Group’s Rebuttal Submissions at paragraph 14, citing *Darling International Canada Inc v Ontario (Environment, Conservation and Parks)*, 2022 CanLII 48592 (ON LT).

<sup>57</sup> Appellant/Intervenor Group’s Rebuttal Submissions at paragraph 14, citing *McNeil v Ontario (Environment, Conservation and Parks)*, 2019 CanLII 39622 (ON ERT) (“*McNeil v. Ontario (Environment, Conservation and Parks)*”).

<sup>58</sup> Appellant/Intervenor Group’s Rebuttal Submissions at paragraph 15, citing the Witness Statement of Mr. Urbain at paragraph 1, paragraph 16, paragraph 45, and paragraph 66. The Appellant/Intervenor Group cited the relevant section of the Environmental Compliance Approval as section 2, Odour Performance:

“2. The Company shall operate and maintain the Facility so that the maximum 10-minute average concentration of odour at the most impacted Sensitive Receptor, computed in accordance with Schedule “A”,

[110] The Appellant/Intervenor Group stated that although Ontario does not have a regulation or guideline setting OU limits, Ontario still inserts OU limits in specific approvals. The Appellant/Intervenor Group argued therefore, there is no great difference between the two provinces' legislative schemes.<sup>59</sup>

[111] The Appellant/Intervenor Group disputed the argument that odour is regulated as a nuisance. In this regard, the Appellant/Intervenor Group observed that 4,500 odour complaints logged to the NRCB since July 2022 without the CFO being forced to improve operations to reduce odours is the absence of regulation.<sup>60</sup> The Appellant/Intervenor Group submitted that given the absence of effective regulation of the CFO, it would be irresponsible of the Board to uphold the Approval without imposing odour emission limits, as doing so would perpetuate an unacceptable status quo.<sup>61</sup>

[112] The Appellant/Intervenor Group argued much of Mr. Urbain's Witness Statement is unimpeached.<sup>62</sup>

[113] The Appellant/Intervenor Group stated Mr. Urbain has experience with the relevant regulatory framework, having consulted with the City of Edmonton with respect to its wastewater treatment plants and for the Government of Alberta in assessing the operation of and emissions from the incinerator and scrubber at the Swan Hills Hazardous Wastes Treatment Centre.<sup>63</sup>

[114] The Appellant/Intervenor Group further stated that Mr. Urbain appreciates that the AAAQO do not regulate odour or impose objectives for odour emissions, however, that does not mean that EPA cannot set an OU limit in appropriate circumstances or make meeting an OU limit a condition of an approval.<sup>64</sup>

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resulting from the operation of the DROPF, shall not be greater than 1.0 odour unit under all atmospheric conditions.”

<sup>59</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 16.

<sup>60</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 17.

<sup>61</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 18.

<sup>62</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 19.

<sup>63</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 20.

<sup>64</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 21.

[115] The Appellant/Intervenor Group noted that a fair examination of the record demonstrates that the Approval Holder gave no consideration to odours when the Application was filed in June 2022, and that odours were only addressed because of the SIRs issued by EPA.<sup>65</sup>

[116] The Appellant/Intervenor Group argued that the Approval Holder takes the position that the Facility will result in a net reduction in regional odours, yet the AQA clearly shows the Facility will have H<sub>2</sub>S and NH<sub>3</sub> emissions, which will add to the existing emissions. The Appellant/Intervenor Group noted the asserted reduction in odours comes from the operational changes at the CFO.<sup>66</sup>

[117] In response to the Approval Holder's claim that even Mr. Urbain agreed there will be a reduction in odour, the Appellant/Intervenor Group stated that Mr. Urbain had indicated that it will not be nearly as great as claimed by the Approval Holder and is not likely to be significant.<sup>67</sup> The Appellant/Intervenor Group stated that Mr. Urbain's opinion is clear that the Approval Holder's evidence relating to H<sub>2</sub>S and NH<sub>3</sub> emissions cannot be relied upon because of errors in calculating the emissions factors for both the manure from the CFO and the organic food waste. The Appellant/Intervenor Group argued that incorrect emission factors and rates for the H<sub>2</sub>S and NH<sub>3</sub> undermine the modelling of the AQA.<sup>68</sup>

[118] The Appellant/Intervenor Group noted the purpose of the AQA is to predict the current and future impacts of a facility and one of the ways to confirm if the assessment is correct is to correlate the model results to local complaints. The Appellant/Intervenor Group stated that in the case of the Approval Holder's AQA, the correlation is very poor.<sup>69</sup>

[119] The Appellant/Intervenor Group maintained their objection that they had insufficient time to engage experts to review the Emergency Planning Zone Study, Land Use Risk Assessment, and Screening Risk Assessment for the Facility.<sup>70</sup>

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<sup>65</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 22.

<sup>66</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 23.

<sup>67</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 24, citing Mr. Urbain's Witness Statement at page 7.

<sup>68</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 25.

<sup>69</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 26.

<sup>70</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 27.

[120] The Appellant/Intervenor Group noted that the Approval Holder had asserted that an Emergency Response Plan is not required as a part of the approval process, and not at issue in the hearing. The Appellant/Intervenor Group stated if this was the case, the Approval Holder should not have filed the Emergency Planning Zone Study, Land Use Risk Assessment, and Screening Risk Assessment or made the authors available at the hearing.<sup>71</sup>

[121] Regarding public consultation, the Appellant/Intervenor Group stated that if the Approval Holder followed all regulatory requirements and the directions of EPA, "... something is terribly wrong with the regulatory requirements and directions of EPA."<sup>72</sup> The Appellant/Intervenor Group stated there was no public consultation with any members of the Appellant/Intervenor Group prior to submitting the Application, submitting the statutorily required notice in the High River Times, and putting the notice in mailboxes. The Appellant/Intervenor Group noted this was despite consulting with the County since early 2020.<sup>73</sup>

[122] The Appellant/Intervenor Group argued that while the Approval Holder stated in the Application that it only intends to use feedstock comprised of manure and organic food resources, the Approval Holder could expand what the Facility accepted to include other organics such as carcasses and washroom wastewater while still complying with the Digestate MOU. The Appellant/Intervenor Group further argued the Approval Holder could make these changes while still complying with the Approval.<sup>74</sup>

[123] The Appellant/Intervenor Group restated Mr. James' and Ms. Estes' concerns regarding local traffic safety and noise based on the Traffic Impact Assessment's conclusion that the Facility's operations may result in up to 19 trips occurring twice daily during a.m. and p.m. peak hours.<sup>75</sup> This increase would be in addition to the existing road traffic already present from the CFO.

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<sup>71</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 28, citing the Approval Holder's Response at paragraph 82.

<sup>72</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 30.

<sup>73</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 30.

<sup>74</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 31 through paragraph 34.

<sup>75</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 35, citing the Traffic Impact Assessment, Director's Record at Tab 81.

[124] The Appellant/Intervenor Group argued that regardless of separating the liquid and solid digestate, the liquid digestate will still generate odours, and that this of particular concern when the Pond is pumped out and refilled.<sup>76</sup>

[125] The Appellant/Intervenor Group argued that despite Dr. Piorkowski's comments to EPA about the emission rates submitted by the Approval Holder, EPA failed to meaningfully pursue the matter. The Appellant/Intervenor Group stated the Director's Record does not disclose a discussion regarding whether the Approval Holder's emissions rates can be relied upon.<sup>77</sup> The Appellant/Intervenor Group argued the Director's Record indicates that the Director appeared to accept at face value that the Cumulative Case demonstrated approximately a 48.2 percent reduction in H<sub>2</sub>S and NH<sub>3</sub> emissions.<sup>78</sup>

[126] The Appellant/Intervenor Group stated that it is not in dispute that the AQA was prepared in accordance with the Air Quality Model Guideline, but rather that the emission rates were incorrect rendering the modelling unreliable. The Appellant/Intervenor Group argued this was a critical error, and that as noted by Mr. Urbain, the emission rates for manure and organic food waste are key inputs for the AQA and cannot be relied upon.<sup>79</sup>

[127] The Appellant/Intervenor Group noted the Director had argued that the Appellant/Intervenor Group had raised several issues that are not within the Director's jurisdiction under EPEA, including noise, traffic, litter, and emergency response plans, and that the Approval Holder had made similar submissions. The Appellant/Intervenor Group disagreed, and argued that the Board had stated in *Vipond et al. v. Director, Southern Region, Environmental Management, Alberta Environment*, re: *EcoAg Initiatives Inc.* (06 January 2011), Appeal Nos. 09-006-009, 016, 017, & 019-ID1 (AEAB), 2011 ABEAB 2 ("*Vipond*") that "... to be properly before the Board, the issues must be in response to the issuance of the Approval..."<sup>80</sup> The Appellant/Intervenor

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<sup>76</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 37.

<sup>77</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 40.

<sup>78</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 45.

<sup>79</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 41.

<sup>80</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 49, citing *Vipond* at paragraph 101.

Group further argued the Director was incorrect in arguing that these issues were outside the Board's jurisdiction.<sup>81</sup>

**6.1.2. The Presties**

[128] The Presties stated they own three parcels of land in the south half of 7-19-29-W4 on the east side of Meridian Street within a half mile of the CFO's property line and the proposed Facility. Two of the parcels are vacant and they have resided on the third for the past 35 years.<sup>82</sup>

[129] The Presties noted the CFO presently affects their quality of life and affects their property values.<sup>83</sup>

[130] The Presties stated the current level of traffic on Meridian Street traveling past their property is overwhelming, with a constant flow of cattle liners, feed and hay trucks, and the hauling of silage. The Presties stated the noise generated by the truck traffic, engines, and engine retarder brakes can be heard within their home. The Presties also noted the sounds of metal scraping on concrete can be heard when the pens at the CFO are being cleaned.<sup>84</sup>

[131] The Presties stated the CFO houses approximately 35,000 head of cattle. The Presties further stated the odours generated by the CFO are regularly overwhelming. The Presties noted they have lodged complaints regarding the odours with the NRCB several times, with no improvement to the odours.<sup>85</sup> The Presties indicated they rarely smell activities from other industrial operators in the area, but "choke on th[e] smell frequently" from the CFO.

[132] The Presties noted the manure staging area for the Facility is located outdoors, approximately 200 m to 300 m closer to their property than the CFO's pens. According to the Presties, the manure will be picked up from the pens, placed into a pile, picked up again, and then

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<sup>81</sup> Appellant/Intervenor Group's Rebuttal Submissions at paragraph 49, citing *Vipond* at paragraph 116. "As the Board stated, the issues of noise, odours, pests, and aesthetics are within the Board's jurisdiction. Groundwater and surface water impacts, air emissions, emergency response plans, litter, reclamation and soil impacts, and the handling of feedstock as it enters the Facility are properly before the Board, provided that the impacts identified, if any, are the result of the operation of the Facility."

<sup>82</sup> Presties' Witness Statement, Schedule C to the Appellant/Intervenor Group's Initial Submissions, (the "Presties' Witness Statement") at page 1.

<sup>83</sup> Presties' Witness Statement at page 2.

<sup>84</sup> Presties' Witness Statement at page 1.

<sup>85</sup> Presties' Witness Statement at page 2.

placed into a manure receiving hopper. The Presties argued there will be odour each time the manure is disturbed.<sup>86</sup>

[133] The Presties stated flies have become a problem and that during the summer months their windows, trim and siding around the windows, veranda railing and pillars are covered with excreta. The Presties further stated a broom is kept at the backdoor to sweep the flies away to prevent their entry on the opening of the door.<sup>87</sup>

[134] The Presties questioned the Approval Holder's prediction on the Facility's ability to substantially reduce odours. The Presties noted the Approval Holder had stated the Cumulative Case was not in compliance with the AAAQO and that it anticipated the Cumulative Case may continue to exceed the AAAQO.<sup>88</sup>

[135] The Presties expressed concern that the solid digestate will be located outdoors and closer to them than the manure staging area. They further expressed concern that the digestate will release odours each time it is disturbed and that the odour of the digestate will be different. The Presties argued the winds will disperse odours and particulates from the solid digestate, and that the solid digestate used for bedding at the CFO will also create additional odours and dust.<sup>89</sup>

[136] The Presties stated the Pond will also have a unique odour and argued that because of its location, most days they will either smell the CFO or the Facility. The Presties noted that Cell 1 of the Pond will be 3.5 m deep and will contain approximately 35,000 cubic metres ("m<sup>3</sup>") of liquid digestate, while Cell 2 will be 3 m deep and will contain approximately 145,000 m<sup>3</sup> of liquid digestate. The Presties expressed concern over the noise of the pumps and the odours created during the emptying process, noting that both cells of the Pond will be emptied in March and September.<sup>90</sup>

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<sup>86</sup> Presties' Witness Statement at page 3.

<sup>87</sup> Presties' Witness Statement at page 2.

<sup>88</sup> Presties' Witness Statement at page 2.

<sup>89</sup> Presties' Witness Statement at page 3.

<sup>90</sup> Presties' Witness Statement at page 3.

[137] The Presties expressed concerns regarding the Pond becoming a breeding ground for mosquitoes, blue-green algae blooms, and odours during the seasonal turnovers of water.<sup>91</sup>

[138] The Presties stated the Director did not require detailed design drawings and specifications, construction or quality assurance or control plans, until three months prior to commencement of the Facility.<sup>92</sup>

[139] The Presties noted there is no requirement for standby blowers on site in the event of a critical blower failing. The Presties further noted there is no requirement for an emergency back-up system. The Presties stated equipment failure would impact them by exacerbating the negative impacts of the pre-existing community odour levels.<sup>93</sup>

[140] The Presties stated that the Facility is designed to process 100,000 tonnes of manure, and 80,000 tonnes of manure would be provided by the CFO. The Presties stated that if the Facility operated at capacity, an additional 20,000 tonnes of manure would be hauled past their residence. The Presties noted an additional 60,000 to 80,000 tonnes of off-site organics may also be hauled past their residence to the Facility and that the solid digestate when emptied, would also be hauled past their residence.<sup>94</sup>

[141] The Presties expressed concerns regarding the noise created by the operation of the Facility through trucks, back-up alarms, equipment, generators, engines, and blowers.

[142] The Presties noted that the solid and liquid digestate from the Facility would be spread on lands adjacent to the Facility. The Presties stated they are concerned these materials would saturate the land and eventually contaminate their water source.

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<sup>91</sup> Presties' Witness Statement at page 4.

<sup>92</sup> Presties' Witness Statement at page 3. The Board notes that Condition 3.3.2 of the Approval does not require detailed design drawings and specifications for the liquid digestate pond construction, signed and stamped by a professional registered with APEGA until three months prior to the commencement of construction. The Board further notes that Condition 3.3.7 of the Approval requires a post construction report of describing any deviations to the detailed design drawings and specifications required to suit field conditions that were encountered. The remainder of the specifications for the construction of the Facility appear to be captured by the Approval and Application.

<sup>93</sup> Presties' Witness Statement at page 4.

<sup>94</sup> Presties' Witness Statement at page 5.



[143] The Presties noted the Facility requires 333,000 m<sup>3</sup> of water and stated that even if 25 percent of the liquid digestate was reused, the quantity of water being used for the Facility was still a huge amount.

[144] The Presties expressed concern that there was no emergency response plan in place and questioned whether the Town's fire department had the resources or the manpower to adequately respond to an emergency such as an explosion or leak.<sup>95</sup>

[145] The Presties expressed concern regarding dust from the use of internal roads.<sup>96</sup>

[146] The Presties objected to the Facility itself, noting they would be able to see the Facility and its stacks from their backyard, and that the "view... will be offensive."<sup>97</sup>

[147] The Presties stated they expected the value of their properties to be negatively impacted. The Presties further stated they expected their quality of life and enjoyment of their property to be negatively impacted by the Facility.<sup>98</sup>

[148] The Presties expressed frustration with the public consultation process, noting that residents within 2.2 km of the Facility were provided a Notice of the Application. The Presties stated the Notice of Application was not dated. The Presties stated that the Notice of Application was published in the High River Times which is not distributed outside the Town. The Presties argued that as the Facility is to be located in the County, the Notice of Application should have been published in the Western Wheel, which is delivered to rural residents.<sup>99</sup>

[149] The Presties further stated public hearings were requested, however, meetings were only held at residences, and two public virtual information sessions were held with the microphones muted.

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<sup>95</sup> Presties' Witness Statement at page 5.

<sup>96</sup> Presties' Witness Statement at page 5.

<sup>97</sup> Presties' Witness Statement, at page 5.

<sup>98</sup> Presties' Witness Statement at page 2 and page 5.

<sup>99</sup> Presties' Witness Statement at page 6.

[150] The Presties argued the Facility was improperly classified as a waste management facility, when it is a refinery producing natural gas, and should be located in an industrial zone, not an area zoned as country residential.<sup>100</sup>

### **6.1.3. The Daltons**

[151] The Daltons stated they will live approximately 2.5 km from their driveway to the proposed Facility. They further stated the distance from the middle of the CFO to their home is approximately 1.6 km. The Daltons stated the proposed Project Site will be approximately 485 m from their home and 360 m from their property line.<sup>101</sup>

[152] At the hearing, the Daltons stated they did not understand how EPA<sup>102</sup> had anything to do with the energy sector and gas capturing, and argued the Director should have acted in good faith and notified the Government that EPA was not the appropriate body to approve the Facility. Accordingly, the Daltons argued the Director should not have approved the Application and that the decision to grant the Approval was not appropriate.

[153] The Daltons argued the matters around the legislation and regulations for this type of industrial gas capturing facility do not exist under EPEA. The Daltons further argued the Approval never should have been granted without consideration for the lack of legislation and regulations, and further, by a governing body that did not fully understand what it was approving.

[154] At the hearing, the Daltons stated they purchased their property in July 2019 prior to the Rimrock Cattle purchasing the CFO. They stated the first few months in their home were quiet and they could enjoy being outside on their deck. The Daltons stated after Rimrock Cattle purchased the CFO and began to occupy the feedlot with cattle there came an excessive amount of traffic, noise, odour, lights, unfriendly neighbours, and unsympathetic CFO ownership.<sup>103</sup>

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<sup>100</sup> Presties' Witness Statement at page 6.

<sup>101</sup> Daltons' Witness Statement, Schedule D to the Appellant/Intervenor Group's Initial Submissions, (the "Daltons' Witness Statement") at page 1.

<sup>102</sup> Note at times the Daltons referred to the "Board", however context suggests the intent was to refer to "EPA."

<sup>103</sup> Daltons' Witness Statement at page 1. Note at the hearing, the Daltons stated they purchased their property in 2018. While nothing turns on when the Daltons purchased their property, the Board notes a purchase date in 2019 appears more consistent with their statement of the first few months being quiet.

[155] The Daltons stated each year they host a family function and ask the truckers from the CFO to refrain from using their engine brakes, a request the Daltons feel was ignored to seemingly cause noise in a purposeful manner. The Daltons stated a conversation cannot be carried on with anyone on the property while a truck is passing due to the noise generated, and that the trucks come and go at all hours of the day and night, and that they have observed as many as 40 trucks pass their home in an 8-hour period. They noted that while some operators are respectful, there are a good portion that continue to use their engine brakes, despite the County signs requesting truckers to refrain from using retarder brakes.<sup>104</sup>

[156] The Daltons further expressed safety concerns arising from the truck traffic, noting the speed of the trucks sometimes reaches over 100 km an hour when the posted speed limit is 80 km an hour, and that the trucks will pass each other. The Daltons stated the street on which they reside is only 1.6 km long, and therefore there is no need for the trucks to speed or pass each other. The Daltons also noted there were safety concerns arising from two school bus stops located on Meridian Street.<sup>105</sup>

[157] The Daltons stated the Facility will receive waste from Calgary, shipped on commercial tractor trailers. They argued the highway was not designed for the number of trucks travelling the roads. The Daltons stated they expected the problems with the truck traffic to worsen with the approval of the Facility. They expressed having difficulty with EPA not considering the traffic concerns because those may be under the purview of another Ministry.

[158] The Daltons noted the CFO had changed the flooring of the pens to RCC which significantly increased the odour produced by the CFO. The Daltons stated the CFO cleans the pens more often which also increases odour. The Daltons alleged that the CFO also changed the type of feed used at the CFO which caused the cattle waste to smell more making the odour at the CFO greater than the odour they have experienced in visits to other feedlots. At the hearing, the Daltons stated they have never smelled the other feedlots the NRCB had identified in the Odour Monitoring Report as other potential sources of odour.<sup>106</sup>

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<sup>104</sup> Daltons' Witness Statement at page 1.

<sup>105</sup> Daltons' Witness Statement at page 2.

<sup>106</sup> Daltons' Witness Statement at page 2.

[159] The Daltons stated the odour from the CFO prevents them from currently enjoying their property and that their windows must remain closed. The Daltons further stated outdoor chores or making improvements to their property are difficult due to the odour from the CFO.<sup>107</sup>

[160] The Daltons argued the Facility will increase the odour problems. The Daltons further argued the Facility will create a different smell as it processes the manure and other organic material received from third parties. The Daltons speculated these would include the smell of rotting food, animal carcasses, fats, or human waste, creating the smell of a landfill less than a kilometer from their home.<sup>108</sup>

[161] The Daltons argued the CFO will still need to clean the feed pens daily and this activity will create odour. They further argued that instead of the manure being used in fields as fertilizer, the manure will now be stored in “several football field sized piles of manure” at the Facility, 400 m from their home. The Daltons argued these manure piles could create run-off that could potentially contaminate the ground water that supplies their personal use/household wells. Mr. Dalton further argued the Facility manure piles would be exposed to strong winds and the rain. He argued this could lead to particulates being blown from the piles which would further reduce air quality.<sup>109</sup>

[162] The Daltons argued having manure stockpiled closer to their home will increase pests such as flies on their property and stated they were already inundated with flies.

[163] The Daltons stated that regulations for the temporary storage of manure require a setback of 100 m if being spread or 150 m if it is not able to be spread within 48 hours, from dwellings not owned by the owner of the manure. The Daltons further stated the setbacks are for temporary storage, not continuous storage. The Daltons argued that the stockpile location proposed by the Approval Holder is a permanent storage location for as long as the Facility is operational, and the storage location has erroneously been classified as temporary. They further argued that even if the manure storage location has been correctly classified, the length of storage

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<sup>107</sup> Daltons’ Witness Statement at page 4.

<sup>108</sup> Daltons’ Witness Statement at page 4.

<sup>109</sup> Daltons’ Witness Statement at page 4.

falls outside the 48 hours contemplated by the regulation, making the entire project in violation of the Manure Spreading Regulations.<sup>110</sup>

[164] The Daltons stated the Facility will store windrows of manure on the north end of the Facility's site close to their property. The Daltons argued cleaning the pens, moving the manure, storing the manure, and then moving the manure into the Facility will double the amount of manure handling and number of days they experience odour. The Daltons argued they experience odour 70 percent of the days of the year and with the Facility, they expect to experience odour every day.<sup>111</sup>

[165] The Daltons argued the proposed odour mitigation equipment, technology, and buildings are inadequate to mitigate the odour from the Facility. The Daltons stated it was their understanding that the cheapest options were implemented in the Application, and alternatives were met with excuses of being too expensive.<sup>112</sup> At the hearing, the Daltons argued the suitability of an approval should be governed by the impact to the surrounding community, adjacent landowners, and the potential environmental impacts of the Application, not the most favourable cost outcomes for the applicant.

[166] The Daltons argued the Pond will increase odour, even with aeration and solid material removal. The Daltons alleged that effluent from the Facility would be pumped through pipes into the ditches to nearby farmland, which the Daltons alleged was already oversaturated.<sup>113</sup>

[167] The Daltons expressed concern regarding the size of the Facility and whether the Approval Holder will comply with the Approval, noting the owners of the CFO struggled to comply with its NRCB authorization by not cleaning its catchment basin since reopening. At the hearing, the Daltons noted that Rimrock Cattle had almost 40 years of experience in the feedlot industry as represented on its website and was still failing to follow the rules and had received no consequence for failing to maintain the catchment basin, and that this gave the Daltons little faith

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<sup>110</sup> Daltons' Witness Statement at page 4. The Board believes the Daltons were referring to the Manure Spreading Regulations (Agdex 096-5), established under AOPA.

<sup>111</sup> Daltons' Witness Statement at page 5.

<sup>112</sup> Daltons' Witness Statement at page 5.

<sup>113</sup> Daltons' Witness Statement at page 6.

in the Approval Holder's ability to properly operate the Facility. The Daltons expressed frustration in the length of time it took for the problem to be identified and the lack of consequences for the CFO. The Daltons argued the CFO owner was a large organization with several feedlots in Canada and the United States, and being familiar with the rules and regulations would know there is likely no consequences for non-compliance.<sup>114</sup>

[168] The Daltons provided another example of why they had little confidence in the Approval Holder maintaining the Facility, by stating that rather than fixing its wind fencing, the CFO used old straw bales as fencing which are now rotting and falling apart. The Daltons asked how they could be confident in a company to operate and maintain an industrial gas facility when that company could not maintain its catchment basin or wind fencing?<sup>115</sup>

[169] The Daltons argued the Facility is incompatible with the surrounding rural landscape. The Daltons stated the Facility is an industrial gas capturing facility with massive silos and flare stacks. They argued that although the Facility is not a wind turbine or solar project as regulated by Pristine Landscape Restriction Zones, their rural views are pristine, and consideration should be given to those views when approving a project such as the Facility. The Daltons argued that no amount of hills or trees would hide the Facility and further argued the flares would be burning nonstop.<sup>116</sup>

[170] The Daltons further commented that the Facility will require security lighting and other high intensity lighting to ensure the Facility has adequate lighting for the safety of its employees, including lighting for the large heavy equipment that move through the Facility and move the manure from stockpiles to the digesters.<sup>117</sup>

[171] The Daltons commented that the Facility was an industrial project being constructed on agricultural land. The Daltons argued the Facility should be relocated to the nearby Highway 2A Industrial Corridor located south of the Town, where they argued there is an Industrial/Commercial Zone suitable for the project. The Daltons alleged that instead sound

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<sup>114</sup> Daltons' Witness Statement at page 2 and page 3.

<sup>115</sup> Daltons' Witness Statement at page 2.

<sup>116</sup> Daltons' Witness Statement at page 3.

<sup>117</sup> Daltons' Witness Statement at page 3.

decision-making and locating the Facility away from residences in the Highway 2A Industrial Corridor, the Facility was located in an area of convenience, where the CFO could lease or sell land to the Facility and maximize money within the CFO.<sup>118</sup>

[172] The Daltons argued the energy being produced by the Facility is being sent to British Columbia and will not benefit local residents.<sup>119</sup>

[173] The Daltons stated there is no H<sub>2</sub>S presently on their property and they felt their property should remain free of H<sub>2</sub>S, especially given the potential effects H<sub>2</sub>S has on health.<sup>120</sup> The Daltons restated this at the hearing.

[174] The Dalton's stated Alberta is climbing out of a drought, the effects of which are especially felt in southern Alberta. The Dalton's further stated the Facility will require 330,000 m<sup>3</sup> of water from the Highwood River, impacting their community and others down river. The Dalton's argued this water will be lost to the community once consumed by the Facility.<sup>121</sup>

[175] At the hearing, the Daltons argued the amount of water being used by the Facility will result in farmers being unable to water their crops or their animals, and that the Facility would render the water they use unfit for human consumption. The Daltons further argued that the water used by the Facility will be lost forever, unlike the Cargill beef processing facility that treats the water it uses and then returns the treated water to Frank Lake.

[176] The Daltons expressed concern regarding the proximity of the Pond to the Highwood River, their home, and water/service well. They stated they had concerns regarding overland flooding and groundwater contamination. The Daltons argued that if there was a significant rainfall event the Approval requirements in place for the Pond may not prevent contaminants from eventually reaching the Highwood River or the nearby farmland, or leaching into the underground aquifer.<sup>122</sup>

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<sup>118</sup> Daltons' Witness Statement at page 3.

<sup>119</sup> Daltons' Witness Statement at page 3 and page 4.

<sup>120</sup> Daltons' Witness Statement at page 6.

<sup>121</sup> Daltons' Witness Statement at page 7.

<sup>122</sup> Daltons' Witness Statement at page 6.

[177] The Daltons expressed concern with the Pond becoming a breeding ground for mosquitos and other insects which may become carriers for disease.

[178] The Daltons stated they expected to hear constant noise from the gas-powered engine located at the Facility, and argued this noise would be unacceptable as it was not currently present. The Daltons argued this noise would be in addition to the noise from the truck traffic and CFO activities. They stated they also expected to hear bird bangers to prevent birds and waterfowl from landing or nesting on the Pond. The Daltons further stated that when the Pond needs to be emptied twice a year, they expected an increase in odours, noise from the pumps, and traffic from trucks to haul away the Pond's contents.<sup>123</sup>

[179] The Daltons argued that during the Application's review, EPA should have realized there were critical factors that other Ministries or regulatory authorities with expertise should have reviewed, and EPA should have required their approval for that portion of the Application. The Daltons further argued that this would ensure that approvals were not being granted for aspects that EPA did not have control or authority over, such as traffic safety. The Daltons stated they were confused that EPA would approve an application likely to have consequences and effects under another department's purview.<sup>124</sup>

[180] The Daltons stated the Facility had negatively impacted their property's value and they were worried that their property would be characterized by its proximity to the Facility. The Daltons further stated they were concerned about the ability to secure loans to improve their property, given its proximity to the Facility.<sup>125</sup>

[181] The Daltons stated they have yet to see an Emergency Response Plan. They further stated they were concerned about the Town's and the County's, and surrounding fire departments'

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<sup>123</sup> Daltons' Witness Statement at page 6 and 7.

<sup>124</sup> Daltons' Witness Statement at page 7. At the hearing during the cross-examination of Ms. Zhao, EPA's Industrial Approval's Engineer, Mr. Dalton likened this approach to regulatory "hot potato," where no regulator takes jurisdiction. The Board notes that Ms. Zhao's response was to clarify that instead, the various regulator's jurisdictions were in fact complimentary, where each regulator has a "piece of the regulatory pie" and is responsible for their respective piece. This means that multiple jurisdictions can apply to a project and that each regulator examines their piece of the regulatory pie from the lens of their jurisdiction with the expectation that a proponent will follow all regulatory requirements set by each regulator.

<sup>125</sup> Daltons' Witness Statement at page 8.



abilities to respond to a gas leak, explosion, or hazardous material leak at the Facility. The Daltons expressed further concerns about their animals in the event they were required to evacuate and noted the Facility is located near a Town and farms.<sup>126</sup>

[182] The Daltons questioned who would reclaim or operate the Facility if the Approval Holder became insolvent, and stated it was inappropriate to leave these questions unanswered until six months after the Facility is operating.<sup>127</sup>

[183] At the hearing the Daltons expressed frustration with the Approval Holder's public consultation on the Facility, stating they were left with unanswered questions and half-truths. The Board heard the public consultation materials were left with the Daltons' children, and the Daltons stated no date was provided for when concerns needed to be submitted. The Daltons stated the information provided was limited and it was difficult to determine whether they were directly affected enough to submit an SOC, which they argued was unethical.<sup>128</sup>

[184] The Daltons further stated the Approval Holder had junior employees meet with residents and there was significant disparity in the information that was shared. The Daltons alleged the information provided was half-truths and misinformation to sell the Facility. The Daltons further stated information was not available when the Approval Holder was consulting with homeowners and according to the Daltons, when answers were finally received, they were not accurate.<sup>129</sup>

[185] The Daltons stated the Approval Holder held a public meeting, but it was virtual, and questions were only permitted to be submitted in advance; they further noted these questions were not answered. The Daltons further noted that the Approval Holder had changed the proposal for the Facility several times throughout the application process with little consultation with the public. The Daltons alleged the Approval Holder stalled and refused to answer questions about the Facility.

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<sup>126</sup> Daltons' Witness Statement at page 8.

<sup>127</sup> Daltons' Witness Statement at page 8 and page 9.

<sup>128</sup> See also the Daltons' Witness Statement at page 9.

<sup>129</sup> Daltons' Witness Statement at page 9. This was also restated by the Daltons at the hearing.

[186] The Daltons further noted the Approval Holder had started to grade the site for the proposed Facility prior to the Approval being issued sending dirt into the air and increasing traffic. The Daltons stated this created unease in the community because the Approval Holder appeared to demonstrate a lack of regard for process, regulations, people, or environmental care.<sup>130</sup>

[187] During cross-examination, the Board heard that Mr. Dalton had not read the AQA, that he did not believe the numbers that the Approval Holder had posted on its website regarding the 42 to 47 percent odour reduction were accurate, and that the predicted odour reduction “was just a guess to make everyone feel comfortable with this project.” Mr. Dalton acknowledged that neither the Approval Holder’s representatives nor the Application stated animal carcasses would be used at the Facility, however he added that the Application did not say that the Approval Holder could not use animal carcasses, and the Approval Holder was not precluded from changing things.

[188] With respect to the emergency flare stack, Mr. Dalton stated in cross-examination that he was advised by an engineer who spoke to them about the Facility that the emergency flare would operate if the RNG did not meet requirements for the main gas lines. He further stated that he expected the emergency flare stack to be continuously flaring, “because this gas is a dirty gas in my opinion, created from manure instead of through LNG [liquified natural gas] natural gas production facilities,” and he did not think the Facility would be able to maintain the minimum standards for natural gas required by ATCO.

#### **6.1.4. Norman Denney**

[189] Mr. Denney<sup>131</sup> stated that he lived approximately 3.5 km from the planned location of the Pond and the CFO’s pens, on the south side of the Highwood River, in the valley below the south facing feedlot and the proposed Facility. Mr. Denney stated he operates a small farm raising grass fed beef.<sup>132</sup>

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<sup>130</sup> Daltons’ Witness Statement at page 10.

<sup>131</sup> Mr. Denney filed the appeal in his name, but referred to both his wife and him in his submissions. To reduce confusion, the Board has maintained the singular reference to Mr. Denney but is cognizant that at the hearing he stated that he and his wife, Ms. Janice Denney had written the witness statement, and that it was his intention to represent both their interests.

<sup>132</sup> Mr. Denney’s Witness Statement, Schedule “E” to the Appellant/Intervenor Group’s Initial Submissions, (“Mr. Denney’s Witness Statement”) at page 1.

[190] Mr. Denney stated there were never any issues other than a farm-like smell prior to the change in ownership at the CFO. He stated the previous owners would put up signs when they were hauling manure, and they would expect odours for about a week. He noted this was different with the current CFO operations, where noxious odours heavy with ammonia emanate weekly to daily. Mr. Denney stated his wife is now on an asthma inhaler and they can no longer be outside on their property or open their windows at night.<sup>133</sup> At the hearing Mr. Denney stated he grew up on a ranch in Montana that had 2,000 head of cattle in the backyard and the smell from the CFO was not like regular manure.

[191] At the hearing Mr. Denney stated that if there is moisture, it brings the odour down into the valley, where it stays and becomes unbearable. He stated that with the prevailing winds coming from the northwest, the gases and odours from the Facility will blow right into their backyard.

[192] Mr. Denney stated they were concerned about wildlife despite the Approval Holder stating there were no issues with wildlife. Mr. Denney stated the area was a duck and goose flyway, and that they were “in disbelief that Rimrock plans on putting a 20-acre digestate pond filled with chemicals between two wetlands that are regularly used by wildlife and especially by waterfowl.”<sup>134</sup>

[193] Mr. Denney expressed concern for how the Approval Holder would manage the release of industrial wastewater, prevent odours, blue-green algae, and chemicals becoming a hazard to humans or wildlife. Mr. Denney stated that while the response to SIR No. 1 indicated no industrial wastewater would be released directly from the Project Site to receiving watercourses or waterbodies, this assurance did not appear to account for local animals accessing the Pond.<sup>135</sup>

[194] Mr. Denney stated he was not confident that treated wastewater would be safe for wildlife, the local river, or to be put on fields such as perennial grass and alfalfa. He further stated

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<sup>133</sup> Mr. Denney’s Witness Statement at page 2.

<sup>134</sup> Mr. Denney’s Witness Statement at page 2.

<sup>135</sup> Mr. Denney’s Witness Statement at page 2.

they had an additional concern regarding the smell of the treated wastewater when it is ultimately applied to land parcels.<sup>136</sup>

[195] Mr. Denny stated the Approval Holder had not shared its Emergency Response Plan with local stakeholders and many of them had questions regarding the availability of safety services in the event of a fire or explosion.

[196] Mr. Denney noted the Approval Holder did not guarantee a reduction in the odours created by the CFO.

[197] Mr. Denney expressed concern regarding flies, mosquitoes, and other pests that would be attracted to the increased odours, and he had additional concerns about the spread of insect-borne diseases such as the West Nile Virus.<sup>137</sup>

[198] Mr. Denney expressed concern regarding the lighting that would be used for the Facility site and stated the flare would be burning “24/7”. He further stated this would disrupt animal migration and sleep.<sup>138</sup>

[199] Mr. Denney stated the Town has been on water restrictions in the summer and fall for the past five years. Mr. Denney argued that given the area’s recent history of drought and water conservation, it was not appropriate to issue an approval for a project that would need additional water to produce gas to sell to homeowners in British Columbia.<sup>139</sup>

[200] Mr. Denney argued the construction and operation of the Facility would result in increased traffic from the trucking of material from Calgary. He argued this would create additional noise, safety concerns, and increased road maintenance costs to be borne by local taxpayers.<sup>140</sup>

[201] Mr. Denney argued the Facility would reduce the value of his property and home, as well as his ability to enjoy both into his retirement.<sup>141</sup>

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<sup>136</sup> Mr. Denney’s Witness Statement at page 2 and page 3.

<sup>137</sup> Mr. Denney’s Witness Statement at page 2.

<sup>138</sup> Mr. Denney’s Witness Statement at page 2.

<sup>139</sup> Mr. Denney’s Witness Statement at page 3.

<sup>140</sup> Mr. Denney’s Witness Statement at page 3.

<sup>141</sup> Mr. Denney’s Witness Statement at page 3.

[202] Mr. Denney stated that much of the public consultation that occurred did so because residents had discovered the project in the High River Times, not because the project had been posted in the Western Wheel and it was only provided to residents within a kilometer of the Project Site. He expressed the opinion that notice was given in this manner because the project was more likely to affect County residents, and this would allow the notice to go “under the radar.”<sup>142</sup> Mr. Denney argued a project of this size with the manure storage and flare stack would affect an area much larger than a kilometer. Similarly to the Daltons, Mr. Denney noted the public presentation did not answer many of the questions that were asked.

#### **6.1.5. Evidence of Mr. Urbain**

[203] Mr. Urbain reviewed the Application on behalf of the Appellant/Intervenor Group, including SIR No. 1 and SIR No. 2. At the hearing, the Board heard that Mr. Urbain is a professional environmental engineer working in Ontario, with 45 years experience in air quality, odour assessment, and odour management.

[204] Mr. Urbain stated that after his review, he had concluded there were numerous calculation errors that made the AQA unreliable, resulting in the Approval Holder significantly underestimating the impact of the Facility. Mr. Urbain further stated the Facility would have little positive influence on the current odour levels generated by the CFO. Mr. Urbain further stated that if the errors in SIR No. 2 were corrected, the results of the AQA would show very little improvement in the Facility’s emissions and no significant improvement in the probability of odour complaints.<sup>143</sup>

[205] Mr. Urbain noted the Approval Holder used H<sub>2</sub>S and NH<sub>3</sub> as the indicators of odour and impact of the Facility and observed the Approval Holder assumed addressing H<sub>2</sub>S and NH<sub>3</sub> would address the odour problem. He stated while H<sub>2</sub>S and NH<sub>3</sub> were the predominant chemicals of concern, other chemicals at lower concentrations would also have detectable odour thresholds.

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<sup>142</sup> Mr. Denney’s Witness Statement at page 4.

<sup>143</sup> Mr. Urbain’s Witness Statement, Schedule “G” to the Appellant/Intervenor Group’s Initial Submissions, (“Mr. Urbain’s Witness Statement”) at page 1.

These included: amines, methane, nitrous oxide, organic acids, aldehydes, ketones, volatile fatty acids, alcohols, mercaptans, and organic sulfides.<sup>144</sup>

[206] The Board heard that odours are a chemical soup. Mr. Urbain explained that if he were to take an air sample to be tested at a lab, the results could contain as many as a thousand chemicals.<sup>145</sup> He noted the difficulty is determining which chemicals are creating the problem and causing the odour. Mr. Urbain characterized an odour complaint as something detectable, annoying, smelly, and persistent. He further stated that it creates a loss of enjoyment in the property.

[207] The Board heard that OU are used to measure odour. Mr. Urbain explained an OU as being the threshold where a population exposed to an odour has 50 percent of the population perceiving the odour and 50 percent not perceiving the odour. He further explained the number of OU is the dilution factor of clean air to the odour or gas, that is required to bring the perception of the odour to 50/50. Mr. Urbain indicated most complaints are usually received at levels around 10 OU and above.<sup>146</sup>

[208] Mr. Urbain explained to the Board that measuring H<sub>2</sub>S and NH<sub>3</sub> was not the same as measuring odour. He explained that climate impacts odour, and while addressing H<sub>2</sub>S and NH<sub>3</sub> in Florida would work, in a colder climate like Alberta or a different climate like British Columbia, there would be different chemicals and odours.

[209] Mr. Urbain explained the proper way to measure odour was to take a sample of 25 litres of air at the source, not the property line, and bring the sample to an odour panel. The odour panel will then proceed to take the sample and provide the OU, which will be placed into a model such as AERMOD (the AMS/EPA Regulatory Model) or CALPUFF (Comprehensive Air Quality Prediction and Puff Model), to predict the odour impact of the facility and the probability of complaints. He further explained this information can be used to calculate the distribution, which can be compared against the odour complaints; he noted these should match. Mr. Urbain

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<sup>144</sup> Mr. Urbain's Witness Statement at page 1.

<sup>145</sup> See also Mr. Urbain's Witness Statement at paragraph 17.

<sup>146</sup> See also Mr. Urbain's Witness Statement at paragraph 8.

stated if they do not match it could be that the input is wrong or that there is another source in the area other than the one in which they are interested.

[210] Mr. Urbain stated that the emission factor of 3.6 grams per day per head of cattle for NH<sub>3</sub> significantly underestimates the NH<sub>3</sub> emission from the CFO pens because the facility in the reference study was using some type of odour management to achieve the emission factor of 3.6 grams per day per head of cattle such as straw and the CFO is currently not using any type of odour control.<sup>147</sup> He noted that it was his understanding that the CFO was using woodchips to provide traction and bedding for the animals. He further noted that while this may be used as a biofilter media, it would require large quantities of wood chips and would not be compatible with the biodigester project.<sup>148</sup> Mr. Urbain concluded that the study demonstrates the emission rate was grossly underestimated for the CFO because the CFO is not using odour control, and the emission rate will increase during pen scraping. At the hearing, he further noted that the study did not have a catch basin as the CFO does, and it was his opinion that the dispersion calculation represents a gross underestimation of the CFO's emissions.

[211] Mr. Urbain noted aeration will assist in preventing the generation of H<sub>2</sub>S. He stated however that it will cause air stripping of the dissolved H<sub>2</sub>S to achieve a 95 percent reduction in pond effluent. He explained this meant a 95 percent reduction in pond effluent not air emissions, as was used in the Pond emission calculation.<sup>149</sup>

[212] Mr. Urbain stated the author of the AQA is overestimating the H<sub>2</sub>S emission related to the raw manure pile. Mr. Urbain explained the Approval Holder overestimated the H<sub>2</sub>S emissions for the raw manure pile by a factor of 5.0. He noted the literature used to develop the emission rate of 45 mg H<sub>2</sub>S/kg states that 49.5 mg NH<sub>3</sub>/kg-N should be emitted but only 9.3 mg H<sub>2</sub>S/kg S for H<sub>2</sub>S.<sup>150</sup>

[213] Mr. Urbain explained this results in the H<sub>2</sub>S assessment in the AQA having a higher impact for the CFO. The Board heard that when he approached the Approval Holder with this

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<sup>147</sup> Mr. Urbain's Witness Statement at paragraph 27.

<sup>148</sup> Mr. Urbain's Witness Statement at paragraph 27.

<sup>149</sup> Mr. Urbain's Witness Statement at paragraph 28.

<sup>150</sup> Mr. Urbain's Witness Statement at paragraph 29.

information, they indicated a conservative number was used. Mr. Urbain explained while not specifically problematic for the CFO, it created a problem when the emission factor was used in the mass balance to calculate the emission factors for all the remaining processes on the Facility side as this resulted in an underestimation in all the other calculations. He further stated that based on this, the impact of the elimination of the raw manure pile by the Facility will not have as great an impact as estimated by the Approval Holder.

[214] Mr. Urbain further stated that the Approval Holder had used an inappropriate reference that was not relevant to estimate the emission factor for H<sub>2</sub>S for the manure blending and the feed tanks. Mr. Urbain stated the AQA used an emission factor of 5.5 mg/m<sup>3</sup> for H<sub>2</sub>S and multiplied that value by the amount of slurry cattle manure of 960.6 m<sup>3</sup>/day to obtain an emission factor of 0.000005 tonnes/day. Mr. Urbain noted the emission factor in the experiment in the study used was measuring the H<sub>2</sub>S concentration in mg/m<sup>3</sup> of gas not sludge, making the emission rate wrong.<sup>151</sup>

[215] The Board heard that the Approval Holder had used a gas concentration from the reference for an emission rate for a per volume of liquid. Mr. Urbain stated there was no justification for the gas calculation being used for a liquid or the math. He stated it was his opinion that it was not appropriate to replace the volume of gas with the volume of liquid sludge and therefore the emission rate was wrong. He explained this was important because in his experience, organic wastes tend to have concentrations of 1,000 ppm of H<sub>2</sub>S. He noted at those levels a person could die right away on inhalation, or there could be a “boom” if proper procedure was not followed, and facility was not designed accordingly. He explained there would not be a public release in those concentrations, but rather the odour scrubber will be overloaded.

[216] Mr. Urbain stated he had a problem with a discrepancy between the text and the drawings for the organic slurry tanks. He noted that everything is stated to be delivered in trucks to enclosed tanks which will extract the air to be treated by the odour scrubber. However, the drawings for the Facility indicate that there will be a ramp where it appears the trucks will back into and dump everything into the tanks. He noted there does not appear to be a cover on the

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<sup>151</sup> Mr. Urbain's Witness Statement at paragraph 30.



openings. He stated there would have to be a lot of air extraction to ensure there were no fugitive emissions because of the physical size of the openings.

[217] Mr. Urbain further stated that he had a problem with the emission rate of 0.03 ppm of H<sub>2</sub>S for the organic food waste. He stated it was unrealistic and did not make sense. He stated that the Approval Holder stated that the organics would have a 5-day resident time and would not have enough time to create a problem. Mr. Urbain explained he has had experience dealing with organics at 24 hours in the tank and the concentration was 1,000 ppm of H<sub>2</sub>S. He noted this overloaded the odour scrubber that was supposed to last 15 to 20 years causing it to be replaced at 3 years. He further explained that if there is an overload, there is a problem, and potentially emissions, which leads to higher concentrations in the stacks and more maintenance.

[218] Mr. Urbain stated that with respect to the digested solid emission rate, there were studies that were high and low, and the Approval Holder took the lower number. He expressed concern that the number was “cherry picked” and stated that the higher number should be used in the conservative approach. He stated that the Approval Holder assumes it will be negligible. He explained there will be an emission of NH<sub>3</sub>, because there is a loss in carbon to create methane and as soon as there is a change in the ratio there is a chance for NH<sub>3</sub> emissions. He stated the Approval Holder should get a field measurement.

[219] Mr. Urbain stated there were two problems with the NH<sub>3</sub> emission rate for the Pond. He noted the emission factor came from Table 3-2, which was for the pre-storage of feedstock prior to digestion, 0.009 kg NH<sub>3</sub>-N per kg N in feedstock. He stated the appropriate emission factor was contained in Table 3-3, the storage of non-separated digestate, 0.0266 kg NH<sub>3</sub>-N per kg N in feedstock.<sup>152</sup> At the hearing, he noted that the emission factor should be based on the separated digestate which the study referenced did not provide, and that in this case stated both he and the Approval Holder were incorrect, resulting in an underestimation in NH<sub>3</sub> emissions from Cell 1 of the Pond.

[220] The Board heard that the dewatering process will likely leave approximately 3.3 percent of the solids in the digestate liquid going into the Pond. Mr. Urbain explained that the

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<sup>152</sup> Mr. Urbain’s Witness Statement at paragraph 31.

idea of Cell 1 is to treat the wastewater entering it. He further explained there are two kinds of bugs in the Pond that need oxygen. There is one type of bug that will steal the oxygen and give it to the other bugs to do their job and generate  $H_2S$ . He explained that by aerating the Pond, those bugs die and the generation of  $H_2S$  stops. Other bugs in the Pond will digest the solids, creating a sludge that will fall to the bottom. He noted however there will still be some air stripping and  $NH_3$  emissions.

[221] Mr. Urbain stated that it can be assumed that Cell 1 will not be 100 percent efficient and there would be some carryover of sludge and solids into Cell 2 of the Pond. He noted the Approval Holder has assumed that all organic matter will be digested prior to entry into Cell 2, that there will be no algae, and that it can be emptied twice a year. Mr. Urbain stated Cell 2 does not have aeration or chemical injection to control emissions. He noted that as long as Cell 2 had a sufficient dissolved oxygen content, Cell 2 should not turn septic or generate emissions.

[222] Mr. Urbain stated given the level of local odour complaints, the AQA failed to address the most important item, the CFO's odour emission rate and the assessment of odour impacts. He argued the level of errors and unsupported statements in the Approval Holder's documents meant those documents could not be relied upon to provide an accurate environmental impact assessment of the Facility. Mr. Urbain recommended the Approval Holder be required to redo and resubmit the AQA, as well as complete a new odour assessment to adequately assess the environmental impact of the Facility.

[223] Mr. Urbain stated that in his experience regulators do not always have the expertise to assess all the specialized technologies, and that in this case EPA asked the correct questions of the Approval Holder but relied on the Approval Holder to provide the correct answers or have the quality assurances to catch mistakes. He further stated that the number of errors identified in the AQA demonstrate that EPA cannot rely on the Application.

[224] Mr. Urbain noted that the Biorem system will control the Facility's emissions and that it is used around the world. He further noted the Facility would be using activated carbon, a biofilter, bio-scrubber, and a chemical scrubber. He stated there is nothing wrong with the

technology. He stated the wet scrubber may need to be injected more often with sulphuric acid to deal with the  $\text{NH}_3$ .

[225] Mr. Urbain stated the carbons were a concern because they were not going to last three years. He stated they are supposed to take a sample of the carbon and check when they are supposed to replace them. He noted that it will take them days to enter the silos and replace the carbon filters. He explained that it was unrealistic of the Approval Holder to claim that it was going to shut the system down to change the filters because there would still be liquid in the tanks, and gas and odours being generated. He noted these were not pressure vessels and that there were going to be some fugitive emissions, and this would create impacts to neighbours.

[226] The Board heard Mr. Urbain's main concern was the adequacy of the equipment size and overloading due to input concentrations, too high a volume of odorous air, and the potential for fugitive emissions, and the potential need for the replacement of the activated carbon media after just a few months of operation. He further noted downtime during maintenance was also a concern. He stated these issues could be remedied by revising the equipment size or emission rates.

[227] The Board heard from Mr. Urbain that when a study of field measurements is done, the results are expressed as emission factors. He provided as examples, a gram of  $\text{NH}_3$  per square metre ( $\text{g/m}^2$ ) or a gram of  $\text{H}_2\text{S}$  per head of cattle. He further explained the emission rate has a function of time, and the calculation is the gram per square metre per unit of time such as second, day, or year. He stated this is the number used in the dispersion calculation and that it will indicate how many chemicals are coming out of a facility.

[228] The Board heard Mr. Urbain had concerns with the emission factors and rates that were used in the dispersion calculation. He stated he had reviewed every study which was used for the emission factors and rates to see if the study was relevant for what they were trying to do with it. He stated his review found many errors. Mr. Urbain said he did not want to attack the regulator, but it was his view that these mistakes should have been caught.

[229] Mr. Urbain stated there will be some reduction in  $\text{H}_2\text{S}$  and  $\text{NH}_3$  changes proposed to the CFO operation. He stated the reduction will be minimal and related to the manure site

storage elimination and the utilization of the digestate solid as bedding material, not the Facility. He noted that the problem was the relatively short life cycle of  $\text{H}_2\text{S}$  and  $\text{NH}_3$ , so that there would not be a big emission reduction between cleaning the pens every three months versus every six months. He further stated the current and projected operational changes at the CFO need to be defined, to assess the proposed emissions reduction program.

[230] Mr. Urbain stated that the dispersion model could not be trusted because the complaints do not match the model. He explained that  $\text{H}_2\text{S}$  smells like rotten eggs and  $\text{NH}_3$  smells like ammonia. He stated that he compared the dispersion model to the complaints. The dispersion model suggests that  $\text{H}_2\text{S}$  is the main issue ( $0.5 \text{ PPB} = 0.72 \mu\text{g}/\text{m}^3 = 1 \text{ OU}$ ) and that ammonia is not ( $0.5 \text{ PPB} = 0.72 \mu\text{g}/\text{m}^3 = 1 \text{ OU}$ ). However, the public complaints are predominantly ammonia related. He stated either there is another source, or the emission factors are wrong.

[231] Mr. Urbain noted that from an environmental perspective there is a clear link between the CFO and the Facility. He stated it was important that the public be informed and participate in Facility operations and improvements that will directly impact them. He further stated the Facility should not proceed until it is demonstrated that both facilities will reduce their odour emissions rates and environmental impacts.

[232] Mr. Urbain stated that it was unlikely that the Facility will lower odour complaints, and stated it was more likely that odour complaints would increase.

[233] Mr. Urbain recommended that the Approval be revoked or suspended and that a new application with a corrected environmental impact assessment that has been peer reviewed by an independent party qualified in digestion and air emissions be submitted.

[234] Mr. Urbain recommended that if the Approval was not revoked or suspended, that the Approval be amended to reflect the following changes:

1. a wet scrubber recirculation pump and activated carbon media vessel should be required, having redundancy to ensure that the odour management system will be operational even during maintenance events;
2. the Approval should contain a condition requiring the Approval Holder to meet an odour impact limit of 10 OU at the property fence line;

3. odour sampling by odour panels and calculation of the odour impact should be required 6 months after Facility startup;
4. as part of the odour management program the Approval Holder should be required to install a local weather station;
5. the Approval Holder's Fugitive Emission Monitoring Program should be filed with the Director six months prior to the start of Facility operations;
6. to gain public trust and acceptance, the Approval Holder should be required to post on a publicly accessible website all odour complaints and resolution within 48 hours of receipt of the complaint. As part of the posting the metrological data should also be provided;
7. measurement of dissolved oxygen in pond cells should be done daily to ensure that the ponds do not emit odorous gases.
8. the Approval Holder should be required to take steps to stop offensive odours as required under the Approval, and all such steps must be taken within two weeks of receiving the odour complaint, unless the Director grants an extension;
9. the Approval should include a mechanism to address noise complaints and, if there are repeated noise complaints, there should be a means of ensuring the Approval Holder is required to initiate a reasonable noise assessment and mitigation plan;
10. the Approval should contain conditions requiring a litter and pest control monitoring or management program; and
11. the Approval should prescribe a deadline for the Approval Holder to publish an emergency response plan, including a neighbour notification system, emergency responder process, and potential evacuation or shelter-in-place processes to be implemented in the event of an emergency such as an on-site spill, release during transportation, release of air emissions, fire, or explosion hazards.<sup>153</sup>

[235] Mr. Urbain stated he had observed that the H<sub>2</sub>S emission factor for the raw manure was significantly overestimated, but did not have a problem with the use of the emission factor.<sup>154</sup>

[236] Mr. Urbain stated that he did not agree with the Approval Holder's reply. He stated that H<sub>2</sub>S is a gas that will only be partially dissolved in the digestate water and even with small air

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<sup>153</sup> Appellant/Intervenor Group's Initial Submissions at pages 9 and 10.

<sup>154</sup> Appellant/Intervenor Group's Rebuttal Submissions, Schedule "A" Rebuttal to Appendix 5 – Rimrock Technical Reply to the Witness Statement of Jean-Yves Urbain ("Rebuttal Witness Statement of Jean-Yves Urbain") at row 2.

bubble aeration there will be some air stripping. Mr. Urbain argued Nexom's choice in language in stating that they will achieve 95 percent removal in the liquid phase by a mix of oxidation and air stripping demonstrated that the person doing the emission estimation for the Approval Holder does not understand the chemical reaction. Mr. Urbain stated that he does not disagree that the resulting emissions from the Pond will be low, just that the wording in the assessment report is wrong.<sup>155</sup>

[237] Mr. Urbain explained that the problem with the emission rate used for the manure blending and feed tanks was that the reference study fails to provide the size of the containment vessel used to calculate the milligrams of H<sub>2</sub>S generated per kg of manure. Mr. Urbain stated that 5.5 mg/m<sup>3</sup> is an air concentration and not a concentration per cubic metre of manure. Mr. Urbain continued, stating the Approval Holder used the relationship between the H<sub>2</sub>S generation and the size of the sample to calculate their emission rate, however he noted that in the AQA, Horizon Compliance had multiplied the liquid manure volume (960.6 m<sup>3</sup>/d) by the study concentration (5.5 mg/m<sup>3</sup>) to arrive at the emission factor. Mr. Urbain restated that the problem is that a cubic metre of liquid is not a cubic metre of air, and the study did not provide the information to calculate the emission rate.<sup>156</sup>

[238] Mr. Urbain stated that he agreed that the emission factor of 0.0266 is for the storage of both liquid and solid digestate, and that was an error on his part. He further noted that the emission factor of 0.0009 is also wrong because it is for the feedstock storage and not digestate storage. He concluded both parties were wrong and the AQA does not provide the information required to calculate the emission factor for the Facility. He further noted the emission factor is provided based on the nitrogen loading in the feedstock and not the digestate solid as used by the Approval Holder.<sup>157</sup>

[239] Mr. Urbain agreed the organic slurry will be delivered in enclosed tanks into an enclosed system. He stated the problem with the organic slurry was that the Approval Holder will have no control over the age of the organic waste, which can be very odorous, create more odorous

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<sup>155</sup> Rebuttal Witness Statement of Jean-Yves Urbain at row 1.

<sup>156</sup> Rebuttal Witness Statement of Jean-Yves Urbain at row 3.

<sup>157</sup> Rebuttal Witness Statement of Jean-Yves Urbain at row 4.

gases, and greatly increase the loading to the Odour Abatement System.<sup>158</sup> He stated he also has an issue with the Approval Holder's statement that 8.5 days of storage capacity will not result in elevated H<sub>2</sub>S when the Toronto Disco Road Facility only has 3 days of capacity and has measured over 1,000 ppm of H<sub>2</sub>S and over 2,000,000 OU.<sup>159</sup>

[240] Mr. Urbain stated that he appreciated the relationship and the differences between the respective regulators' jurisdictions over the CFO and the Facility. He further stated that it was good corporate social responsibility to address public, municipal, and regulators' concerns, and be proactive in addressing those concerns, noting that the CFO already recognizes that it is one of the major sources of the very high level of odour complaints.<sup>160</sup>

[241] Mr. Urbain stated he believed there is potential for a very small reduction in the overall environmental impact of both facilities, mostly by addressing the CFO's operational practices. Mr. Urbain stated that the Application is faulty and cannot be relied upon, and the only way to assess the impact is to redo the AQA with proper emission factors, preferably with real field measurements and not just literature research.<sup>161</sup>

[242] Mr. Urbain stated there is no consistent evidence of the ammonia emission rate for the digestate solid and the Approval Holder has not provided any evidence of field measurements for other facilities in Alberta. Mr. Urbain noted the City of Toronto Disco Road Facility digestate solid truck loading has very high emissions of ammonia, and the concentration is above the threshold limit value for employees, for 8-hours exposure.<sup>162</sup>

[243] Mr. Urbain stated that if there is water drainage after the dewatering process, it should be shown in the Facility's mass balance and this a sign that the screw presses are not working properly. He stated based on his experience in wastewater and food waste facilities, there should be no water drainage, but instead there would be some absorption.<sup>163</sup>

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<sup>158</sup> Rebuttal Witness Statement of Jean-Yves Urbain at row 6.

<sup>159</sup> Rebuttal Witness Statement of Jean-Yves Urbain at row 18.

<sup>160</sup> Rebuttal Witness Statement of Jean-Yves Urbain at row 7.

<sup>161</sup> Rebuttal Witness Statement of Jean-Yves Urbain at row 8.

<sup>162</sup> Rebuttal Witness Statement of Jean-Yves Urbain at row 9.

<sup>163</sup> Rebuttal Witness Statement of Jean-Yves Urbain at row 9.

[244] Mr. Urbain stated the liquid digestate will have 3.3 percent of suspended solids after the screw presses and the oxidation process in Cell 1 will generate more solids. He further stated these solids will accumulate at the bottom of Cell 2 as sludge. He agreed that Cell 1 would be able to control the dissolved oxygen levels but stated this was not the case for Cell 2, which relied on ambient air at the surface of the water. Mr. Urbain further stated that at a typical digester facility, heat exchangers are used to control the digester temperature, not the liquid digestate discharge. He stated that due to the size of Cell 2, it is likely that ice will form, regardless of the incoming liquid digestate to Cell 1 being heated.<sup>164</sup>

[245] Mr. Urbain noted that if there is little reliable data regarding the emission rate of digestate solids, field measurements at a similar facility should be taken or the higher emission rate should be used.<sup>165</sup> He stated that he did not have an issue with the Approval Holder overestimating the H<sub>2</sub>S emissions of the raw manure, but based on the dispersion calculation the surrounding population should complain about rotten eggs and not ammonia. He stated the complaints were a further indication that the modelling was incorrect.<sup>166</sup>

[246] Mr. Urbain further stated that sulphate solids are very soluble, are not removable by screw press, and will stay in the liquid digestate. He further stated the liquid digestate will have a very high demand on oxygen and a 3.3 percent solid content will trigger biological activity. He stated he agreed with both cells of the Pond being tested daily for dissolved oxygen levels.<sup>167</sup>

[247] Mr. Urbain argued that the BATEA Study should have used a weighted approach for the emission factors, which accounted for the large odour threshold difference between the H<sub>2</sub>S and NH<sub>3</sub>.<sup>168</sup>

[248] Mr. Urbain noted that the life span of the activated carbon media is based on the estimated loading provided by the Approval Holder. He stated that based on his experience, the

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<sup>164</sup> Rebuttal Witness Statement of Jean-Yves Urbain at row 11.

<sup>165</sup> Rebuttal Witness Statement of Jean-Yves Urbain at row 12.

<sup>166</sup> Rebuttal Witness Statement of Jean-Yves Urbain at row 19.

<sup>167</sup> Rebuttal Witness Statement of Jean-Yves Urbain at row 19.

<sup>168</sup> Rebuttal Witness Statement of Jean-Yves Urbain at row 13.



estimated loading is wrong, noting that Biorem had estimated a 10-year life span for carbon media at a food waste digestion facility which subsequently had to be replaced after 3 years.<sup>169</sup>

[249] Mr. Urbain stated that he does not dispute that the AAAQO has set H<sub>2</sub>S limits; he noted however, that the public will still detect the characteristic rotten egg smell of H<sub>2</sub>S at concentrations of 0.5 ppb or 0.0005 ppm.<sup>170</sup>

[250] Mr. Urbain stated that he agreed that Lethbridge contained the nearest continuous ambient air monitoring station that contains publicly available data for H<sub>2</sub>S and NH<sub>3</sub>, however Mr. Urbain noted that does not mean the data is representative of High River. Mr. Urbain stated that the Approval Holder's claim that Lethbridge is expected to have higher baseline concentration of H<sub>2</sub>S and NH<sub>3</sub> is questionable without supporting evidence, given the Approval Holder claims there are other sources of H<sub>2</sub>S and NH<sub>3</sub> in the High River region. Mr. Urbain stated that by not including regional air quality data, there is no way of determining whether the Facility is impacting regional air quality. He further noted that by using Lethbridge data, the data was missing the Cargill facility, raw manure application to lands, and raw manure storage.<sup>171</sup>

[251] Mr. Urbain further argued that it was unacceptable to argue that the AQA was prepared independent of the odour complaints received by the CFO, the NRCB, and EPA, noting that the purpose of the AQA is to predict the current or future impact of a facility.<sup>172</sup>

[252] On cross-examination, Mr. Urbain indicated that the Facility would likely meet the AAAQO for H<sub>2</sub>S, noting that this did not mean that the Facility would not smell.

## **6.2. Intervenor With Full Party Rights**

### **6.2.1. Mr. James and Ms. Estes**

[253] Mr. James and Ms. Estes stated they objected to the issuance of the Approval and requested that the Board recommend that the Minister reverse the Director's decision to issue the Approval or in the alternative, vary the Approval. The Board notes at the hearing, Ms. Estes stated

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<sup>169</sup> Rebuttal Witness Statement of Jean-Yves Urbain at row 14. See also Rebuttal Witness Statement of Jean-Yves Urbain at row 20.

<sup>170</sup> Rebuttal Witness Statement of Jean-Yves Urbain at row 15.

<sup>171</sup> Rebuttal Witness Statement of Jean-Yves Urbain at row 16.

<sup>172</sup> Rebuttal Witness Statement of Jean-Yves Urbain at row 17.

that she would not be content with amendments to the Approval and wanted the decision to issue the Approval be reversed.

[254] Mr. James and Ms. Estes stated they purchased their property in 2016. They further stated they live approximately 40 metres from the CFO's property line to their property line, and approximately 722 metres from the closest cattle pen. Mr. James and Ms. Estes stated that within two months of the change in ownership of the CFO the cattle pens were outfitted with RCC.<sup>173</sup>

[255] Mr. James and Ms. Estes stated their view of the night sky became obstructed with the lighting from the CFO and they had to put up a grain bin and park a recreational vehicle beside it to block the light. They stated that when they raised the issue of the lighting with the County, the County advised them the CFO was an agricultural operation, and the Dark Sky Bylaw did not apply. They further stated the next time they inquired about the lighting they were advised that the County was working with the CFO to shroud the lights; they noted this was two years ago and the lighting has not changed.<sup>174</sup>

[256] Mr. James and Ms. Estes stated the CFO has resulted in additional truck traffic at all hours of the night, creating safety concerns when there is speeding and failures to stop for the stop sign at the corner of Meridian Street and Coal Trail. They further stated the trucks create noise from the use of their engine retarder brakes, and there is additional noise from the scraping of the pens and from the hauling of the manure to fields for spreading.

[257] Mr. James and Ms. Estes noted the tanker truck traffic would generate traffic at the rate of 19 trucks per hour and stated the truck traffic would make it difficult to enter and exit their property safely. They stated the truck traffic posed safety considerations that are an unfair risk to them and that the Facility traffic will increase in noise and exhaust emissions, further hindering their ability to enjoy their property. Ms. Estes indicated that the truck activity disrupts her ability to work with her horses.<sup>175</sup> At the hearing Ms. Estes stated that the noise from the traffic either spooked the horses when riding or they just end up smelling exhaust.

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<sup>173</sup> Mr. James and Ms. Estes' Witness Statement, Schedule D to the Appellant/Intervenor Group's Initial Submissions, (the "Mr. James and Ms. Estes' Witness Statement") at page 1.

<sup>174</sup> Mr. James and Ms. Estes' Witness Statement at page 1.

<sup>175</sup> Mr. James and Ms. Estes' Witness Statement at page 1 and page 2.

[258] Mr. James and Ms. Estes stated the odours generated by the CFO have been horrendous and the flies have made being outside unbearable. They stated the flies have required expensive traps and expensive repellents for their horses. They further stated that while there has been suggestion of other sources for the odours, none were offensive before the ownership of the CFO changed.<sup>176</sup>

[259] At the hearing, Ms. Estes described the odours as being strongly ammonia based, headache causing, eye burning, with the tiniest bit of animal decay. She stated that prior to the CFO, they did not smell the odours. She also noted that she had raised calves, and their odours were nothing like the CFO.

[260] Mr. James and Ms. Estes stated they were concerned about the noise level the Facility would generate, noting that it would be approximately 40 to 45 decibels for residences close to the Facility. They argued they should not be subjected to noise that the Approval Holder compared to being equivalent to a moderate rainfall. They further stated they were concerned about the use of micro co-generation units which they argued were permitted by the AUC and not EPA, and the possible effects the micro co-generation units may have to human health and the breeding of livestock.<sup>177</sup>

[261] Mr. James and Ms. Estes stated they have significant concerns about the odours created by the Pond, stating the liquid digestate would be derived from: various slaughterhouses, paunch contents, animal carcasses and parts, entrails and blood, cooked and uncooked fish, and meat processing, dairy processing, pet food processing, various food wastes, and on-site domestic wastewater from facility washrooms. They expressed concern that the effluent would create additional odours and gases, would cause blue-green algae, and would be a breeding ground for mosquitoes. Mr. James and Ms. Estes stated it was of particular concern to them given the 18 confirmed cases of West Nile Virus in Alberta in 2023 in horses and humans.<sup>178</sup>

[262] Mr. James and Ms. Estes expressed concerns regarding the possibility of contamination to groundwater, aquifers, and their drilled water well due to liner issues or overland

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<sup>176</sup> Mr. James and Ms. Estes' Witness Statement at page 2.

<sup>177</sup> Mr. James and Ms. Estes' Witness Statement at page 2.

<sup>178</sup> Mr. James and Ms. Estes' Witness Statement at page 3.

flooding of the Highwood River. They further stated the Approval Holder has not indicated how it intends to keep waterfowl or wildlife off the Pond.<sup>179</sup>

[263] Mr. James and Ms. Estes stated that while the Pond will be drained twice a year and transport for application to land parcels in accordance with the Digestate Directive, the Approval Holder has not given any information regarding how the offsite transportation and application will occur. They stated that it was their understanding the Approval Holder had suggested this would be done using pipelines through County ditches to fields for fertilization depending on an approval from the County. They argued this solution would create even more odours, increase the likelihood of groundwater contamination through leaks, and increase noise by high-powered pumps to transport the liquid digestate.<sup>180</sup>

[264] Mr. James and Ms. Estes further argued the continuous scraping of cattle pens with loaders and the hauling of manure to the manure receiving hoppers at the Facility will not reduce noise or odours but will increase them, as the Facility would be constructing a manure staging area to store 5,000 tonnes of manure closer to residents.<sup>181</sup>

[265] Mr. James and Ms. Estes stated they have concerns about the windrows of digestate being left to dry along Coal Trail. They stated this is not only a visual concern, but that they are also concerned about the particulates generated by the drying digestate, and the associated pollutants and health concerns.<sup>182</sup>

[266] Mr. James and Ms. Estes further stated they were concerned about the introduction of a regularly burning flare stack that would be 9 feet by 36 feet, which would be both unsightly and create emissions. They noted that according to SIR No. 2, the cumulative case of H<sub>2</sub>S and NH<sub>3</sub> emissions are predicted to exceed the AAAQO due to the existing Baseline Case. They further argued the sight of flames from the flare stack would increase anxiety among residents.<sup>183</sup>

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<sup>179</sup> Mr. James and Ms. Estes' Witness Statement at page 3.

<sup>180</sup> Mr. James and Ms. Estes' Witness Statement at page 3.

<sup>181</sup> Mr. James and Ms. Estes' Witness Statement at page 3.

<sup>182</sup> Mr. James and Ms. Estes' Witness Statement at page 4.

<sup>183</sup> Mr. James and Ms. Estes' Witness Statement at page 4.

[267] Mr. James and Ms. Estes stated it was only after SIR No. 2 that they became aware that the Facility would operate at night. They further stated they had concerns about the visual impacts of the Facility's operations at night.<sup>184</sup>

[268] At the hearing, Ms. Estes expressed concerns regarding the Facility's potential to explode or be a fire hazard. Mr. James and Ms. Estes expressed concern regarding the lack of an Emergency Response Plan. They argued it was highly unlikely that local emergency responders would be able to handle an explosion given the size of the Facility. They further argued that the Approval Holder does not appear to have considered how an explosion would impact its closest neighbours, what would happen in the event of a leak, or how an evacuation order would be implemented if need be. Mr. James and Ms. Estes argued an industrial project of this nature does not belong in a residential area so close to homes.<sup>185</sup>

[269] Mr. James and Ms. Estes stated Notice of the Application was taped to their gate on July 22, 2022. They stated they emailed the contact information supplied with the notice that day requesting a copy of the Application and over the course of several weeks, continued to contact the company requesting information regarding the Application. Mr. James and Ms. Estes stated that information was provided slowly regarding the project and that it was only in September that they found out how much water was required. They further found out that notice of the water transfer application was posted on EPA's Digital Regulatory Assurance System Website under the name of the Approval Holder, but was posted for one day in the High River Times in the name of Korova Feeders Ltd. Mr. James and Ms. Estes stated they asked for a copy of the Application one final time on October 13, 2022, and were told they could not have a copy of the Application unless they signed a non-disclosure agreement. They stated they finally received a copy of the Application on October 14, 2022, through a neighbour.<sup>186</sup>

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<sup>184</sup> Mr. James and Ms. Estes' Witness Statement at page 4.

<sup>185</sup> Mr. James and Ms. Estes' Witness Statement at page 4.

<sup>186</sup> Mr. James and Ms. Estes' Witness Statement at page 5 though page 7.

[270] Mr. James and Ms. Estes stated the Approval Holder declined an open public meeting and would only meet with one or two households at a time, and stated the only public meeting held did not answer the questions that were asked.<sup>187</sup>

**6.2.2. Town of High River**

[271] The Town sought to have the Approval varied in the following ways:

1. for the Pond to be covered or the liquid digestate fully contained in tanks to reduce odours; and
2. for there to be a requirement that the AER regulate the Facility.

The Town asked that in the alternative, if the Approval could not be varied to incorporate the requested conditions, the Board recommend that the decision to issue the Approval be reversed.<sup>188</sup>

[272] The Town further argued that the Facility is a fuel-producing facility producing combustible methane gas, which should be subject to the same oversight as a petroleum and natural gas plant which are subject to the oversight of the AER.<sup>189</sup>

[273] The Town stated that the Town and its residents were concerned that the Facility would increase the odours emanating from the CFO. The Town noted the Application indicated that the current baseline showed that the Project Site was already in exceedance of the limits set for H<sub>2</sub>S and NH<sub>3</sub> by the AAAQO, and that the AAAQO were "... developed to protect human health and the environment and to address the concerns of Albertans."<sup>190</sup> The Town argued the Facility must reduce odours as much as possible as the existing odours already exceed the AAAQO.

[274] At the hearing, the Board heard from the Town's Mayor, Mr. Craig Snodgrass, ("Mayor Snodgrass") that he was familiar with feedlot operations, having previously worked for Western Feedlots and Diamond V Feeders several years prior. He also indicated that he had toured the CFO after the change in ownership. He noted the new owners had made operational changes included installing RCC in the pens.

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<sup>187</sup> Mr. James and Ms. Estes' Witness Statement at page 7.

<sup>188</sup> Town's Response Submissions at paragraph 3 through paragraph 5.

<sup>189</sup> Town's Response Submissions at paragraph 19.

<sup>190</sup> Town's Response Submissions at paragraph 10, citing the AAAQO, Director's Record at page 284.

[275] Mayor Snodgrass stated the Town was not formally consulted on the Facility, remarking the only correspondence received in relation to the CFO was a letter seeking support for something called the “new production system” related to the CFO in 2020. On cross-examination, he acknowledged the email had also referenced a biodigester facility.<sup>191</sup>

[276] Mayor Snodgrass stated that there was an increase in ammonia odour after the installation of the RCC that he would attribute to the concrete, and that there had always been an odour from the spreading of manure on the fields, regardless of the CFO’s owner.

[277] Mayor Snodgrass stated there were no other sources of odour in the Town other than the CFO, and that he was familiar with the complaints about the CFO. He indicated the residents of the Town had become well versed in the process of filing a complaint to the NRCB and would approach him, or Town Councillor, Michael Nychyck (“Councillor Nychyck”), other councillors, the Town’s legislative services department, the Town’s Chief Administrative Officer, and many times, will copy the Town on complaints filed with the NRCB. He further stated that they will also get telephone calls and private emails that are not submitted to the NRCB. The Board heard they will be approached at the grocery store and that they “hear it from all angles.” Mayor Snodgrass observed that they also experience the odours themselves, and he observed that “if you live here, you will experience it.”

[278] Councillor Nychyck, who stated he lives approximately 5 km east of the CFO, described the odour from the CFO as “rank.” Councillor Nychyck further stated that he was aware that perceptions of odour vary, and the Town has heard about the odour to varying degrees. Councillor Nychyck indicated there were other sources of odour in the Town such as a former cookie factory and a distillery, but not comparable to a feedlot. He further indicated that when the winds blow in from Cargill, there are occasionally odours, but the Town’s residents believed the primary source of odours was the CFO.

[279] Councillor Nychyck further stated that there have been a few other limited odour complaints, related to the cookie factor and a distillery, and to the Town’s lift stations related to

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<sup>191</sup> See Exhibit 3 to the hearing, the email from Ms. Kendra Donnelly to Mr. Craig Snodgrass dated August 25, 2020, subject line: Support letter; and Letter titled “Proposed wording for letter of support – EOI – High River” provided by Mr. Burden by email on January 28, 2025.

the Town's waste treatment services. He noted however that of the thousands of complaints received, they have predominantly been related to the CFO.

[280] On cross-examination, Mayor Snodgrass acknowledged that the Town's waste treatment lift station impacted others "now and then on a very minute level." He further stated that he did not believe Dr. Piorkowski's evidence that the Town's sewage treatment lagoons were one of the regional sources of odours. He stated those facilities are approximately 3 km north of the Town, are small, do not smell, and that they never get complaints.

[281] The Board heard that the NRCB had previously come to High River's Town Council to explain their odour studies and to High River to perform odour monitoring, because of the complaints. He noted the NRCB has been very transparent with respect to its odour monitoring. He added that the NRCB had not taken direct action with respect to the odours until recently, with the Compliance Directive requiring the CFO to clean up its catch basins.

[282] At the hearing, the Town stated the Town had grave concerns with the Facility's proposed use of an 8-ha liquid digestate pond to store manure by-products, given the CFO has approximately 6.7 ha of catch basins which have been causing odours.

[283] The Board heard that it was Mayor Snodgrass' understanding that the Facility would have a digestate pond made up of two smaller ponds, that the Pond would be between 12 and 24 acres, it would contain the liquid digestate as a by-product of the biodigestion process, and the Pond will be uncovered. Councillor Nychyck stated that the Pond would be exposed to the elements like the catch basins at the CFO.

[284] Councillor Nychyck stated that he had noted that the Compliance Directive speaks to the catch basins at the CFO having the approximate surface size of 6,060 to 7,000 m<sup>2</sup>, whereas the NRCB believed the CFO should have catch basin more in the size of 2,100 or 2,200 m<sup>2</sup>. He reasoned that if the surface area of the catch basin is large and promoting some sort of smell, a large open pond at the Facility will also likely be the same experience and situation. He further stated that the only other biodigester he was aware of was in Lethbridge, and the digestate was self-contained, with the liquid digestate stored in tanks.



[285] Mayor Snodgrass stated that he had toured the Lethbridge facility, was aware that the liquid digestate was stored in tanks, trucked out to local farms, and from there stored in containment ponds directly on the farms to be pumped into the fields. He stated those ponds were small compared to what the Facility would construct.

[286] Mr. Snodgrass indicated that he understood that two options had been examined for the liquid digestate, covering the Pond or storing the liquid digestate in tanks. The Town submitted that the Application confirms these options were explored and deemed possible to implement but were “evaluated and deemed economically unviable.”<sup>192</sup> Councillor Nychyck indicated that it was his understanding that it would help with the odours to cover the Pond but noted that there would airflow dynamics involved including air makeup systems.

[287] At the hearing, the Town noted the Approval Holder’s BATEA Study had determined a covered digestate pond resulted in an 8.2 percent Project Case reduction in NH<sub>3</sub> emissions with an increased capital cost of 23 percent, compared to a 2 percent increase in capital costs for an uncovered pond with a 0 percent reduction in NH<sub>3</sub> emissions for mechanical aeration. The Town further noted that based on these calculations, the Approval Holder had determined that an uncovered digestate pond with mechanical aeration was the best option. The Board heard from Mayor Snodgrass that the Town gets a lot of wind from the west, and he was of the view that covering the Pond would help with the odours, as less wind going across the Pond would mean there are less odours coming into the Town.

[288] The Town argued that while it was in the Approval Holder’s best interests to seek to maximize its profits on the Facility, those profits were at the expense of the AAAQO, overall Project odour abatement, and the well-being of citizens of the Town and surrounding areas. The Town further argued that not covering the Pond was inconsistent with the purposes of EPEA, arguing that section 2 of EPEA does not mean that economic considerations trump environmental considerations.<sup>193</sup> The Town argued that to the extent that economic considerations are a factor under EPEA, it is to the extent that economic growth and prosperity can be achieved in an

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<sup>192</sup> Town’s Response Submissions at paragraph 10, citing Response to SIR No. 1, Table 3-1: Evaluation of Alternatives for Minimization of Odours, Director’s Record at Tab 23, page 18.

<sup>193</sup> Town’s Response Submissions at paragraph 13.

environmentally responsible manner, and to integrate environmental protection and economic decisions in the earliest stages of planning.<sup>194</sup>

[289] The Town argued the Director's decision to issue the Approval with uncovered liquid digestate was not appropriate, as it permitted the Approval Holder's economic interests to trump the protection of the environment and human health. The Town further argued the decision was not appropriate because it does not allow for economic development in an environmentally responsible manner. The Town further argued that to the extent that the Approval terms and conditions allow for the liquid digestate to remain uncovered, the Approval terms and conditions are inappropriate.<sup>195</sup>

[290] On cross-examination, Mayor Snodgrass acknowledged that economics are important to projects, that the Town considers costs when building infrastructure and the Town must be practical. He qualified this by stating that a project cannot negatively affect others. He further stated in response to a question of balancing the public interest with economics that if project has negative impacts to the greater community, it should not proceed.

[291] When the Approval Holder's BATEA Study was put to Mayor Snodgrass on cross-examination, he acknowledged that according to the BATEA Study, of the three options of mechanical aeration, covering the Pond, or storing the liquid digestate in tanks all achieved roughly the same outcome and further acknowledged that the Approval Holder had chosen to proceed with mechanical aeration. However, he also indicated in redirect that most of the odour complaints

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<sup>194</sup> Town's Response Submissions at paragraph 15, citing section 2 of EPEA. Section 2 of EPEA provides in part:

- 2 The purpose of this Act is to support and promote the protection, enhancement and wise use of the environment while recognizing the following:
  - (a) the protection of the environment is essential to the integrity of ecosystems and human health and to the well-being of society;
  - (b) the need for Alberta's economic growth and prosperity in an environmentally responsible manner and the need to integrate environmental protection and economic decisions in the earliest stages of planning;
  - (c) the principle of sustainable development, which ensures that the use of resources and the environment today does not impair prospects for their use by future generations;
  - (d) the importance of preventing and mitigating the environmental impact of development and of government policies, programs and decisions;

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<sup>195</sup> Town's Response Submissions at paragraph 15 and paragraph 16.

were ammonia based, and covering the Pond would reduce the Facility's NH<sub>3</sub> emissions by 8.2 percent.

[292] The Board heard that Mayor Snodgrass expected the Facility to result in a reduction in the Cumulative Case in the H<sub>2</sub>S limits. He explained that based on his experience working with feedlots, this would be if the Facility can assist with the daily cleaning of the CFO pens and if the Facility can eliminate or drastically reduce the spreading of manure on fields. He stated that through those two activities, he could understand a reduction in odours. He indicated his response would be the same with respect to the ammonia odours, but that this was speculative.

[293] The Town stated that it was concerned about the potential legislative gaps in regulatory oversight once the Facility was operational, as the intended purpose is to create pipeline-grade methane gas to be injected into an existing ATCO distribution system. The Town argued this confirms there is an energy producing component to the project.

[294] At the hearing, the Board heard that the Town viewed the AER as having more oversight and regulatory power than either the NRCB or EPA. Mayor Snodgrass noted the Facility would be generating natural gas from the manure that the CFO is generating. He explained the Town's view was the Facility is no different than an oil and gas project as it is a facility producing gas. The Town argued that methane gas produced through biodegrading methane rather than conventional drilling operations, does not change the fact that methane is still produced and being fed into an existing pipeline system. The Town argued therefore, that the Facility should be under the regulation of the AER.<sup>196</sup>

[295] On cross-examination, Councillor Nychyck indicated that he did not think any government body had experience regulating biodigesters. When asked, Mayor Snodgrass indicated it was his understanding that EPA would regulate the Facility, and that EPA regulates the Lethbridge biodigester.

[296] Councillor Nychyck stated that it was the Town's understanding that the NRCB would have a role in the regulation of the Facility in terms of the CFO's odour, and the

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<sup>196</sup> Town's Response Submissions at paragraph 19.

feedstock/manure coming from the CFO. He further stated that he understood that the Facility was subject to an Approval issued by EPA, and that EPA had a compliance program.

[297] Mayor Snodgrass stated at the hearing that the Town's biggest concern was that this is the largest biodigester facility on a feedlot in Canada, and that it has never been tried before using feedstock of this type. He stated he was open to discussing any solution to mitigate the odour issue caused by the CFO.

[298] Mayor Snodgrass further indicated that they will never know if the Facility will work until it is built. He emphasized that while the Town is open to it, it absolutely cannot increase the odour issues from the CFO, which is why the Town asked for the liquid digestate to be contained or covered. He stated while there was no direct evidence to indicate the information provided by the Approval Holder was speculative, there also was not another facility like the one proposed.

[299] Mayor Snodgrass indicated that in asking government officials who would have "teeth" if the odour problem gets worse, he was advised that it was EPA. He stated that with the Facility being an energy producing facility, this should fall under the AER. He stated they were looking for assurances regarding how the Facility could be shut down or dealt with if there were problems. On cross-examination, he indicated that he was unaware that EPA has many of the same authorities as the AER in respect of its approvals and compliance program, and can issue enforcement orders, shut facilities down, and pursue prosecutions.

[300] Councillor Nychyck stated there was an enforcement concern if there was a problem, that each facility could blame the other, and create a question of who would ultimately have responsibility. He stated their concern was the grey area between the NRCB and EPA, and who would have authority over the manure when it is being moved to the Facility.

[301] The Town argued that oversight by the AER would provide greater certainty to the Town and other affected parties that the Facility operations would be appropriate. The Town further argued that to the extent that the Approval was granted without a requirement for AER oversight, the Approval was not appropriate.<sup>197</sup>

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<sup>197</sup> Town's Response Submissions at paragraph 20.

[302] Councillor Nychyck noted that the NRCB regulated from an agricultural perspective, and that as a gas producing facility, the AER would be most appropriate. He further indicated that the AER has responsibility from application to reclamation, and questioned what controls are in place, and how the Facility would be remediated. He highlighted that the operating conditions were a concern, and how enforcement actions would be carried out if needed. He noted that it took 4 years for the NRCB to address the odour issue, and the AER is viewed as being much more succinct and timelier.

### **6.3. Approval Holder**

[303] The Approval Holder advanced four main arguments in response to the Appellants' submissions:

1. the Appeals pertain to the Approval and the Facility, not the CFO;
2. the Approval meets all the regulatory requirements under the legislation and in particular, EPEA;
3. the Appeals are not about the CFO, the CFO's compliance history, traffic, noise, dust, or odours; and
4. the Appeals are not about coregulating the CFO and the Facility, and the Facility is not responsible for managing the odours emitted by the CFO.

[304] The Approval Holder stated the appeals are about the design, construction, operation, maintenance, decommissioning, and reclamation of the Facility under the Approval and EPEA. The Approval Holder further stated the appeals are not about the NRCB's regulation of the CFO, land spreading of digestate under AOPA, or the Legislature's decision to have EPA regulate the Facility under EPEA.<sup>198</sup>

[305] The Approval Holder argued that the Appellant/Intervenor Group's, Town's, and Intervenor's evidence about the NRCB's regulation of the CFO is technically irrelevant to the issues before the Board.<sup>199</sup>

[306] The Approval Holder explained that EPA regulates industrial activities through EPEA and the NRCB regulates the CFO and the spreading of manure under AOPA. The Approval

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<sup>198</sup> Approval Holder's Response Submissions at paragraph 29.

<sup>199</sup> Approval Holder's Response Submissions at paragraph 30.

Holder further explained that EPA, Alberta Agriculture and Irrigation, and the NRCB had entered into the Digestate MOU regarding the storage and application of digestate on agricultural land (land spreading).<sup>200</sup>

[307] The Approval Holder stated that land use zoning is a decision within the jurisdiction of the County, under the MGA. The Approval Holder argued EPA has no jurisdiction to consider land use planning.

[308] The Approval Holder noted the Digestate MOU outlines the respective roles and responsibilities of the parties to the Digestate MOU in ensuring the environmental risks associated with digestate storage and land spreading are appropriately managed. The Approval Holder stated that notably, the Digestate MOU provides that the NRCB has regulatory responsibility for the storage of digestate at confined feeding operations on agricultural land and in manure storage facilities, and for the application of digestate to arable land by any person, whenever the manure feedstock for the digestate is comprised of at least 50 percent manure by wet weight on an annual basis.<sup>201</sup>

[309] The Approval Holder stated the Digestate Directive was made in conjunction with the Digestate MOU to establish the parameters that allow digestate to be regulated as manure under AOPA. The Approval Holder noted the Digestate Directive similarly outlines the maximum content of an allowable feedstock that can be used in combination with manure, and only permits digestate produced in compliance with the Digestate MOU to be land applied as manure under AOPA, in accordance with any permit conditions issued by the NRCB.<sup>202</sup>

[310] The Approval Holder stated this means that the manure generated by the CFO is regulated by the NRCB under AOPA, the Facility is regulated by EPA, and the land spreading of the digestate is regulated by the NRCB under AOPA.<sup>203</sup>

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<sup>200</sup> Approval Holder's Response Submissions at paragraph 22 and paragraph 23.

<sup>201</sup> Approval Holder's Response Submissions at paragraph 25, citing the Digestate MOU.

<sup>202</sup> Approval Holder's Response Submissions at paragraph 26.

<sup>203</sup> Approval Holder's Response Submissions at paragraph 22 and paragraph 27.

[311] The Approval Holder stated the Facility will be located on approximately 39.82 ha of private land approximately 5.5 km west of the Town.<sup>204</sup> At the hearing, Mr. Denny Boisvert, Project Manager for the Approval Holder, stated the location was chosen because of land availability, efficient transportation of manure, solid digestate, and organic food resources in proximity to the Facility, access available through Coal Trail, proximity to the AUC distribution line, and the Fortis Alberta power lines. He further explained that the size and location of the Facility is a series of integrated components designed to work together to ensure efficient and cost-effective operations.

[312] The Board heard from Mr. Boisvert that the CFO is currently licenced by the NRCB for 35,000 beef finishers. The CFO produces 80,000 tonnes of manure annually and per AOPA guidelines, manure can only be spread on unfrozen soil, which typically occurs in the spring prior to seeding or in the fall following harvest. He further explained the AOPA regulations drive the amount of manure that can be stored and the catch basin storage that must be present at feedlots. He noted that at any given time, there could be up to half the annual amount of manure production stored at the CFO in either the pens or in stockpiles.

[313] At the hearing, Mr. Boisvert explained that the primary objective of the Facility is to capture greenhouse gases that are currently being emitted into the atmosphere from the CFO and from landfills where organics are being disposed. He stated the Facility's purpose was not to reduce odours from the CFO, and that odour reduction would only be a secondary benefit. Mr. Boisvert indicated that annually the Facility is expected to remove the equivalent of 40,000 tonnes of CO<sub>2</sub> emissions to the atmosphere.

[314] Mr. Boisvert provided an operational overview of the Facility, which supplemented the description provided in the Approval Holder's earlier written submissions.

[315] Mr. Boisvert explained the Facility was designed to account for the staging, processing, upgrading, pipeline injection, and digestate management required to process the volume of feedstock needed to generate the RNG to make the Facility economically viable. He noted that other locations such as the 2A Industrial Corridor would require trucking raw manure

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<sup>204</sup> Approval Holder's Response Submissions at paragraph 6.

along public roads, and additional handling of materials, which would increase regional odours and reduce the overall environmental benefits of the Facility. He also observed that there were numerous residents within 500 m of the Highway 2A Industrial Corridor, in addition to the Appellants and Intervenors.

[316] Mr. Boisvert explained that current manure handling practices include several steps. Manure is initially cleaned from around the feed drops and pushed to the center of pens. Pens are fully cleaned every 90 to 180 days depending on the type of cattle, time of year, and activity within the pen. He noted manure from the pens is then stockpiled on the site and stored until AOPA regulations allow for it be applied to land. He further explained this results in numerous disturbances to the manure, but with the Facility, raw manure will be harvested with similar frequency to the pushing of manure to the center of the pens, but all the steps and disturbances thereafter will be removed, reducing emissions and odours.

[317] Mr. Boisvert further explained that a large portion of organics are also being disposed of in landfills, where they decompose anaerobically and release greenhouse gases including methane,  $\text{NH}_3$ , and  $\text{H}_2\text{S}$ . He noted the County's landfill is 8.5 km north of the Facility, and it releases methane,  $\text{NH}_3$ ,  $\text{H}_2\text{S}$ , total reduced sulphur, and volatile organic compounds. He explained the Facility will not be releasing emissions from fossil fuels but will instead be capturing these gases that already exist.

[318] Mr. Boisvert continued to explain that rather than being stockpiled and spread, raw manure would be delivered to a manure receiving hopper within a fully enclosed odour-abated building. The Board heard there will be two manure receiving hoppers each sized to contain 125 tonnes of manure. Combined, the two manure receiving hoppers will provide enough storage for just over one day of operation. The overhead doors will only be open to receive manure and will otherwise remain closed. Air from the manure receiving hopper building will be directed to the Odour Abatement System.

[319] Mr. Boisvert stated that the total solids content of the raw manure received from the CFO will be between 30 and 40 percent, which means that it will contain between 60 and 70 percent water. The Board heard that to digest manure, the total solids must be reduced to



between 8 and 10 percent, which means that water will have to be used to hydrate the manure. He explained that the primary source of water will be the Highwood River, and that water will be pumped through an existing intake structure to the freshwater pond for storage, then to the blend tanks. Mr. Boisvert stated the freshwater pond has 20 to 30 days of storage depending on the moisture content of the feedstocks.

[320] Mr. Boisvert indicated that other sources of water will be liquid digestate reuse from the process. He also indicated that the Approval Holder was considering pumping water from the existing CFO catch basin, which will ensure it remains dry throughout the year as AOPA guidelines do not permit the catch basins to remain filled.<sup>205</sup>

[321] Mr. Boisvert stated that once manure is blended to the proper hydration, it will be pumped into the manure feed tanks, which will provide a continuous supply of feed to the digestors.

[322] Mr. Boisvert explained the manure staging area and enclosed manure receiving hoppers are close to the CFO to improve efficiency and reduce transport distance. He noted manure delivery would occur through an internal road via dump trucks directly into the manure receiving hoppers and the manure staging area would only be used as a temporary back-up if the manure could not be received at the manure receiving hoppers or stockpiled at the CFO. He stated the manure staging area is not anticipated to contain long term storage of manure and is therefore limited by the Approval conditions to a maximum of 5,000 tonnes. He explained that by going directly from the CFO to the manure receiving hoppers, both expenses and greenhouse gases are reduced. He commented that letting the manure dry out would defeat the purpose of the Facility.

[323] The Board heard that on the rare occasions that manure will need to be stored, the staging area has been lined with RCC and will be sloped to the clay-lined collection ditches that are directed to the Pond.

[324] In its submissions, the Approval Holder stated the feedstock for the Facility will be sourced from the CFO, transported by truck and received in the Facility's two manure receiving

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<sup>205</sup> The Board notes the Facility's use of water from the CFO's catch basins would require a separate *Water Act* application, which is not presently before the Board.

hoppers located in an enclosed manure receiving hopper building. The manure would then be augured into fully enclosed manure blend tanks where it will be hydrated and mixed. Following this, the hydrated manure would be pumped to the six anerobic digester tanks.<sup>206</sup>

[325] The Approval Holder further explained in its submissions that organic food resources will be pre-processed offsite and brought to the Facility via enclosed trucks and pumped directly into enclosed organic food resource tanks.<sup>207</sup> At the hearing, the Board heard from Mr. Boisvert that the organics will be pre-processed by a de-packer to remove impurities such as plastics and will be transported to the Facility by way of truck.

[326] Mr. Boisvert explained that only feedstock approved and described in the Digestate Directive (Appendix 3) and listed in the Application would be received. The Approval Holder noted that digestate must be produced in accordance with the Digestate Directive, contain a minimum manure content and allowable feedstocks, and be produced in compliance with the Digestate Directive can be applied to land as manure.

[327] Mr. Boisvert further explained that because the Facility will not have a thermal hydrolysis unit, in accordance with the Digestate Directive, products that may contain specified risk material, such as carcasses, entrails, or blood, cannot and will not be processed at the Facility. Regarding the delivery of the organic slurry, he further explained the trucks are expected to contain about 25 tonnes of organic slurry, resulting in about 7 trucks per day. The organics reception tanks will be fully enclosed and connected to the Odour Abatement System. He stated the tanks will be heated to prevent freezing and will be monitored to ensure temperatures will not induce digestion, which will produce methane and H<sub>2</sub>S. He further explained that each organics tank will provide approximately 8 to 9 days of storage when full.

[328] Mr. Boisvert noted organics reception will be constructed of concrete and closed with lids, will be odour abated, and include secondary containment and leak detection. He advised that the feedstock pump house will house mechanical and electrical equipment such as pumps and

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<sup>206</sup> Approval Holder's Response Submissions at paragraph 7.

<sup>207</sup> Approval Holder's Response Submissions at paragraph 7.

heat exchangers, in addition to office space and a control room. He further stated this building will also be fully enclosed and odour abated.

[329] The Board heard the Odour Abatement System will be located adjacent to the digestate separation building and will consist of a wet chemical scrubber to treat ammonia, a dry scrubber containing active carbon to treat H<sub>2</sub>S and other compounds including total reduced sulfur, volatile organic compounds, and other compounds.

[330] The Approval Holder stated the organic slurry would be pumped to the six anerobic digester tanks where, with the manure slurry, it will be converted into biogas and digestate through an anerobic digestion process. The biogas would be sent to a biogas upgrading system to be conditioned into produced biomethane and transferred to an existing off-site ATCO natural gas distribution meter station and pipeline.<sup>208</sup>

[331] The Approval Holder explained the digestate would be pumped to the digestate separation building where it would be separated through screw presses into liquid and solid fractions.<sup>209</sup> The Approval Holder further explained that digestate is the treated material resulting from the anaerobic digestion process, in which manure and organic food resources are broken down by bacteria in the absence of oxygen. The Approval Holder noted digestate consists primarily of two components:

1. solid fraction: a fibrous nutrient-rich material that can be used as cattle bedding or a soil amendment; and
2. liquid fraction: a part that is rich in nutrients, particularly nitrogen, phosphorus, and potassium which makes it valuable as a fertilizer.<sup>210</sup>

The Approval Holder noted that with the removal of liquid from the solid digestate, the opportunity for microbial activity was reduced and odour generation was reduced, in the solid digestate. Removal of the solids from the liquid digestate would also prevent the Pond from becoming anaerobic and releasing emissions.<sup>211</sup>

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<sup>208</sup> Approval Holder's Response Submissions at paragraph 7.

<sup>209</sup> Approval Holder's Response Submissions at paragraph 7.

<sup>210</sup> Approval Holder's Response Submissions at paragraph 10.

<sup>211</sup> Approval Holder's Response Submissions at paragraph 11.

[332] The Approval Holder explained that the liquid digestate is then pumped to the two-celled liquid digestate pond where it will be aerated in Cell 1, following which it will be transferred to Cell 2 for seasonal storage. The liquid digestate in Cell 2 will be pumped out twice a year and land spread on nearby agricultural crop land. The Approval Holder stated the solid digestate would be transferred to the solid digestate staging area and from there either transferred back to the CFO to be used for bedding in the pens or land spread.<sup>212</sup>

[333] The Approval Holder noted the Appellant/Intervenor Group had argued the Pond would include waste from local sources beyond the CFO leading to more severe odours, and stated that the Pond would only contain liquid digestate, stormwater run-off, and any accidental release of manure or digestate. The Approval Holder further noted Approval condition 4.4.5 prohibits the release of any other substance to the Pond, and stated the Pond would not hold any waste products. Further, the Approval Holder noted that waste products will not be stored at the Project Site, rather organic food resources feedstock will be pre-processed offsite and transferred directly into enclosed organics reception tanks.<sup>213</sup>

[334] The Approval Holder stated that according to Approval condition 4.4.1, liquid digestate must be produced from feedstock in accordance with the Digestate Directive. The Approval Holder further stated condition 4.3.3 states the Approval Holder cannot receive or store any third-party waste at the Facility and that, per condition 4.3.1, feedstocks and digestate are not considered wastes.<sup>214</sup>

[335] The Approval Holder further stated that a Nutrient Management Plan approved by the NRCB is required by the NRCB to obtain permits for digestate land spreading. The Approval Holder stated the primary purpose of the Nutrient Management Plan is to ensure the proper handling of digestate at rates that do not exceed crop requirements and to ensure there are no impacts to surface water and groundwater. The Approval Holder noted the Nutrient Management Plan contains testing and reporting requirements.<sup>215</sup>

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<sup>212</sup> Approval Holder's Response Submissions at paragraph 7.

<sup>213</sup> Approval Holder's Response Submissions at paragraph 39 and paragraph 40. See also paragraph 47.

<sup>214</sup> Approval Holder's Response Submissions at paragraph 43.

<sup>215</sup> Approval Holder's Response Submissions at paragraph 162.

[336] The Approval Holder stated the Pond was designed to mitigate the potential for blue-green algae, noting that Cell 1 would have submerged mechanical aeration to create consistent water movement and to maintain dissolved oxygen levels. The Approval Holder further stated the Pond would not be stagnant throughout the year, noting that it was designed to be drained in the spring and fall for land application.<sup>216</sup>

[337] The Approval Holder stated that it proposed to prevent the attraction of pests through a combination of Facility design, operational procedures, housekeeping and, if required, pest control measures. The Approval Holder further noted that the Director has included Approval conditions specifically intended to address concerns regarding potential vectors and pests resulting from the Facility at conditions 4.4.8 through 4.4.10.

[338] The Approval Holder stated the Facility has been designed to mitigate noise and will comply with the Foothills County Community Standards Bylaw No 45/2013 and AUC *Rule 012: Noise Control*.<sup>217</sup> The Approval Holder further noted that noise is outside the mandate of EPA, and is not directly regulated by EPEA, other than as a nuisance.<sup>218</sup>

[339] The Approval Holder noted the aesthetic concerns raised by the Appellant/Intervenor Group and the Intervenor, the disruption to scenic views, the height of the emergency flare and its potential to create a fire hazard, and the impacts of the Facility's lights.<sup>219</sup>

[340] The Approval Holder stated the tallest building is the emergency flare, at approximately 12 m above grade.<sup>220</sup> The Approval Holder stated the next tallest building is the digestate separation building, which will be approximately 9.9 m. The Approval Holder offered as a comparison, that the typical grain silo can range from 10 to 30 m in height depending on the

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<sup>216</sup> Approval Holder's Response Submissions at paragraph 45.

<sup>217</sup> The Board notes that the Approval Holder will have two micro-generation units on the Project Site. The Board notes that the AUC has regulatory authority over the micro-generation units, per the *Micro-generation Regulation*, Alta Reg 27/2008. Section 5 of the *Micro-generation Regulation* requires compliance with the rules established by the Commission.

<sup>218</sup> Approval Holder's Response Submissions at paragraph 50.

<sup>219</sup> Approval Holder's Response Submissions at paragraph 52.

<sup>220</sup> Approval Holder's Response Submissions at paragraph 55.

type.<sup>221</sup> The Approval Holder noted the feed mill at the CFO contains silos that are approximately 15 to 18 m tall, with the leg above the silos adding an addition 12 m in height.<sup>222</sup>

[341] The Approval Holder stated the flare stack will be designed to applicable codes and standards used within Alberta, including:

- *CSA/ANSI B149.6 Code for Digester Gas, Landfill Gas and Biogas Generation and Utilization* jointly published by Canadian Standards Association and the American National Standards Institute;
- American Petroleum Institute (API) 521, and
- the intent of Alberta Energy Regulator Directive 60.

The Approval Holder stated the flare stack will meet or exceed all code requirements.<sup>223</sup> At the hearing, Mr. Boisvert stated that during commissioning of the Facility or in the event of an operational upset, the biogas would be directed to the emergency flare stack where it would be combusted. Mr. Boisvert noted however that flaring was not expected to occur frequently once the Facility was operational.

[342] The Approval Holder noted that the standards used to design the Facility contain design requirements to ensure the Facility and surrounding area's safety, including the avoidance of fire hazards. These requirements include minimum separation and clearance distances, minimum flare height, maximum radiant heat at ground level, and the installation of a wind guard. The Approval Holder stated the flare stack will be operated and maintained in accordance with vendor specifications and further highlighted Approval condition 3.2.4, which requires the installation of a wind guard on the flare.<sup>224</sup>

[343] The Approval Holder stated the flare stack is a part of the pollution abatement equipment for the Facility, noting that condition 4.1.9 and 4.1.10 require the Approval Holder to ensure the combustion of all combustible gases released to the emergency flare stack and to operate the emergency flare stack in accordance with the manufacturers' operation and maintenance

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<sup>221</sup> Approval Holder's Response Submissions at paragraph 53.

<sup>222</sup> Approval Holder's Response Submissions at paragraph 55.

<sup>223</sup> Approval Holder's Response Submissions at paragraph 56.

<sup>224</sup> Approval Holder's Response Submissions at paragraph 56.

manuals. The Approval Holder noted the purpose of the emergency flare stack is to abate the release of hazardous compounds by combusting the gases instead of venting them.<sup>225</sup>

[344] Mr. Boisvert stated that separation and aeration were the main odour abatement strategies used at the Facility. He explained that the Odour Abatement System would remove 94 percent of the Facility's H<sub>2</sub>S emissions and 53 percent of the Facility's NH<sub>3</sub> emissions. Mr. Boisvert indicated the Facility represented 1.5 percent of the cumulative H<sub>2</sub>S emissions and 0.6 percent of the cumulative NH<sub>3</sub> emissions for the area, which he argued demonstrated the Facility itself was a very small regional contributor to odour.<sup>226</sup>

[345] Mr. Boisvert stated that the Odour Abatement System for the Facility operates as a forced air system directing airflow from the building intakes through the tanks and then onward towards the odour abatement unit. Mr. Boisvert explained all the buildings and tanks within the feedstock receiving area and digestate separation areas are integrated into the Odour Abatement System. He further explained that the biogas will initially be pretreated to remove NH<sub>3</sub>, H<sub>2</sub>S, and other volatile compounds. Mr. Boisvert explained separation is intended to remove the volume of solids allowed to enter the Pond and this process is expected to significantly reduce the risk of odours in the liquid digestate. He clarified that the solid digestate staging area is intended as a backup, as the solid digestate would be sent to the CFO for use as bedding.

[346] Mr. Boisvert explained that the Odour Abatement System consists of two stages, wet chemical and dry scrubbers to remove H<sub>2</sub>S and NH<sub>3</sub>, reduce sulphur compounds and volatile organic compounds. Mr. Boisvert stated that these compounds will not be released into the atmosphere from the Odour Abatement System. He indicated the remaining two components are CO<sub>2</sub> and biomethane, which are ultimately compressed and further refined into biogas.

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<sup>225</sup> Approval Holder's Response Submissions at paragraph 57.

<sup>226</sup> The Board notes that according to the BATEA Study, approximately 45 percent of the Facility's NH<sub>3</sub> emissions are associated with the manure staging area. The Board also notes the CFO stores manure within 200 to 300 yards of the manure staging area. The BATEA Study concludes that regardless of where the manure is stored, there is no net increase in NH<sub>3</sub> emissions to the regional airshed associated with the manure staging area, and that while covering the manure staging area may reduce the NH<sub>3</sub> emissions in the Project Case, in the Cumulative Case, the NH<sub>3</sub> emissions are only reduced by 0.9 percent. See the Approval Holder's Response to SIR No. 2, BATEA Study at 4.2, Director's Record at Tab 28.

[347] At the hearing, Mr. Reid Fothergill, Engineer, Obsidian Engineering Corp. (“Mr. Fothergill”), stated the Odour Abatement System was designed to allow for general maintenance and downtime without releasing any untreated odours. He explained that when required, the Approval Holder will stop receiving feedstock and will process the manure into the system and digestors, reducing the amount of active organic material in the system. He further explained that once that first step has been completed, the ducting system and tanks will be sealed, confining the odorous air to the empty tanks and ducting while maintenance is being completed. Mr. Fothergill stated the Approval Holder will store critical spares on site to ensure repairs can be made in a timely manner, and once the Odour Abatement System is back online, air trapped in the ducting system and tanks will be treated before being released. On cross-examination he stated that increased concentrations would not shorten the lifespan necessarily but would increase the frequency the media would need to be changed, depending on the concentrations.

[348] Mr. Garnet Dawes, Engineer, ISL Engineering and Land Services Ltd. (“Mr. Dawes”) explained that Cell 1 of the Pond has an aeration system to ensure the Pond does not go anerobic and to minimize the emission of odours. Mr. Dawes indicated that a fine bubble diffuser will release air into the liquid digestate through weighted air pipes resting at the bottom of Cell 1, keeping that portion of the Pond aerobic.

[349] Dr. Roderick Facey, Engineer, Obsidian Engineering Corp. (“Dr. Facey”), explained the aeration would oxidize the  $H_2S$  into sulfates or elemental sulfur, reducing the potential for sulfur emissions from the Pond. The Board also heard that a certain level of oxygen content in the Pond would also prevent the development of anaerobic conditions and control algae growth within the Pond.

[350] The Board heard from Dr. Facey that Cell 1 would treat the materials in it similarly to the sewage waste lagoons in smaller rural communities across Alberta, and he likened it to those communities flushing a toilet and treating the waste going into an anaerobic pond, then a facultative cell, then a third cell, and the process is natural bacteria travelling through each cell. He explained that with the Pond, the anaerobic digestors are typical of the first pond in that sewage waste lagoon and it is also getting aeration, so it is getting two steps in one. He explained that by



the time the liquid digestate is in Cell 2, the liquid digestate will have been treated, solids will have been separated from the liquid digestate, and odours will have been mitigated to the point where additional treatment by aeration should not be required. Dr. Facey stated that Cell 2 of the Pond is a larger storage shelf designed to avoid anaerobic conditions from developing within the cell and that it would allow for aerobic bacteria to break down any residual biodegradable organic matter remaining in the liquid digestate. He further stated significantly fewer biological processes are expected to occur in Cell 2 and odours generated by this cell are expected to be limited.

[351] The Approval Holder stated that the emissions from the Facility were predicted to comply with the ground level AAAQO for H<sub>2</sub>S and NH<sub>3</sub>. Mr. Boisvert stated that covering or placing the liquid digestate into tanks would only reduce the NH<sub>3</sub> emissions emitted by the project by a further 8.2 percent, and would only reduce the cumulative H<sub>2</sub>S and NH<sub>3</sub> emissions in the region by 0.1%.<sup>227</sup> He further noted that covering the Pond would result in a 23 percent increase to the overall project cost and that placing the liquid digestate in tanks would increase the project cost by 43 percent.

[352] In response to the Appellant/Intervenor Group's comments about litter and pest control, the Approval Holder stated that the Facility will not generate litter as waste products will not be stored at the Facility. The Approval Holder noted section 4.3 of the Approval includes specific requirements for Facility waste management and condition 4.4.8 through condition 4.4.10 specifically address vectors and pests. The Approval Holder further stated that an inspection and housekeeping program will be implemented at the Facility.<sup>228</sup>

[353] The Approval Holder further stated that berms will be placed and maintained along both the west and north sides of the Facility. The Approval Holder noted the berms, which are used to properly store salvaged soil for reclamation purposes, will be strategically placed at these locations to improve aesthetics, blend into the natural environment, and reduce Facility visibility from neighboring residents. The Approval Holder further stated trees will be planted along the

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<sup>227</sup> Approval Holder's Response to SIR No. 2, BATEA Study at Table 4.2, Director's Record at Tab 28.

<sup>228</sup> Approval Holder's Response Submissions at paragraph 58 and paragraph 109.

berms as an additional aesthetic measure.<sup>229</sup> At the hearing, the Board heard from Mr. Boisvert that the trees would also serve as a wind break.

[354] The Approval Holder stated the Facility has been designed such that its lighting will comply with the Dark Sky Bylaw.<sup>230</sup>

[355] The Approval Holder stated particulate emissions from manure and digestate storage piles is not anticipated to be an issue due to low dust content. The Approval Holder explained that in the process of separating the liquid and solid digestate, the finer digestate particulate matter that could turn to dust remains in the liquid digestate. Consequently, the dewatered digestate tends to have large particles not prone to dust formation. The Approval Holder further explained that the dewatered digestate also tends to form a crust when exposed to air, which mitigates dust formation and, in the winter, it is anticipated the solid digestate will be partially frozen.<sup>231</sup>

[356] The Approval Holder stated the manure staging area is intended as a contingency only. The Approval Holder stated that manure trucks from the CFO are intended to dump directly into the manure hoppers to avoid double handling. The Approval Holder stated the maximum volume of staged digestate will only occur during limited periods of time throughout the year and the solid digestate staging area will also be completely emptied each spring and fall. Both areas will be routinely inspected.<sup>232</sup>

[357] The Approval Holder stated that Approval Conditions 4.1.11 and 4.1.12 require the Approval Holder to control fugitive emissions and to prevent the release of any substance that may cause impairment, degradation, or alteration of the quality of natural resources, material discomfort, harm, or adverse effect to the well-being of a person or harm to a property, or vegetative or animal life.<sup>233</sup>

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<sup>229</sup> Approval Holder's Response Submissions at paragraph 59.

<sup>230</sup> Approval Holder's Response Submissions at paragraph 60.

<sup>231</sup> Approval Holder's Response Submissions at paragraph 62 and paragraph 63.

<sup>232</sup> Approval Holder's Response Submissions at paragraph 64.

<sup>233</sup> Approval Holder's Response Submissions at paragraph 66.

[358] The Approval Holder stated the solid digestate staging area and the manure staging area have been designed to mitigate potential groundwater impacts. The Approval Holder stated the area will be entirely underlain with an RCC pad, creating a highly impermeable structure, and further, clay-rich soils are onsite which provide additional containment material. The Approval Holder noted the area will be sloped whereby runoff is diverted to clay-lined ditches that will convey run-off to the liquid digestate pond.<sup>234</sup>

[359] The Approval Holder further stated that the liquid digestate pond is designed for the base elevation of both cells to be above the groundwater table. The Approval Holder explained the pond will be constructed with a high-density polyethylene (“HDPE”) liner. To further protect groundwater and maintain the liner’s functionality, the Approval Holder stated a layer of sand will be placed beneath the HDPE liner, acting as a buffer zone, and allowing for the passage of air and moisture. The sand will be linked to the groundwater monitoring system and will protect the HDPE liner from mechanical damage. It will also facilitate the identification of any leaks and aid in the repair process. The Approval Holder stated the subsurface of the pond will be compacted prior to placement of the liner sand and HDPE layers, which will provide an additional layer of protection. The Approval Holder noted the HDPE liner will be inspected annually.<sup>235</sup>

[360] The Approval Holder further stated that it is required by condition 3.3.2 to submit documents for the Pond construction in advance of construction, signed and stamped by a professional registered with Association of Professional Engineers and Geoscientists of Alberta (“APEGA”). The Approval Holder noted these drawings and specifications are required to include specific details related to the liner per condition 3.3.5, and that summary reports of the quality assurance and control results are required to be submitted prior to operation of the Pond per condition 3.3.6.<sup>236</sup>

[361] The Approval Holder further noted that geotechnical investigations had shown that the surficial soils are clay-rich, and that hydraulic conductivity testing confirmed low permeability

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<sup>234</sup> Approval Holder’s Response Submissions at paragraph 69.

<sup>235</sup> Approval Holder’s Response Submissions at paragraph 70.

<sup>236</sup> Approval Holder’s Response Submissions at paragraph 71.

of the subsoil, which would provide a natural barrier between the surface and the groundwater.<sup>237</sup>

[362] The Approval Holder stated that per Approval condition 2.4.2, all underground tanks at the Facility would have secondary containment to capture any fluids in the event of a release.<sup>238</sup>

[363] The Approval Holder further noted that section 4.5 of the Approval requires the Approval Holder to develop and implement a comprehensive Groundwater Monitoring Program, including a detailed groundwater response plan. The groundwater response plan should specify actions to be taken if contaminants are identified through the Groundwater Monitoring Program, and the Approval Holder must file a Groundwater Monitoring Report annually.<sup>239</sup>

[364] The Approval Holder noted the groundwater flow and direction at the Facility site is from north to south, and that the Approval Holder intends to have a groundwater monitoring network which will include monitoring wells along the north, east, south, and west boundaries of the Project Site, upgradient and down gradient of the Pond, and down gradient of the feedstock receiving area, and the manure and solid digestate staging area.

[365] The Approval Holder noted the Facility is located up an escarpment, approximately 2.5 km from the Highwood River using a straight line, well outside the flood hazard protection zone. The Approval Holder stated that using EPA's 1:500-year flood elevations for the Highwood River, the high-water level in the event of a 1:500-year flood is estimated at 1,074.0 m. The Approval Holder stated the lowest point of elevation for the Project Site is 1,101.5 m above sea level and the escarpment top is 1,095 m, which is approximately 25 m higher than EPA's estimate of the 1:500-year flood elevation. The Approval Holder argued that based on the large difference in elevation between the Facility and the Highwood River, the risk of any flooding from the Highwood River reaching the Facility is considered extremely remote.<sup>240</sup>

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<sup>237</sup> Approval Holder's Response Submission at paragraph 72, citing the Approval Holder's Response to SIR No. 2, Director's Record at Tab 28, at page 33.

<sup>238</sup> Approval Holder's Response Submissions at paragraph 73.

<sup>239</sup> Approval Holder's Response Submissions at paragraph 74.

<sup>240</sup> Approval Holder's Response Submissions at paragraph 76.

[366] The Approval Holder stated the risk of flooding from the Pond is extremely remote. The Approval Holder further stated the Pond has been designed for a 1:100-year rain event occurring at the same time as the Pond being at its highest level, with impervious berms to contain the liquid digestate. The Approval Holder stated the berms will be designed by an APEGA-certified engineer to meet the appropriate code requirements, and the designs must be submitted to EPA in advance of the construction of the Pond per Approval condition 3.3.2. The Approval Holder noted Approval condition 4.4.6 requires the Approval Holder to operate the Pond at or below a maximum level of 0.6 m below the top of the Pond liner to prevent the risk of overflow.<sup>241</sup>

[367] The Approval Holder stated the water needs for the Facility will be managed under the *Water Act*, RSA 2000, c W-3 (the “*Water Act*”). The Approval Holder noted the Facility does not have a new allocation of water, but that a *Water Act* licence was transferred to the Approval Holder and the transfer involved a 10 percent holdback of the original allocation under the licence by the Province.<sup>242</sup>

[368] The Approval Holder stated that it will develop, implement, and continuously maintain an emergency response plan prior to commissioning the Facility to prevent, manage, and mitigate conditions in the unlikely event of an onsite emergency.<sup>243</sup>

[369] The Approval Holder noted an Emergency Response Plan is not required as part of the EPA approval process and would typically not be developed until the completion of the final detailed design, and a Hazard and Operability Study.<sup>244</sup>

[370] The Approval Holder stated that it has undertaken several studies in the unlikely event of a gas release or explosion. The Approval Holder stated the results of the studies indicated there will be no need to evacuate, shelter-in-place, or require any other response from residents in the event of an emergency as all risks are contained within the fence line.<sup>245</sup>

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<sup>241</sup> Approval Holder’s Response Submissions at paragraph 77.

<sup>242</sup> Approval Holder’s Response Submissions at paragraph 79.

<sup>243</sup> Approval Holder’s Response Submissions at paragraph 81.

<sup>244</sup> Approval Holder’s Response Submissions at paragraph 82.

<sup>245</sup> Approval Holder’s Response Submissions at paragraph 83.

[371] Mr. Chow, engineer with H<sub>2</sub>Safety, stated that Approval Holder had modelled for an H<sub>2</sub>S and toxic release using the ERCB H<sub>2</sub>S model, which models for leaks and full ruptures.<sup>246</sup> He further stated that the model is used to determine the emergency planning zone. Mr. Chow explained he had examined a pipeline leak scenario and an explosion scenario from the pipeline. Mr. Banner, ALARP Engineering, who prepared the Land Use Risk Assessment, stated the biggest risk is compressed fuel gas escaping the facility.

[372] The Approval Holder stated that H<sub>2</sub>Safety calculated the emergency planning zone for the Facility.<sup>247</sup> The Approval Holder explained that using the maximum H<sub>2</sub>S concentrations for the Facility, the emergency planning zone was calculated as being within the fence line. However, the regulations used as a best management practice indicate that the emergency planning zone should be calculated 10 m out from the fence line, resulting in an emergency planning zone that extends 10 m beyond the fence line.<sup>248</sup> The Approval Holder further explained that as there are no residences within 10 m of the fence line, there will be no need for residents to evacuate or shelter-in-place.

[373] The Approval Holder stated that ALARP Engineering prepared a Land Use Risk Assessment Study which modelled two types of failures of the biogas upgrading system considered worst case scenarios: H<sub>2</sub>S release and explosion.<sup>249</sup> The modelling indicated that both risks would be contained within the fence line, posing no danger to nearby residents.

[374] The Approval Holder stated that Horizon Compliance modelled the unlikely event of all six biodigesters rupturing at the same time and releasing all their gas.<sup>250</sup> The modelling used concentrations 3 to 4 times higher than what would be expected operationally, and the results were compared against Occupational Health and Safety exposure limits and the limit considered

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<sup>246</sup> The Board understands ERCB to mean the Energy Resources Conservation Board, now the Alberta Energy Regulator.

<sup>247</sup> *Rimrock Renewables Facility Emergency Planning Zone (EPZ) (H<sub>2</sub>Safety)*, Kevin Chow P. Eng., H<sub>2</sub>Safety, October 30, 2024 (the “Emergency Planning Zone Study”).

<sup>248</sup> Approval Holder’s Response Submissions at paragraph 84.

<sup>249</sup> Approval Holder’s Response Submissions at paragraph 84, citing *Land Use Risk Assessment Study*, Michael Banner M.Sc. P.Eng, ALARP Engineering Ltd., August 29, 2024 (“the Land Use Risk Assessment”).

<sup>250</sup> Approval Holder’s Response Submissions at paragraph 84, citing *Screening Risk Assessment (Horizon Compliance)*, Cody Halleran, B.Sc., EP Manager, Horizon Compliance, November 8, 2024 (the “Screening Risk Assessment”).

Immediately Dangerous to Life or Health. The Approval Holder stated that the results indicated that H<sub>2</sub>S concentrations outside the Facility would be well below both the safety and exposure limits.<sup>251</sup>

[375] The Approval Holder noted the County's emergency services personnel are professionally trained and that there are oil and gas wells, pipelines, gas plants, sewage treatment facilities, solar farms, and transportation of dangerous goods corridors within the County to which the County's fire personnel are presumably trained to respond. The Approval Holder argued the Appellant/Intervenor Group had not provided evidence that the County is incapable of responding to an incident at the Facility.<sup>252</sup>

[376] The Approval Holder stated it would maintain adequate emergency response equipment on site, and that it would consult with local fire and emergency personnel during the development of the operational emergency response plan to coordinate services and ensure there are sufficient capacities.<sup>253</sup>

[377] The Approval Holder noted the Facility will only have a small amount of hazardous materials onsite at any given time during operations, and that the Approval Holder will adhere to all regulations with respect to the management and storage of these materials and provisions for appropriate response procedures and equipment will be made in the emergency response plan.<sup>254</sup>

[378] The Approval Holder stated the Facility will be designed, constructed, inspected, and maintained in compliance with the Alberta Fire Code and other regulations, Canadian Safety Association standards, ASTM standards, and industry best practices, including all applicable safety detection and monitoring equipment.<sup>255</sup>

[379] As lightning strikes had been raised as a concern, Mr. Boisvert noted the digesters will be equipped with lightning rod protection to protect the digesters from lightning strikes and

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<sup>251</sup> Approval Holder's Response Submissions at paragraph 84.

<sup>252</sup> Approval Holder's Response Submissions at paragraph 85.

<sup>253</sup> Approval Holder's Response Submissions at paragraph 85.

<sup>254</sup> Approval Holder's Response Submissions at paragraph 88.

<sup>255</sup> Approval Holder's Response Submissions at paragraph 89.

noted the digesters will comply with National Fire Protection Association Code 780.<sup>256</sup>

[380] Mr. Boisvert restated at the hearing that an emergency response plan would be developed, and that during the development of the emergency response plan, the Approval Holder would consult with local fire and emergency services.

[381] Mr. Boisvert stated that while the exact details of staffing were not finalized, there would likely be three to four employees onsite during the day and someone onsite the remainder of the time or on call. He further explained that as a part of the facility design, remote monitoring systems would be used to allow monitoring of the facility 24-hours a day, 7 days a week. These systems would be connected to alarms and further systems that would allow for the ability to remotely change process conditions if the need arose.

[382] The Approval Holder stated that it was required to include a preliminary reclamation plan and financial security calculation with the Application. The Approval Holder noted that Approval conditions 6.1 through 6.3 require the Approval Holder to apply for an amendment to the Approval to reclaim the Facility by submitting a Decommissioning and Reclamation Plan prior to ceasing operations.<sup>257</sup>

[383] The Approval Holder stated that it had posted \$3,153,353.50 with EPA as security for the decommissioning and reclamation. The Approval Holder noted that Section 5 of the Approval requires the Approval Holder to review and revise the security amount annually and submit further security to EPA based on the revised cost estimate.<sup>258</sup>

[384] The Approval Holder acknowledged that it is legally liable for all reclamation costs and must obtain a reclamation certificate from EPA.<sup>259</sup>

[385] The Approval Holder stated that regarding public consultation, it had followed all regulatory requirements and the directions of EPA. The Approval Holder further stated that as instructed by EPA, the Approval Holder placed Public Notice of the Application in the High River

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<sup>256</sup> See NFPA 780: Standard for the Installation of Lightning Protection Systems 2023.

<sup>257</sup> Approval Holder's Response Submissions at paragraph 91 and paragraph 92.

<sup>258</sup> Approval Holder's Response Submissions at paragraph 93 and 94.

<sup>259</sup> Approval Holder's Response Submissions at paragraph 95. The Board notes the purpose of the reclamation certificate is to ensure the Project Site has been reclaimed in accordance with the terms and conditions of the Approval.



Times and hand delivered the notice to the residences within 2.0 km distance from the property lines of the Facility<sup>260</sup>

[386] The Approval Holder noted that after the Notice of Application, EPA had accepted nine Statement of Concern (“SOC”) filers. The Approval Holder stated that it had responded to all the SOC filers by email, telephone call, or in person meetings. The Approval Holder noted that its extensive consultation with SOC filers, local landowners, and residents is detailed in the consultation records submitted to EPA.<sup>261</sup>

[387] The Approval Holder stated that the consultation records reflect 30 plus in-person meetings, over 100 telephone conversations and email exchanges, 2 public information sessions, and individual written responses to nearly 500 questions and concerns about the Facility. The Approval Holder further noted that it had established a dedicated project email address as well as a project website in 2022.<sup>262</sup>

[388] The Approval Holder stated that it held two online public presentations in 2023. The Approval Holder stated one was for SOC filers and one for residents within the 2 km public notice radius. The Approval Holder stated these presentations focused on updates to the design since the filing of the Application which had been made to address feedback and potential odour concerns.<sup>263</sup>

[389] At the hearing, Mr. Boisvert explained the information session was held on January 12, 2023, and each of the 27 residences within 2.2 km of the Project Site was invited to participate, prior to the public meeting with the County on January 25, 2023. He further indicated the feedback and questions from the initial session were used to develop the presentation to address specific concerns.

[390] The Approval Holder noted that during ongoing public and stakeholder consultation, both the Approval Holder and EPA had received feedback and concerns about the potential impact of the Facility on regional odours. The Approval Holder stated these concerns

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<sup>260</sup> Approval Holder’s Response Submission at paragraph 97.

<sup>261</sup> Approval Holder’s Response Submission at paragraph 99; see also Director’s Record at Tabs 79 to 85.

<sup>262</sup> Approval Holder’s Response Submission at paragraph 100.

<sup>263</sup> Approval Holder’s Response Submission at paragraph 101.

were the primary driver for the Approval Holder materially re-designing and further optimizing the Facility, as noted in the Approval Holder's response to SIR No. 2, filed on July 17, 2023.<sup>264</sup>

[391] The Approval Holder noted these changes included:

1. the manure blend building was replaced with the feedstock receiving hopper building, fully enclosing the outdoor manure blend and digester feed tanks, and a feedstock pumphouse building. By enclosing the feedstock receiving hoppers, odours from receiving the raw manure are collected through intakes and tied into the Odour Abatement System. The headspace of the manure blend tanks, and digester feed tanks will be under negative pressure and vented to the Odour Abatement System;
2. the headspace of the organics reception tank will also be tied into the Odour Abatement System;
3. all tanks involved in the feedstock receiving and digestate separation will be enclosed, under negative pressure, and tied into the Odour Abatement System through sealed ducting;
4. the Odour Abatement System was added, which will consist of two stages, using wet chemical and dry scrubbers to remove H<sub>2</sub>S, NH<sub>3</sub>, reduced sulphur compounds, and volatile organic compounds;
5. the digestate separation building and associated digestate nurse tank and liquid digestate tank, and staging bays were moved to be co-located with the feedstock receiving area to allow the digestate nurse tank and liquid digestate tank to be tied into the Odour Abatement System. Hood vents and ducting above the screw presses will pull process air created during digestate separation into the Odour Abatement System;
6. the digestate staging area was relocated to the northeast of the Facility further away from residential receptors and directly adjacent to the CFO, where a significant portion of the digestate is proposed to be transported throughout the year;
7. the liquid digestate pond design was optimized to a two-celled pond configuration with mechanical aeration. The mechanical aeration in the polishing cell (Cell 1) will remove more than 95 percent of H<sub>2</sub>S through oxidation/stripping. Cell 2 will be used for storage of the fully stabilized liquid digestate; and
8. operational changes were made to limit the volume of manure and digestate that can be temporarily staged at the manure feedstock receiving and solid

<sup>264</sup>

Approval Holder's Response Submission at paragraph 101.

digestate staging areas.<sup>265</sup>

[392] The Approval Holder stated the changes to the Facility design in SIR No. 2 demonstrate that the public consultation process was a success and show that the Approval Holder sought out and was receptive to public and stakeholder feedback, having incorporated that feedback into the Facility design.<sup>266</sup>

[393] The Approval Holder stated the Facility design changed, but did not expand or change the footprint of the Facility. The Approval Holder further stated that detailed project updates were sent to individual SOC filers, residents within 2 km of the Facility, the County, and the Town, in January 2023, March 2023, and July 2023. The Approval Holder stated that SOC filers were also individually invited to sit down in person to discuss any questions or concerns with the Approval Holder in July 2023, but there were no responses to this offer.<sup>267</sup>

[394] The Approval Holder noted that the operations at the adjacent CFO at times result in a strong odour and that some find such odours unpleasant. The Approval Holder noted that contrary to the Appellant/Intervenor Group's assertion that the existing odour issues due to the CFO will worsen with the Facility, the AQA prepared for the Facility demonstrates that the Facility is predicted to result in a net reduction of odorous air emissions in the region compared to current conditions.<sup>268</sup>

[395] The Approval Holder also noted that EPA had included Approval conditions 4.1.1 through 4.1.39 to address concerns regarding odour at the Facility.<sup>269</sup>

[396] The Approval Holder noted that three odour abatement systems were incorporated into the Facility's design:

1. digestate separation using screw presses to separate solid and liquid fractions;

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<sup>265</sup> Approval Holder's Response Submission at paragraph 18 and paragraph 102. See also the Approval Holder's Response to SIR No. 2, Director's Record at TAB 28.

<sup>266</sup> Approval Holder's Response Submission at paragraph 103.

<sup>267</sup> Approval Holder's Response Submission at paragraph 105.

<sup>268</sup> Approval Holder's Response Submission at paragraph 36, citing the AQA, Director's Record at Tab 28.

<sup>269</sup> Approval Holder's Response Submission at paragraph 38.

2. odour abatement system consisting of two stages, that will use wet chemical and dry scrubbers to remove H<sub>2</sub>S, NH<sub>3</sub>, reduced sulphur compounds, and volatile organic compounds; and
3. mechanical aeration of Pond Cell 1 to remove H<sub>2</sub>S from the liquid through oxidization and stripping.<sup>270</sup>

[397] The Approval Holder argued the Facility is essentially a large odour abatement system, designed to capture emissions from manure at the CFO and convert them through a closed system into RNG. The Approval Holder further argued this is a net positive influence on emissions in the Cumulative Case as this will result in a significant reduction of manure stored at the CFO.<sup>271</sup>

[398] The Approval Holder argued that the Board should give little weight to the Witness Statement of Mr. Urbain. The Approval Holder argued that Mr. Urbain's Witness Statement demonstrated a lack of familiarity with the regulatory framework applicable in Alberta for the Facility.

[399] The Approval Holder stated there is no regulatory requirement under EPEA for the Approval Holder to demonstrate that it will reduce odours or emissions in the Cumulative Case.

[400] The Approval Holder noted that nevertheless, Mr. Urbain acknowledges that odours will be reduced as a result of the Facility.<sup>272</sup> The Approval Holder further noted that regardless of baseline conditions, the Facility's emissions are predicted to comply with ground-level ambient air quality for H<sub>2</sub>S and NH<sub>3</sub>, and will result in a net reduction in the overall mass emissions of H<sub>2</sub>S and NH<sub>3</sub> emissions at the adjacent CFO.<sup>273</sup>

[401] The Approval Holder stated that regulations in Alberta, including EPEA, do not include requirements for specific odour assessments, measurements, or prescribed limits. The Approval Holder noted that the AAAQO were developed under EPEA to protect human health

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<sup>270</sup> Approval Holder's Response Submissions at paragraph 8.

<sup>271</sup> Approval Holder's Response Submissions at paragraph 9.

<sup>272</sup> Approval Holder's Response Submission at 117, citing the Mr. Urbain's Witness Statement at page 17, paragraph 31.

<sup>273</sup> Approval Holder's Response Submissions at paragraph

and the environment. The Approval Holder further stated that odour is regulated as a nuisance and not as a specific contaminant subject to limits.<sup>274</sup>

[402] The Approval Holder further stated that OU, which form the basis of most of Mr. Urbain's recommendations, are not assessed or enforced as a part of Alberta's regulatory framework. The Approval Holder noted OU are based on Ontario legislation, where Mr. Urbain is licenced and OU are regulated.<sup>275</sup>

[403] The Approval Holder stated that contrary to Mr. Urbain's assertion that the Approval Holder is trying to distance itself from the CFO, the Approval Holder acknowledges the manure will be sourced from the CFO throughout the Application. The Approval Holder stated that contrary to Mr. Urbain's claims, the CFO's baseline emissions are acknowledged in the AQA and in many other places in the Director's Record.<sup>276</sup>

[404] The Approval Holder stated there is a critical regulatory separation between EPA and the NRCB, which sets out that EPA regulates industrial activities, that may not be understood. The Approval Holder stated that contrary to Mr. Urbain's suggestion, the Best Odour Management Practices Control Plan is limited to the EPEA-regulated facility and cannot include the CFO.<sup>277</sup>

[405] The Approval Holder further stated that there were no errors, omissions, or unsupported statements in the AQA as claimed by Mr. Urbain. The Approval Holder argued there was no value or need to redo the AQA for the Facility. The Approval Holder further stated the AQA demonstrates the Facility emissions will be below the AAAQO and predicts a net reduction in emissions for the Cumulative Case.<sup>278</sup>

[406] The Approval Holder noted that Mr. Urbain had stated there were a few questions that needed to be addressed before there could be a final opinion on the Facility and argued that two of the questions effectively asked the same question – whether the predictions in the AQA

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<sup>274</sup> Approval Holder's Response Submissions at paragraph 118, paragraph 124 and paragraph 129.

<sup>275</sup> Approval Holder's Response Submissions at paragraph 119.

<sup>276</sup> Approval Holder's Response Submissions at paragraph 120.

<sup>277</sup> Approval Holder's Response Submission at Appendix 5: Technical Reply to the Witness Statement of Jean-Yves Urbain ("Appendix 5"), row 7.

<sup>278</sup> Approval Holder's Response Submissions at paragraph 121 and paragraph 122.

were accurate. The Approval Holder noted another question was whether EPA had adequately assessed the environmental impact of the Facility and a further question regarding the BIOREM system. The Approval Holder stated the Director's Record demonstrated the Director had considered the environmental impact. The Approval Holder further stated the reply to Mr. Urbain's question regarding the BIOREM system demonstrates his question to be inaccurate.<sup>279</sup>

[407] The Approval Holder noted that some of Mr. Urbain's recommendations regarding the Approval Conditions are not relevant to EPEA or other regulations or are already directly addressed in the Application or Approval.<sup>280</sup>

[408] The Approval Holder stated that the emissions rates and factors used in the AQA prepared for the Facility are not wrong. The Approval Holder argued Mr. Urbain's opinion that certain emissions factors and emissions rates used in the AQA are wrong is unsubstantiated and based on his professional opinion. The Approval Holder noted that as stated in the Industrial Facility Resume, "due to a lack of published information on H<sub>2</sub>S and NH<sub>3</sub> emission rates from the area sources, such as the US EPA's AP-42 emission factors and actual monitoring results, it is challenging to determine their mass emission rates from the area sources."<sup>281</sup> The Approval Holder noted it had acknowledged this variability by selecting conservative emission rates in the AQA.<sup>282</sup>

[409] The Approval Holder noted that Mr. Urbain had stated that it was not appropriate to replace the volume of gas by the volume of liquid sludge in calculating the H<sub>2</sub>S emission rate during the feedstock slurring, and therefore the emission rate is wrong. The Approval Holder stated the experimental test in the literature used to develop the H<sub>2</sub>S gas emission rate found that 1 kilogram of manure that was slurried to a similar moisture content and hydraulic retention time produced 5.5 mg/m<sup>3</sup> of H<sub>2</sub>S. The Approval Holder stated the relationship between the sample size and H<sub>2</sub>S production from the test was used to calculate the H<sub>2</sub>S off-gas emission for the amount of

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<sup>279</sup> Approval Holder's Response Submissions at paragraph 126.

<sup>280</sup> Approval Holder's Response Submissions at paragraph 127.

<sup>281</sup> Approval Holder's Response Submission at paragraph 123, citing the Director's Record at Tab 3, page 55.

<sup>282</sup> Approval Holder's Response Submissions at paragraph 123.

manure slurry being handled by the Facility process, and the H<sub>2</sub>S off-gas value predicted in the emission model is conservative. The Approval Holder stated the emission rate was not wrong.<sup>283</sup>

[410] The Approval Holder noted that Mr. Urbain had indicated the H<sub>2</sub>S emissions for the raw manure pile were overestimated, and therefore the Facility would not have as great an impact as estimated by the Approval Holder. The Approval Holder disagreed that the raw manure H<sub>2</sub>S emission rate was overestimated. The Approval Holder noted the literature for H<sub>2</sub>S emission rates for cow manure reported multiple emission rates, depending on the incubation test, for the H<sub>2</sub>S for the anaerobic digestion of cow manure. The Approval Holder further noted the cumulative emission rates for H<sub>2</sub>S with respect to days of incubation varied significantly between tests. The Approval Holder stated the selected H<sub>2</sub>S emission rate was based on the control sample, representing the anaerobic digestion of cow manure for the expected storage time of the manure pile. The Approval Holder noted the selected H<sub>2</sub>S emission rate was deemed the most appropriate by the subject matter expert based on the review of the various scenarios in the literature.<sup>284</sup>

[411] The Approval Holder noted Mr. Urbain had stated the sulphur mass balance to calculate the remaining H<sub>2</sub>S emissions was wrong, noting the original H<sub>2</sub>S emission rate for the raw manure was used at the beginning of the sulphur mass balance. The Approval Holder further stated that Mr. Urbain had also noted that the Approval Holder had assumed there would be no conversion of sulfate to H<sub>2</sub>S after the digestion process, and stated this would be the case as long as there was air available.

[412] The Approval Holder noted that Mr. Urbain had identified two problems with the NH<sub>3</sub> emissions for the Pond. The first was that the emission factor came from Table 3-2, which was for pre-storage of feedstock prior to digestion, and that the emission factor should have come from Table 3-3, which is for the storage of digestate. The second problem Mr. Urbain identified was that the emission factor was based on the nitrogen content prior to separation, but the reference states that the nitrogen content should be in the feedstock prior to the pre-storage, making the emission factor wrong. The Approval Holder stated the emission factor for the NH<sub>3</sub> is not wrong

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<sup>283</sup> Approval Holder's Response Submission at Appendix 5, row 3.

<sup>284</sup> Approval Holder's Response Submission at Appendix 5, row 2.

and that the emission factor provided by Mr. Urbain is wrong because it is for unseparated digestate and only liquid digestate will be stored in the Pond.<sup>285</sup>

[413] The Approval Holder further noted that an extensive review of literature regarding NH<sub>3</sub> emission factors was conducted and there is variability in the available data with no evidence of a consistent effect of anaerobic digestion on NH<sub>3</sub> emissions. The Approval Holder stated that an NH<sub>3</sub> emission factor of pre-storage and digestion was representative for the Facility and consistent with the literature. The Approval Holder further noted that the Director identified this difficulty and included post-commissioning fugitive emissions assessment requirements in the Approval under conditions 4.1.11, 4.1.12, and 4.1.33 through 4.1.39.<sup>286</sup>

[414] The Approval Holder noted Mr. Urbain's comments regarding the emissions rates for the solid digestate storage piles stating that a literature review did not identify potential emission factors or rates for dewatered digestate solids. The Approval Holder stated that a literature review highlights the inconsistency in the data regarding whether anaerobic digestion increases or decreases NH<sub>3</sub> emissions under all conditions and situations.<sup>287</sup>

[415] The Approval Holder noted Mr. Urbain had suggested that a redundant wet scrubber recirculation pump and activated carbon media vessel be required as backup to ensure the Odour Abatement System is operational during planned and unplanned maintenance. The Approval Holder stated that during maintenance no untreated air will be released into the atmosphere. The Approval Holder further stated the lifespan of the carbon media is 3 years and the Approval condition 4.1.19 requires continuous monitoring of the chemical scrubber.<sup>288</sup>

[416] The Approval Holder noted Mr. Urbain recommended that the Approval Holder be required to meet an odour impact limit of 10 OU at the property fence line. The Approval Holder stated this recommendation is not relevant to the regulations in Alberta and noted that OU are not assessed or enforced as a part of the regulatory framework in Alberta. The Approval Holder noted

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<sup>285</sup> The Board notes that Mr. Urbain acknowledged this error but also maintained that the study did not support the Approval Holder's calculation and stated both parties were wrong.

<sup>286</sup> Approval Holder's Response Submission at Appendix 5, row 4.

<sup>287</sup> Approval Holder's Response Submission at Appendix 5, row 12.

<sup>288</sup> Approval Holder's Response Submissions at paragraph 128. See also Appendix 5 to the Approval Holder's Response Submissions at row 14.



odour in Alberta is regulated as a nuisance and not as a specific contaminant subject to prescribed limits. The Approval Holder further argued that existing odours and ambient air quality in the region are saturated because of existing operations and any monitoring for fence line odours would be dominated by odours from the CFO. The Approval Holder argued the fence line concentrations would provide no indication of whether the Approval Holder was in compliance with offsite odours or the AAAQO, and further noted this difficulty was considered by the Director.<sup>289</sup>

[417] The Approval Holder noted Mr. Urbain recommended odour sampling by odour panels and stated calculation of an odour impact should be required 6 months after the Facility start-up. The Approval Holder restated that OU are not a part of the Alberta regulatory framework.<sup>290</sup>

[418] The Approval Holder noted it was recommended that to gain public trust and acceptance, the Approval Holder should post on a publicly accessible website all odour complaints and resolution within 48 hours of receipt of the complaint, including meteorological data. The Approval Holder noted that Approval conditions 4.1.27 and 4.1.28 require the Approval Holder to submit and implement an Odour Complaint Management and Response Program.<sup>291</sup>

[419] The Approval Holder noted it was recommended that the Pond's cells be measured for dissolved oxygen on a daily basis to ensure the Pond does not emit odorous gases. The Approval Holder noted Cell 1 of the Pond would be aerated, and that condition 4.1.18 requires the Approval Holder to measure the dissolved oxygen levels of both Pond cells daily.<sup>292</sup>

[420] The Approval Holder noted that Mr. Urbain uses "environmental impact" and "environmental impact assessment" in his report about the hearing issues, and further noted his opinion centered solely on the AQA, among the hundreds of pages of technical and environmental information submitted to EPA as a part of the Application.<sup>293</sup>

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<sup>289</sup> Approval Holder's Response Submissions at paragraph 129.

<sup>290</sup> Approval Holder's Response Submissions at paragraph 119 and paragraph 130.

<sup>291</sup> Approval Holder's Response Submissions at paragraph 131.

<sup>292</sup> Approval Holder's Response Submissions at paragraph 132.

<sup>293</sup> Approval Holder's Response Submissions at paragraph 133.

[421] The Approval Holder disagreed with Mr. Urbain's statement that the 95 percent H<sub>2</sub>S reduction would be to the Pond effluent and not to the air emissions. In response, the Approval Holder noted the majority of the H<sub>2</sub>S would be oxidized to elemental sulphur and remain in the liquid phase, and therefore not be available to be released as an emission. The Approval Holder further stated:

"... the warm water temperature, coupled with the hydraulic retention time of the effluent within the pond is sufficient to have a majority of the H<sub>2</sub>S oxidized into sulfide, bisulfide and solid sulfur particles, which are not air strippable, reducing the amount that can be released to the atmosphere as an emission. To promote this conversion the pond micro-aeration system will be designed to maintain at all times a minimum dissolved oxygen content of 0.5 to 2.0 mg/L in the water phase."<sup>294</sup>

[422] The Approval Holder noted Mr. Urbain had indicated the aeration system in Cell 1 would cause air stripping of some of the dissolved gases such as H<sub>2</sub>S and NH<sub>3</sub> and increase the Pond's emissions. The Approval Holder responded that the micro-aeration system was specifically designed to release fine bubbles which rise more slowly and have a higher total surface area per volume of air introduced into the system, increasing overall oxygen transfer efficiency. The Approval Holder explained the micro-aeration also creates less surface turbulence, which is also expected to mitigate the release of gases.<sup>295</sup>

[423] The Approval Holder noted that Mr. Urbain commented that the Approval Holder had not addressed how the changing seasons will trigger the Pond mixing and release of accumulated odorous gases from the Pond's bottom sludge. The Approval Holder stated the changing seasons will not trigger Pond mixing for the following reasons:

1. the liquid and solid digestate will have been previously been separated;
2. the Pond micro-aeration system will be designed to maintain at all times a minimum dissolved oxygen content of 0.5 to 2.0 mg/L in the water phase to avoid the Pond going anaerobic and producing odorous compounds;
3. Approval condition 4.1.18 requires the Approval Holder to test the dissolved oxygen of both cells of the Pond;

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<sup>294</sup> Approval Holder's Response Submission at Appendix 5, row 1.

<sup>295</sup> Approval Holder's Response Submission at Appendix 5, row 10.

4. the Approval Holder has the ability through a heat exchanger to control the temperature of the liquid entering the Pond;
5. stratification of the digestate pond is limited, Cell 1 will be aerated, and Cell 2 (storage) is shallow and will be subject to wind action that will circulate and mix the contents; and
6. ice is not anticipated to form in the Pond in the winter due to the incoming warm liquid digestate and continuous operations of the Pond.<sup>296</sup>

[424] The Approval Holder noted Mr. Urbain recommended special receiving procedures to minimize potential fugitive emissions related to any potential external organic feedstocks that may be received. The Approval Holder restated that appropriate organic food resources receiving procedures are already proposed to mitigate fugitive emissions. The Approval Holder noted that in addition to being pre-processed, delivered in enclosed trucks to enclosed tanks, all tanks involving feedstock will be enclosed, under negative pressure, and connected to the Odour Abatement System.<sup>297</sup>

[425] The Approval Holder noted that Mr. Urbain had recommended a duplicate recirculation pump and dry scrubber to ensure there were no fugitive emissions when the Odour Abatement System undergoes maintenance. The Approval Holder further noted that Mr. Urbain had opined that as the Facility will always be in operation, the carbon media may only last months before needing to be changed. The Approval Holder responded that the estimated lifespan of the carbon media is 3 years.<sup>298</sup>

[426] The Approval Holder stated the Odour Abatement System is a critical system that will be subject to regular inspection and the Approval Holder will have spare parts on hand. The Approval Holder further stated that maintenance is expected to take less than 24 hours.<sup>299</sup>

[427] The Approval Holder noted that Mr. Urbain had disagreed that the solid digestate would be less odorous than the raw manure and had stated that solid digestate with 70 percent

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<sup>296</sup> Approval Holder's Response Submissions at paragraph 132. See also Approval Holder's Response Submissions at Appendix 5, at row 11.

<sup>297</sup> Approval Holder's Response Submission at Appendix 5, at row 6.

<sup>298</sup> Approval Holder's Response Submissions at Appendix 5, at row 14.

<sup>299</sup> Approval Holder's Response Submissions at Appendix 5, at row 14. See also Approval Holder's Response Submission at Appendix 5, at row 20.

water content can sustain bacteria growth. The Approval Holder stated the water content of 70 percent is for the solid digestate immediately after the screw press process and does not account for free liquid recovery and draining from the solid digestate. The Approval Holder further stated free liquid is expected to drain from the solid digestate shortly after staging and therefore the solid digestate will not support the growth of odour causing bacteria.<sup>300</sup>

[428] The Approval Holder noted the Daltons had raised several concerns including the Facility, the CFO's compliance history, aesthetics, zoning, contract with Fortis BC, odours, noise, liquid digestate pond, traffic, water usage, property values, emergency response planning, reclamation, and consultation. The Approval Holder stated the Facility is an on-farm biodigester located adjacent to the primary source of feedstock, being the CFO. The Approval Holder noted that moving the Facility closer to an industrial area will result in additional traffic on roads closer to High River for manure feedstock transportation. The Approval Holder stated that currently the manure will be transported by way of an internal private access road between the Facility and the CFO.<sup>301</sup>

[429] The Approval Holder stated the size of the Facility is driven by the size of the infrastructure required for the staging, processing, upgrading, and digestate management required to process the volume of feedstock needed to generate enough RNG to make the Facility economically viable. The Approval Holder further stated that the Approval is based on the Application, which contains a description of all the Facility structures, process areas, and staging areas. The Approval Holder noted the Approval conditions reflect the Facility design and operations.<sup>302</sup>

[430] The Approval Holder stated that traffic and noise are not within the mandate of EPA but are issues for local law enforcement and the County.<sup>303</sup>

[431] The Approval Holder stated property value is not within the mandate of EPA.<sup>304</sup>

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<sup>300</sup> Approval Holder's Response Submissions at Appendix 5, row 9.

<sup>301</sup> Approval Holder's Response Submissions at paragraph 135 and paragraph 136.

<sup>302</sup> Approval Holder's Response Submissions at paragraph 137.

<sup>303</sup> Approval Holder's Response Submissions at paragraph 138.

<sup>304</sup> Approval Holder's Response Submissions at paragraph 139.

[432] The Approval Holder stated that it does not propose to use bird bangers at the Facility. The Approval Holder noted that liquid digestate contains water and dissolved nutrients rather than hazardous chemicals or contaminants and does not present a risk to the health of birds if they land on the Pond. The Approval Holder further stated the Pond would be like catch basins or treated wastewater lagoons and would be monitored daily during operations.<sup>305</sup>

[433] In response to Mr. Denney's concerns regarding wildlife, the Approval Holder noted that detailed desktop and onsite wildlife assessments were completed by professional biologists in 2021 and 2022, prior to any site disturbance to verify the potential for wildlife and wildlife habitat within the project footprint and a surrounding 1 km buffer. The Approval Holder stated that habitat quality was deemed by the biologists to be generally low in the 1 km surrounding the Facility as the lands within the Facility footprint and surrounding area were highly modified and dominated by agricultural activities and intermittent rural residential development. The Approval Holder further stated there were no sensitive wildlife species or features were reported historically within the Facility footprint or observed during the onsite assessments.<sup>306</sup>

[434] At the hearing, Ms. Rachael Powell, EP, PMP, EXP Services Inc., stated the Approval Holder had completed environmental studies and field assessments. The Approval Holder stated a pre-disturbance wildlife and bird nesting sweep was completed prior to commencing the early earthworks activities, and stated that in accordance with provincial requirements, sweeps would be completed prior to future construction activities.<sup>307</sup>

[435] The Approval Holder stated the RNG generated by the Facility will be injected into the local ATCO gas distribution system for consumption in local markets including by the Appellant/Intervenor Group and the Intervenor. The Approval Holder stated Fortis BC has purchased the environmental attributes associated with the RNG.<sup>308</sup>

[436] The Approval Holder noted that Mr. James and Ms. Estes suggested the Approval Holder will put slaughterhouse remnants, paunch, animal carcasses, entails, blood, pulp and paper

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<sup>305</sup> Approval Holder's Response Submissions at paragraph 140.

<sup>306</sup> Approval Holder's Response Submission at paragraph 160, citing the Director's Record at Tab 14.

<sup>307</sup> Approval Holder's Response Submissions at paragraph 160.

<sup>308</sup> Approval Holder's Response Submissions at paragraph 141.

residue, and washroom wastewater into the liquid digestate pond. The Approval Holder stated this was false.<sup>309</sup>

[437] The Approval Holder noted that Mr. James and Ms. Estes had suggested that there would be as many as 19 trucks per hour. The Approval Holder stated the Traffic Impact Assessment had included 7 organic resource trucks per day, 2 in each of morning and afternoon hours, the remainder during the day. The remaining vehicles cited in the 19 a.m./p.m. peak included staff vehicles and maintenance vehicles.<sup>310</sup>

[438] The Approval Holder stated that it has access to the full acreage required to support the digestate application for the Facility. The Approval Holder stated this includes land owned by the Rimrock Cattle as well as wide a network of neighbouring properties. The Approval Holder stated liquid digestate will be transferred to land parcels and will be injected into unfrozen soil using the common agricultural practice of drag lining.<sup>311</sup>

[439] The Approval Holder stated the delivery of manure to the manure receiving hoppers and the delivery of organic food resources to the organic waste reception tanks will occur during daytime hours only. The Approval Holder stated the anaerobic activity in the Facility will continuously occur through the night and day, and the Facility will be continuously monitored either remotely or with onsite operations staff.<sup>312</sup>

[440] The Approval Holder noted the Presties had stated the Pond would be 20.7 acres. The Approval Holder stated the Pond was designed for a storage cell with a maximum depth 3 m, which results in a large surface area. The Approval Holder stated the shallow depth of the Pond will avoid stratification and will allow for wind action to circulate the contents, which will help maintain and distribute the dissolved oxygen levels required to mitigate odours.<sup>313</sup>

[441] The Approval Holder noted that contrary to the Presties' concerns regarding sludge on the bottom of the Pond, when the Pond is pumped, the digestate separation process as well as

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<sup>309</sup> Approval Holder's Response Submissions at paragraph 146.

<sup>310</sup> Approval Holder's Response Submissions at paragraph 147.

<sup>311</sup> Approval Holder's Response Submissions at paragraph 148.

<sup>312</sup> Approval Holder's Response Submissions at paragraph 149.

<sup>313</sup> Approval Holder's Response Submissions at paragraph 152.

the micro-aeration process should reduce the potential for odorous solids settling on the bottom of the Pond.<sup>314</sup>

[442] The Approval Holder stated that 100,000 tonnes of manure and 80,000 tonnes of organics are the maximum feedstock capacities. The Approval Holder stated contrary to the Presties' suggestion, it will not be trucking in an additional 20,000 tonnes of manure. The Approval Holder further stated the Facility has not been designed to handle these volumes of feedstock and instead has been designed for 80,000 tonnes of manure and 60,000 tonnes of organics. The Approval Holder stated that should the Facility's capacity increase beyond this operational capacity, additional onsite equipment would be required along with amendments to the Approval, triggering an updated traffic assessment.<sup>315</sup>

[443] The Approval Holder noted the Director was provided with design information including design drawings, process flow diagrams, and specifications in the Application. The Approval Holder noted that an Issued-for-Construction level design will be submitted to EPA prior to construction, and that this typically occurs after an approval is issued.<sup>316</sup>

[444] The Approval Holder stated the Presties are incorrect in referring to the Facility as a biogas refinery. The Approval Holder noted that as per the Application and the Approval, the Facility is defined under Schedule 1, Division 1 (c) of the *Activities Designation Regulation*, Alta Reg 276/2003, as "the construction, operation or reclamation of a facility for the collection and processing of waste or recyclables to produce fuel, where more than 10 tonnes of waste or recyclables per month are used to produce the fuel."<sup>317</sup>

[445] The Approval Holder noted that the Town had suggested that the AER should regulate the Facility, and the Pond should be covered.

[446] The Approval Holder stated the BATEA Study indicated that it was not practical or economical to cover the Pond. The Approval Holder noted the Pond is similar in size to and

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<sup>314</sup> Approval Holder's Response Submissions at paragraph 153. See also Appendix 5 to the Approval Holder's Response Submissions, at row 11.

<sup>315</sup> Approval Holder's Response Submissions at paragraph 155.

<sup>316</sup> Approval Holder's Response Submissions at paragraph 157.

<sup>317</sup> Approval Holder's Response Submissions at paragraph 158, citing the Approval.

design to municipal wastewater treatment lagoons found throughout Alberta, including the Town's own wastewater lagoons.<sup>318</sup>

[447] The Approval Holder stated the BATEA Study's odour mitigation cost benefit factor for mechanical aeration is approximately 11 times more beneficial compared to either covering the Pond or staging liquid digestate in tanks. The Approval Holder noted this was due to the large capital investment required to enclose the Pond and treat the resulting air emissions versus the predicted effectiveness of mechanical aeration and comparatively lower capital cost, compared to the predicted percentage in reduction of odours.<sup>319</sup>

[448] The Approval Holder noted the AER's jurisdiction is established in the *Responsible Energy Development Act*, SA 2012, c R-17.3 ("REDA"), and that it has been given authority to regulate an "energy resource activity," which is defined as:

- “(i) an activity that may only be carried out under an approval issued under an energy resource enactment, or
- (ii) an activity described in the regulations that is directly linked or incidental to the carrying out of an activity referred to in subclause (i).”<sup>320</sup>

[449] The Approval Holder noted energy resource enactments included: the *Coal Conservation Act*, RSA 2000, c C-17; the *Gas Resources Preservation Act*, RSA 2000, c G-4; the *Geothermal Resources Development Act*, SA 2020, c G-5.5; the *Mineral Resource Development Act*, SA 2021, c M-16.8; the *Oil and Gas Conservation Act*, RSA 2000, c O-6; the *Pipeline Act*, RSA 2000, c P-15; the *Turner Valley Unit Operations Act*, RSA 2000, c T-9; and any regulations made under these enactments.<sup>321</sup>

[450] The Approval Holder further noted that the AER does not regulate low pressure gas distribution systems and that these are regulated by the AUC.<sup>322</sup>

[451] The Approval Holder stated the CFO and Facility are not a single entity and cannot be regulated as a single entity. The Approval Holder further stated that the Board had not included

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<sup>318</sup> Approval Holder's Response Submissions at paragraph 166.

<sup>319</sup> Approval Holder's Response Submissions at paragraph 166.

<sup>320</sup> Approval Holder's Response Submission at paragraph 167, citing REDA.

<sup>321</sup> Approval Holder's Response Submissions at paragraph 168.

<sup>322</sup> Approval Holder's Response Submissions at paragraph 169.



regulation of the CFO and the Facility as a single entity by a single regulator in the hearing issues.<sup>323</sup> The Approval Holder argued that section 95(4) of EPEA<sup>324</sup> provides that where the Board determines that a matter will not be included in the hearing of an appeal, no representations on that matter may be made on the matter at the hearing. The Approval Holder further argued that the Board's Rules of Practice at Section 9 repeat and support section 95(4) of EPEA.<sup>325</sup>

[452] The Approval Holder further argued that if the Board had decided that the CFO and the Facility should be regulated as a single facility, the CFO and presumably other parties such as the Alberta Cattle Feeders' Association should have been provided the opportunity to participate in the hearing of the appeals.<sup>326</sup>

[453] During cross-examination, Mr. Boisvert indicated the Approval Holder would be open to a discussion about including a condition in the Approval requiring food waste be delivered within 24 hours and in a state is ready to be pumped into the organic slurry tanks.

[454] During cross-examination, Mr. Boisvert discussed the design of the Facility in a response to a question regarding how much feedstock would be accepted.<sup>327</sup> He indicated in response to a question regarding the amount of feedstock the Facility would accept, that the base case of was 80,000 tonnes of manure. He further indicated that a range for the acceptance of the weight of the feedstock had been provided was because of the total solids or moisture content of the manure or organics depending on freshness, and that weight would fluctuate depending on

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<sup>323</sup> Approval Holder's Response Submissions at paragraph 170.

<sup>324</sup> Section 95(4) of EPEA provides:

"(4) Where the Board determines that a matter will not be included in the hearing of an appeal, no representations may be made on that matter at the hearing."

<sup>325</sup> Section 9 of the Board's Rules of Practice provides:

"The Board shall determine which matters included in the Notice of Appeal will be included in the hearing of the appeal. The Board may consider certain matters before it makes its determination (section 95(2)). Where the Board determines that a matter will not be included in the hearing of an appeal, no representations may be made on that matter (section 95(4))."

<sup>326</sup> Approval Holder's Response Submissions at paragraph 173.

<sup>327</sup> The Board notes the following: The project's general description in the Industrial Approval Resume is "80,000 to 100,000 tonnes/year of manure and 60,000 to 80,000 tonnes/year of organic food resources will be received and processed at the facility to produce approximately 610,000 GJ/year of renewable natural gas (RNG)." See the Industrial Approval Resume at page 1, Director's Record Tab 3. See also 5.1.2 Feedstock, Water and Natural Gas Inputs at page 33, Director's Record Tab 14, which provides in part that "the digester tank and biogas upgrader design will have capacity to handle up to 100,000 tonnes per year of livestock manure and up to 80,000 tonnes per year of off-farm organic food resources."

whether wet weight or dry weight is measured. Mr. Boisvert stated the design has six biodigester storage tanks and ancillary equipment and as designed, can handle 100,000 tonnes of feedstock a year, if you are measuring a total solid content of less than 40 percent. Mr. Boisvert further stated the Approval Holder would be open to a condition that limited the Approval to 80,000 tonnes of manure and 60,000 tonnes of organic slurry a year as a base case, provided the moisture content could be defined.<sup>328</sup>

[455] At the hearing, Mr. Boisvert touched on the partial change in ownership of the Approval Holder raised by the Appellants and Intervenor, stating that Biocirc ApS, had purchased Tidewater Renewables Ltd.'s shares in the Approval Holder. He indicated that Biocirc ApS is a leading global biogas company that specializes in producing green energy through biomethane and has operations across multiple countries. He further explained that Biocirc ApS is partially owned by the DLG Group, which he indicated was one of Europe's largest agricultural cooperatives, which includes 25,000 Danish farmers. He explained the company operates some of the world's largest RNG facilities, several of which are larger than the approved Facility. Mr. Boisvert explained that Biocirc ApS brings extensive experience in designing, constructing, and safely maintaining biogas facilities.

#### **6.4. Director**

[456] The Director<sup>329</sup> advanced the following four main arguments:

1. The decision to issue the Approval was appropriate;
2. the Director can only regulate matters under his jurisdiction;
3. the Approval will provide environmental oversight of the Facility; and
4. the terms and conditions of the Approval are appropriate.

[457] The Director requested that the Board uphold the Approval and the terms and conditions of the Approval.

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<sup>328</sup> The Board notes this information conflicts with the Approval Holder's earlier comments regarding the amount of feedstock to be processed at the Facility, however, the Board further notes the Application is consistent with Mr. Boisvert's comments at the hearing. See the Application, Director's Record at Tab 14.

<sup>329</sup> Note the Board has used "Director" used when referring to statements and arguments made within the Director's written submissions.

[458] The Director stated the Approval is for the construction, operation, and reclamation of a waste management facility for the processing of waste to produce fuel, and provides for a 2.2 MW power plant, both of which are regulated by EPA under EPEA. The Director further stated the CFO is regulated under an authorization issued by the NRCB pursuant to AOPA, and that this was the status of the jurisdiction of the regulators and legislation, unless there was a change in law by the Alberta Legislature.<sup>330</sup>

[459] The Director focussed on the approval process and review of the Application, and stated he was unable to comment on any other regulatory authorizations issued and administered by other provincial or municipal agencies.

[460] At the hearing, the Director, Mr. Craig Knauss, provided a regulatory overview. Mr. Knauss explained that in 2019, the *Red Tape Reduction Act*, SA 2019, c R-8.2, was enacted with a focus to reducing redundant or overlapping requirements within a regulator or amongst regulators. Mr. Knauss explained to the Board EPA's role in supporting the reduction of regulatory and administrative burdens, and in improving service outcomes to Albertans. Mr. Knauss stated as a part of this process, there has been a culture change "across government to regulate only when needed and with the lightest touch possible." He explained this meant focussing on outcomes not overly oppressive rules, while continuing to ensure the health and safety of Albertans and the protection of Alberta's environment. He noted red tape reduction initiatives were an ongoing process and are regularly released.

[461] Mr. Knauss stated that in 2020, EPA announced efforts to modernize its regulatory system and processes, referred to as the "Regulatory Assurance Framework Transformation" ("RAFT"). He explained that EPA is in the middle of this process, and the purpose of RAFT is to foster an attitude of outcomes and risk-based decision making while ensuring timely authorizations are issued under EPEA as well as the *Water Act*. He further explained the purpose was to support and promote the protection of the environment while incorporating the principle of sustainable development of regulated activities.

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<sup>330</sup> The Board notes the micro-cogeneration units on the Project Site appear to be regulated by the AUC under the *Micro-generation Regulation*, Alta Reg 27/2008.

[462] Mr. Knauss explained one of the objectives of RAFT is to take a wholistic approach which considers the life cycle of a project from application to closure and remediation. He further explained that this required changes in how EPA regulates in the context of cumulative effects, shared use of the land base over time, as well as geographically. He explained that although the social, environmental, and economic context are considered in EPA's decision-making and this has changed over time, the regulatory system has not evolved significantly in response.

[463] Mr. Knauss stated the intention is to move from a prescriptive approach to an outcomes-based approach. He expanded by stating that EPA describes the goal, but not how to achieve it, which provides the opportunity for the proponent to be adaptable and innovative, while still arriving at the same critical environmental outcomes described or required in an approval.

[464] Mr. Knauss stated the concept is that if time is put in at the front end before an application is submitted, the proponent will have a clear understanding of the requirements at closure and the end of the activity, to return the landscape to pre-disturbance conditions. He further explained this involves increased effort in continual monitoring, inspection, and audit of the activity during the operation phase to ensure the operation is achieving the outcomes mandated in the approval.

[465] The Board heard that this approach involves a measure of risk analysis, using the EPA's Common Risk Management Framework which Mr. Knauss stated was developed based on International Standards Organization (ISO) 31000 standards for risk management. He explained that there were two components to determining the level of risk: the consequence or impact, and the likelihood or probability of that consequence or impact happening. He stated that with those factors considered, one could determine the level of risk.

[466] Mr. Knauss stated an EPEA approval is issued to ensure that proposed projects are appropriately reviewed by EPA, and appropriate terms and conditions are applied to prevent and minimize environmental impact. The Director stated approval clauses can be prescriptive, or outcome based. Mr. Knauss further stated that through the authority of EPEA, integrated approvals can be issued which incorporate economic, social, and environmental considerations into regulatory decisions.

[467] Mr. Knauss stated EPA was the regulator of waste management facilities, noting several connections to EPEA and EPA's legislative authority. He commented that the *Oil and Gas Conservation Act* and REDA, do not regulate the activities that EPEA triggers, or have the provisions or legislative authority to oversee those activities.

[468] Mr. Knauss stated there are also certain activities that fall outside of EPEA such as confined feeding operations, noting that EPEA specifically exempts agricultural activities.

[469] Mr. Knauss explained there was a Digestate MOU, which recognizes that regulatory oversight changes between the two regulators (EPA and NRCB) at different stages of the life cycle of manure. Mr. Knauss indicated that he appreciated the confusion regarding the regulation of biodigestion in Alberta. Mr. Knauss stated the NRCB regulates the CFO and EPA regulates the manure as feedstock once the manure is on the Facility site. After the manure is processed, solid digestate or fertilizer returned to and used at the CFO site is once again regulated by the NRCB.

[470] Mr. Knauss stated EPEA is the primary statute in Alberta through which regulatory requirements for air, water, land, and biodiversity are managed. Mr. Knauss further stated EPEA regulates impacts in the form of releases into the air, land, or water. He explained this meant that EPA does not regulate the actual process for biodigestion, other activities or operations, and the Approval Holder is responsible for ensuring the facility is properly engineered to operate appropriately.

[471] Mr. Knauss stated there were several regulations that provided clarity and direction regarding the regulatory scheme under EPEA:

1. *Activities Designation Regulation*, Alta Reg 276/2003 ("ADR");
2. *Approvals and Registrations Procedure Regulation*, Alta Reg 113/1993 ("ARPR");
3. *Environmental Protection and Enhancement (Miscellaneous) Regulation*, Alta Reg 118/1993 ("EPER"); and
4. *Waste Control Regulation*, Alta Reg 192/1996 ("WCR").

[472] Mr. Knauss stated that biodigestion is not a process which is defined in EPEA or the regulations, but there are triggers under the ADR which indicates this activity is regulated under EPEA.

[473] The Director highlighted section 61 of EPEA<sup>331</sup> and noted that if the proposed activity is listed within the “Schedule of Activities” in EPEA, a person must then consult the ADR to determine if the proposed activity requires an approval (Schedule 1), a registration (Schedule 2), or is a notice activity (Schedule 3).<sup>332</sup> The Director stated that if the activity is not listed under the ADR, the activity is not regulated by EPEA.

[474] At the hearing, Mr. Knauss noted that a facility listed in ADR Schedule 1, Division 1 requires an approval, and specifically referenced subclause (c):

“the construction, operation or reclamation of a facility for the collection and processing of waste or recyclables to produce fuel, where more than 10 tonnes of waste or recyclables per month are used to produce the fuel;”<sup>333</sup>

Mr. Knauss stated that the Approval Holder requires an approval, because the proposed activity is a waste management facility using manure and other organic wastes as feedstock to produce RNG, which falls within Schedule 1 of the ADR.

[475] Mr. Knauss further noted there was a secondary activity which falls within Schedule 1, Division 2, Part 9, which speaks to the construction, operation or reclamation of a power plant. He further stated that ARPR provides detailed procedures on how to apply for an approval and outlines the information and content required for an application to inform the director’s decision. He further noted the EPER sets out the public notice of application requirements. Mr. Knauss stated that the WCR sets out the financial security requirements for the proposed Facility.

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<sup>331</sup> Section 61 of EPEA provides:

“No person shall commence or continue any activity that is designated by the regulations as requiring an approval or registration or that is redesignated under section 66.1 as requiring an approval unless that person holds the required approval or registration.”

<sup>332</sup> Director’s Response Submissions at paragraph 6, citing the ADR.

<sup>333</sup> Director’s Response Submission at 7, citing the ADR at Schedule 1, Division 1, subclause (c).

[476] Ms. Ping Zhao, EPA Industrial Approvals Engineer, explained the approvals application process, noting that the roles and responsibilities of EPA and the proponent are well defined by EPEA at each stage of the approval process.

[477] Ms. Zhao explained that an applicant must submit a detailed application in accordance with the ARPR along with a fee, after which an application number is assigned. An approvals engineer starts the review of the application to ensure it contains all the necessary information, is administratively complete, and can proceed with public notice.

[478] Ms. Zhao explained the goal of public notice of the application is to ensure that potentially affected stakeholders are adequately informed of the application. She further stated that the Director sets out the requirements for public notice, noting that advertising notice in the paper and on EPA's website are the normal processes. Ms. Zhao observed that hand delivery of public notice is not commonly used.

[479] Ms. Zhao further explained that section 73 of EPEA<sup>334</sup> provides a mechanism for the public to provide input into the decisions made by the director. The Board heard that the legislation mandates that a person who is directly affected can submit an SOC within 30 days of the public notice. Ms. Zhao stated that the director reviews, considers, and acknowledges all SOC submissions. She explained that the applicant is responsible for trying to resolve concerns and is expected to address SOC filers' concerns to the director's satisfaction.

[480] Ms. Zhao explained that EPA subject matter experts conduct the technical review of the application. She further explained that during the technical review all the potential impacts from a proposed activity on the environment and human health are identified and assessed. The Board heard that if the proposed activity is found to be acceptable, the approvals engineer drafts

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Section 73 of EPEA provides:

"73(1) Where notice is provided under section 72(1) or (2), any person who is directly affected by the application or the proposed amendment, addition, deletion or change, including the approval holder in a case referred to in section 72(2), may submit to the Director a written statement of concern setting out that person's concerns with respect to the application or the proposed amendment, addition, deletion or change.

(2) A statement of concern must be submitted within 30 days after the last providing of the notice or within any longer period specified by the Director in the notice."

an approval which specifies the required conditions regarding the construction, operation, and reclamation of the proposed activity. She further stated the approval resume is prepared by the approvals engineer which provides a summary of the application as well as including the rationale for the recommendations provided to the director.

[481] Ms. Zhao explained that the director considers EPEA, its regulations, the applicable policies, the facts and information in the application along with the recommendations from the EPA subject matter experts who reviewed the application, the SOC filers' concerns, the applicant's responses to the SOC filers' concerns, as well as all other decisions by other regulators involved in the proposed activity whether to issue or refuse an approval for the activity under their jurisdictions. She explained that once issued, the approval is legally binding on the approval holder. Ms. Zhao further explained that the terms and conditions of the approval may be more stringent but not less stringent than the terms and conditions provided for in the regulations.

[482] The Board heard that under section 74 of EPEA<sup>335</sup> the director provides notice of the decision to every person who submitted an SOC that was accepted by the director.

[483] The Director stated that the Approval Holder submitted the Application to EPA on June 10, 2022, for a facility to produce RNG through the upgrading of biogas resulting from anaerobic digestion of feedstock comprised of livestock manure and off-farm organic sources and a 2.2 MW power plant.<sup>336</sup> The Board heard from Ms. Zhao that approximately 60,000 tonnes of organic food and 80,000 tonnes of manure will be processed at the proposed Facility to produce RNG. The Director further stated that the application included several appendices including the AQA produced by Horizon Compliance.<sup>337</sup>

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<sup>335</sup> Section 74 of EPEA provides in part:

“74(1) Where the Director

(a) issues an approval,

...

(2) If subsection (1) applies, the Director shall,

(b) where notice of the application or proposed changes was provided under section 72(1) or (2), provide notice or require the provision of notice of the decision in accordance with the regulations to every person who submitted a statement of concern in accordance with section 73.”

<sup>336</sup> Director's Response Submissions at paragraph 8.

<sup>337</sup> Director's Response Submissions at paragraph 8, citing the Application, Director's Record at Tab 14.



[484] Ms. Zhao clarified at the hearing that the RNG will be injected into the distribution system and will not be used for power generation at the proposed Facility.

[485] The Director stated a detailed technical review of the Application was conducted by EPA subject matter experts. The Director stated the purpose of the technical review was to identify any potential concerns or deficiencies with the application and to determine if appropriate mitigations are in place to minimize the potential risks to the environment, human health, or safety, and is highly specific to the application and proposed activity. The Director stated the responses to the technical review questions or concerns are utilized to further inform a decision by the Director whether to issue or not issue the requested EPEA approval, and any conditions to be included if an approval is issued.<sup>338</sup>

[486] Ms. Zhao stated that Notice of Application was published in the High River Times on July 22, 2022, and the application was hand delivered to 27 residences within 2 km of the Facility. She further stated that all the SOC's submitted were reviewed and accepted as official SOC's. She noted that the Approval Holder was informed of the SOC acceptances and asked to respond to each of the SOC filers.

[487] The Director stated that EPA reviewed the Application and sent SIR No. 1 to the Approval Holder on November 28, 2022. The Director stated the purpose of SIR No. 1 was to seek further information regarding odour management at the proposed Facility. EPA requested the Approval Holder conduct an odour study using a dispersion model in accordance with the Air Quality Model Guideline<sup>339</sup> and provide a report identifying all potential odour generating sources, containment, control, monitoring, management, and response programs.<sup>340</sup> At the hearing, Ms. Zhao stated the Approval Holder was also asked to provide a program for keeping out vectors, including birds and insects.

[488] Ms. Zhao explained at the hearing that air quality limits in an approval are developed based on site specific assessment of reasonable limits required to meet the AAAQO and

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<sup>338</sup> Director's Response Submissions at paragraph 9.

<sup>339</sup> *Alberta Air Quality Model Guideline*, Alberta Environment and Parks, September 13, 2021 (the "Air Quality Model Guideline").

<sup>340</sup> Director's Response Submissions at paragraph 10. See also the SIR NO. 1, Director's Record at Tab 20.

are designed to protect the environment and human health. Ms. Zhao further stated the modelling for an EPA application must be carried out in accordance with the Air Quality Model Guideline. She noted that emission rates, stack heights, topography, and meteorology are inputs into the modelling. She further noted that the modelling outputs and the receptor's location, are compared with the AAAQO.

[489] The Director stated the Approval Holder responded to SIR No. 1 on February 13, 2023. The Director stated the Approval Holder submitted refinements to the Facility design, including the liquid digestate pond, which according to the Director, the Approval Holder stated were "a direct result of ongoing efforts to prevent, control and contain potential odours."<sup>341</sup>

[490] The Director further stated the Approval Holder provided the AQA, which included potential odorous air emissions of H<sub>2</sub>S and NH<sub>3</sub>, that may be released in certain scenarios: from the Facility alone, from the CFO, and when both the Facility and the CFO are operating. The Director stated the AQA used emissions rates estimated by Triton Environmental Consultants ("Triton") and Obsidian Engineering Corp. The Director stated the AQA indicated the Facility was predicted to result in a significant net positive improvement to air quality versus the current Baseline Case and that this included the current operating conditions of pre-existing sources in the area Cumulative Case.<sup>342</sup>

[491] The Director stated that the Approval Holder also provided a memorandum dated February 13, 2022, from Triton regarding odour assessment for the proposed Facility (the "Triton Memorandum"). The Director further stated the Triton Memorandum was a companion document to the AQA and concluded that the operation of the proposed Facility would result in a net reduction of total odour units emitted with both the CFO and the proposed Facility operational.<sup>343</sup>

[492] The Director stated that EPA sought and received comments from Dr. Piorkowski, on February 27, 2023, regarding the AQA and Triton Memorandum. The Director further stated

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<sup>341</sup> Director's Response Submission at paragraph 12, citing the Approval Holder's Response to SIR No. 1, Director's Record at Tab 23.

<sup>342</sup> Director's Response Submission at paragraph 13, citing the Approval Holder's Response to SIR No. 1, Director's Record at Tab 23.

<sup>343</sup> Director's Response Submissions at paragraph 13.

that Dr. Piorkowski opined that an approximate 50 percent reduction in emission rates for odour causing parameters or odour units from the CFO assumed in both the Triton Memorandum and the AQA were “gross overestimates” of the likely proportional reduction in emission rates.<sup>344</sup>

[493] The Director further stated that EPA’s review of the Approval Holder’s response to SIR No. 1 raised additional concerns regarding odour assessment, control, odour, and air emissions monitoring at the proposed Facility.<sup>345</sup>

[494] The Director stated SIR No. 2 was sent to the Approval Holder on March 23, 2023, advising that the Approval Holder would be required to consider the most effective demonstrated technologies to minimize odour from the proposed Facility. The Director further stated the Approval Holder was asked to provide: a design plan and specifications for pollution abatement equipment, an updated air quality modelling report, an updated design plan and specifications for cover systems or other pollution abatement technologies, an updated design plan and specifications for the Pond, measures to be taken to prevent odour emissions from the facultative cell and maturation cell, along with further documentation, evaluation, and rationale relating to the minimization of air emissions and odours being released from the proposed Facility.<sup>346</sup>

[495] The Board heard at the hearing from Ms. Zhao, that SIR No. 2 was a request for evaluation of available pollution prevention and control technologies to minimize odour, design plan and specifications of pollution equipment to treat the air from the buildings and the stacks, and all the equivalent technologies for area sources for liquid digestate to prevent groundwater contamination. Ms. Zhao further explained that EPA required rationale for the emission rates estimate used for the monitoring.

[496] The Director stated the Approval Holder submitted its response to SIR No. 2 on July 17, 2023. The Director further stated that as a part of the Approval Holder’s response, the Approval Holder completed a BATEA Study of odour reducing technologies. This study

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<sup>344</sup> Director’s Response Submission at paragraph 14, citing Dr. Piorkowski’s email, Director’s Record at Tab 24.

<sup>345</sup> Director’s Response Submissions at paragraph 15.

<sup>346</sup> Director’s Response Submissions at paragraph 16, citing SIR NO. 2, Director’s Record at Tab 25.

determined a combination of technologies selected for the proposed design would be economically feasible, achievable, and provide environmental benefits including:

1. use of enclosures or covers, wet chemical scrubbers for NH<sub>3</sub> removal, and then activated carbon filter for H<sub>2</sub>S, volatile organic compounds, and reduced sulphur removal for the feedstock hopper building manure blend and feed tanks, organic food resources tanks, digester/upgrader, digestate separation building, and nurse/liquid fraction tanks;
2. addition of ferric chloride to the feedstock prior to entry into the digesters;
3. mechanical separation of solid and liquid digestate in the digestate separation building; and
4. mechanical aeration of the Pond.<sup>347</sup>

[497] Ms. Zhao noted the wet chemical scrubber for the active carbon filters will be continuously monitored with a sensor for the pH levels, with automatic acid injection to maintain the pH level. She further noted that some monitoring is proposed to be periodic using a portable H<sub>2</sub>S detector, to determine when the carbon media filter needs to be replaced. Ms. Zhao indicated that the major source of odour for the Facility will be the emissions, and they will be treated by the chemical scrubber followed by the active carbon filter. She explained that based on the Application, there will be a 95 percent reduction in the total reduced sulphur, NH<sub>3</sub>, and volatile organic compounds. She indicated that EPA had listed the reduction as 90 percent, as they felt a 90 percent removal rate could be achieved based on the technology.

[498] The Director stated the Approval Holder indicated in its BATEA Study that it selected mechanical aeration for odour mitigation of the Pond, but considered enclosure of the Pond and storing the liquid digestate in tanks as possible alternatives. The Director further stated the Approval Holder had indicated that covers or enclosures would offer limited benefit to odour mitigation without the use of air exchangers connected to an Odour Abatement System and were likely to increase anaerobic activity in the ponds, leading to an increase in emissions. The Director stated the Approval Holder had advised that it expected mechanical aeration of the Pond to have a

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<sup>347</sup> Director's Response Submission at paragraph 17, citing the Approval Holder's Response to SIR No. 2, Director's Record at Tab 28.

similar removal efficiency of H<sub>2</sub>S as enclosure or a tank system connected to an appropriately sized odour treatment system.<sup>348</sup>

[499] The Director stated the Approval Holder also provided updates to the AQA to reflect the pollution abatement equipment. The Director stated the AQA found that the predicted maximum ground level concentrations of H<sub>2</sub>S and NH<sub>3</sub> complied with the AAAQO, and that the Facility was predicted to result in a cumulative net positive to air quality versus the current baseline operating conditions with the CFO operating alone.<sup>349</sup>

[500] The Director stated that per its usual practice, EPA provided a draft approval to the Approval Holder on August 12, 2023, for comments.

[501] The Director further stated that EPA sought additional internal review and comments on the updated AQA. The Director stated the EPA specialist did not have concerns with modelling submitted in the original AQA or the updated AQA, noting that the air dispersion modelling had been completed in accordance with the 2021 EPA Air Quality Model Guideline.<sup>350</sup>

[502] The Director stated that in arriving at his decision to issue the Approval, he recognized that the primary concerns related to the proposed Facility were the potential air emissions and odours from the activity. The Director noted the proposed location of the Facility is directly adjacent to the CFO, which is regulated by the NRCB. The Director further noted that the Appellants and the Intervenor had identified a concern that the Facility will amplify the odours and impacts they are already experiencing from the CFO.<sup>351</sup>

[503] The Director stated that due to the proximity of the CFO, the presence of other confined feeding operations nearby and upwind, and the chemical composition of odours, it would be extremely difficult to use traditional ambient air monitoring techniques and equipment to

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<sup>348</sup> Director's Response Submission at paragraph 18, citing the Approval Holder's Response to SIR No. 2, Director's Record at Tab 28.

<sup>349</sup> Director's Response Submissions at paragraph 19.

<sup>350</sup> Director's Response Submissions at paragraph 21.

<sup>351</sup> Director's Response Submissions at paragraph 36.

determine odour source. The Director stated that ambient monitoring in this scenario would not provide meaningful results to identify and confirm the Facility as the source.<sup>352</sup>

[504] The Director stated that he reviewed the AQA, which indicated the proposed Facility activity alone will not pose a significant contribution to the maximum predicted ground level concentrations in the area from all sources and emissions of H<sub>2</sub>S and NH<sub>3</sub> that may be released in certain scenarios: the Facility alone, the CFO, or with both the Facility and the CFO operating.<sup>353</sup>

[505] The Director further stated he determined from the available information that the emissions from the manure staging area at the Facility would be comparable to the storage of manure on the adjacent CFO. He further noted that he had determined that the storage of solid digestate at the Facility would be less odorous than the source manure due to the biodigestion process removing organics and discharging vapours into the Odour Abatement System.<sup>354</sup>

[506] The Director stated that he was of the view that there would be limited emissions from the Pond given the reduced size of 5 ha and the Approval requirement to maintain the Pond in an aerobic state (0.5 to 2.0 mg/L of dissolved oxygen) to prevent H<sub>2</sub>S generation.<sup>355</sup> At the hearing, Ms. Zhao stated that an aeration system is to be installed at Cell 1 of the Pond, which will provide between 0.5 to 2.0 mg/L of dissolved oxygen.

[507] The Director further stated that as assurance measures, the following conditions were added to the Approval:

1. regarding odour and air emissions, pollution abatement equipment: 3.24, 4.1.2 and 4.1.3, 4.1.11, and 4.1.12;
2. regarding odour management: 4.1.24, 4.1.27, 4.1.30, 4.1.31, 4.1.33, 4.1.34, and 4.1.35;
3. regarding industrial runoff and wastewater management: 3.3.1, 4.2.1, 4.2.3, and 4.2.4; and

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<sup>352</sup> Director's Response Submissions at paragraph 37.

<sup>353</sup> Director's Response Submissions at paragraph 38.

<sup>354</sup> Director's Response Submissions at paragraph 39.

<sup>355</sup> Director's Response Submissions at paragraph 39.

4. regarding feedstock and digestate management: 4.4.1, 4.4.4, 4.4.5, and 4.4.7.<sup>356</sup>

[508] The Director noted Approval condition 4.1.33 requires the Approval Holder to submit a Fugitive Emissions Monitoring Program within 12 months of commencing operations. The Director stated the process for developing and submitting the Fugitive Emissions Monitoring Program allows the Approval Holder to take empirical measurements and validate the assumptions in the ambient air modeling to inform program development during normal operating conditions at the intended facility design.<sup>357</sup>

[509] At the hearing Ms. Zhao explained that the Application materials demonstrated that there would not be an exceedance of the AAAQO in the Project Case, and that even an emergency flare in the Project Case was still within the AAAQO. She further explained that EPA did not rely on the 48.2 percent reduction in the Cumulative Case as claimed, as it may not be representative of the actual operations. She stated that EPA did not have the variable information. Ms. Zhao further noted that regardless of whether 48.2 or 15 percent is used as a reduction, the Cumulative Case remains in exceedance of the AAAQO.

[510] The Board heard the emission limit was developed based on a parallel assessment of the AAAQO which is the air quality objective for the environment and human health, and the technology-based limit which is based on an assessment of the technology. Ms. Zhao explained that because the AAAQO limits are not technology-based, and the limits within the Approval are technology based, the development of these limits required the consideration and evaluation of all available pollution prevention and control technologies and any relevant technology-based limits from all jurisdictions such as the United States and Ontario. She further stated that the performance of similar facilities and any unique factors related to the proposed facility is part of the process, to ensure that the limits meet the applicable AAAQO.

[511] Ms. Zhao explained this was a very project-specific approach, and that the yearly limit was converted into an hourly limit, to minimize odour emissions from the area sources and identify whether those area sources are emitting those odour compounds, and at what rate. She

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<sup>356</sup> Director's Response Submissions at paragraph 40.

<sup>357</sup> Director's Response Submissions at paragraph 41.

further explained they also wanted to acquire the emissions rate from the monitoring data for future modelling.

[512] The Director further stated that the data collected from the Fugitive Emissions Monitoring Program will ensure there are no fugitive releases from area sources that could cause or contribute to odours off-site, since traditional ambient air monitoring techniques are not able to be reasonably deployed at the Project Site.<sup>358</sup>

[513] The Director stated his decision to issue the Approval was based on his review of the technical information provided in the Application, the responses to SIR No. 1 and SIR No. 2, advice from EPA subject matter experts, and additional information that EPA gathered from independent sources. The Director further stated that EPA subject matter experts applied their expertise and knowledge to conduct the technical review of the Application and ultimately provided a recommendation to the Director.<sup>359</sup>

[514] The Director stated that he carefully considered all this information in making his decision to issue the Approval. He further stated that he accepted the recommendations of EPA staff regarding the terms and conditions of the Approval.<sup>360</sup>

[515] At the hearing, Mr. Knauss explained that in making the decision, he looks at the policies, guidelines, application including the SIRs and responses, reports, and everything that is summarized in the industrial facility approval resume. He further stated that he includes in his decision consideration of the advice and recommendations of EPA subject matter experts. He stated in this case he was looking at the impact of the Facility with respect to air quality.

[516] Mr. Knauss explained that it was important to note that there was no legislative requirement on the Facility to reduce impacts generated by another facility. He explained that while the Cumulative Case was important to his decision, what he needed to examine was if the Facility will result in an exceedance of the AAAQO. He stated that if the Facility will result in a secondary benefit or a secondary condition that will help improve conditions, that is considered a

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<sup>358</sup> Director's Response Submissions at paragraph 42.

<sup>359</sup> Director's Response Submissions at paragraph 44.

<sup>360</sup> Director's Response Submissions at paragraph 45.



positive outcome. He further stated that if the Facility is not making things worse, that is considered a positive outcome.

[517] Mr. Knauss stated that he considered the risks, and the impacts identified through the technical review and assessment process. He explained that he looked at each of those risks and considered the potential impact or consequence, and the possibility of the risk occurring. He stated that because of the lack of published data relating to H<sub>2</sub>S and NH<sub>3</sub> emissions from the area sources such as liquid digestate, EPA did not use the data in the Application to set the outcomes and Approval emissions rates. He stated the emission rates were based on more restrictive considerations which were tied to the efficiency of the odour control systems. This was confirmed by Ms. Zhao who stated in cross-examination stated that she had reviewed the modelling information provided by the Approval Holder, but did not rely on the emission rates. Mr. Knauss indicated that based on policy this was an appropriate approach as the technology-based limits were the more stringent limits. He stated the secondary reason was the uncertainty in the emission factors in the modelling.

[518] Ms. Zhao explained that the Approval does not contain limits for total reduced sulphur or volatile organic compounds because the guideline for total reduced sulphur was not in effect when the Approval was issued. She noted however that the Odour Abatement System would remove both total reduced sulphur and volatile organic compounds, and that H<sub>2</sub>S and NH<sub>3</sub> were surrogates for both, respectively.

[519] Ms. Zhao explained that ambient air monitoring could not be used at the Facility because an environmental protection officer could not use the information if enforcement action needs to be taken because it is from a mixed source. She stated this was the reason for the monitoring at the source.

[520] Mr. Knauss confirmed that the information from the emissions monitoring can be used in EPA's model to ensure the assumptions and estimates regarding area sources are correct. He further explained that this data can be used going forward in the Approval, should the new information demonstrate that the Approval needs to be amended. He stated that to alleviate the professional discussion of whose opinions or what would be useful, the Facility is required to

perform monitoring at the area sources which will provide the actual impact of the Facility. The Board heard that if the Facility is having an impact, Mr. Knauss can amend the Approval or require the Approval Holder to submit an application to address the impact.

[521] Mr. Knauss stated that the Application identified that the Facility would likely meet the AAAQO for H<sub>2</sub>S and NH<sub>3</sub>, and Mr. Urbain had stated the same as well, depending on what was emitted from the Pond. Mr. Knauss explained that this substantiated the approach taken in the Approval requiring the Approval Holder to develop, implement, and undertake a sampling program for those area sources to cover over all the estimates or uncertainties. He further noted that over the discussions during the hearing, there was no evidence that had identified that the Project Case would exceed the AAAQO, or that the Cumulative Case would exceed the Baseline Case, without the Project.

[522] Mr. Knauss further stated that the discussion and uncertainty related to who may be right or wrong in the assumptions, or which is better, has been addressed through the Odour Abatement System. He explained Approval condition 4.1.3 requires all point sources to be connected to the Odour Abatement System to remove volatile organic compounds, total reduced sulphur including H<sub>2</sub>S, and NH<sub>3</sub>. He further explained that the Odour Abatement System will prevent odours and gases from the biodigestion process from being released into the atmosphere, by treating any air effluent before it is released to remove odour causing gases. The emissions from the stack will be tested twice a year to ensure compliance with the limits, which Mr. Knauss stated was the equivalent of Mr. Urbain's description of getting a sample at the source.

[523] Mr. Knauss explained to the Board that the Approval sets out how the operation of the Odour Abatement System will be monitored and maintained. He noted the monitoring includes requirements to monitor the pH, the material, and sampling the activated carbon to see if it needs to be changed sooner.

[524] The Director stated he had considered the air quality modeling predictions prepared by Horizon Compliance that indicated that the Facility would operate well within the H<sub>2</sub>S and NH<sub>3</sub> limits of the AAAQO. The Director further stated that he was of the view that the operation of the Facility in accordance with the Approval and the anticipated reduction in H<sub>2</sub>S and NH<sub>3</sub> emissions

from the CFO would have a net positive benefit on the overall cumulative emissions of these two substances when compared to the current scenario of the NRCB regulated the CFO operating in isolation.<sup>361</sup>

[525] The Director stated that under section 68(2) and section 68(3) of EPEA<sup>362</sup> he has the discretion to prescribe the terms and conditions to an Approval which he considers appropriate, and which may be more stringent than the applicable terms and conditions provided for in the regulations. The Director submitted that he exercised his discretion appropriately in respect of the conditions that are included within the Approval.

[526] The Director stated he exercised his discretion to insert several conditions in the Approval to regulate air emissions and odour emissions, including requiring the Approval Holder to install and operate pollution abatement equipment, an odour abatement system, and a program for fugitive air emissions management. The Director further stated that odour management at the Facility includes a Best Odour Management Practices Control Plan, and an Odour Complaint Management and Response Program, and that these measures are appropriate to compel the Approval Holder to prevent, manage and mitigate odours and air emissions.<sup>363</sup>

[527] The Director further stated that the Approval conditions related to the Fugitive Emissions Monitoring Program are stringent and are comparable to those used for measuring fugitive emissions at oil sands mines and to those used by the United States Environmental Protection Agency. The Director noted these requirements are broader than what has been included in previous EPEA approvals in respect to other odour generating activities.<sup>364</sup>

[528] The Director stated that the data collected from odour monitoring activities provides feedback for optimizing the performance of the pollution abatement equipment to

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<sup>361</sup> Director's Response Submissions at paragraph 48 and paragraph 49.

<sup>362</sup> Director's Response Submissions at paragraph 51. Section 68 of EPEA provides in part:  
"68(2) The Director may issue an approval subject to any terms and conditions the Director considers appropriate.

(3) The terms and conditions of an approval may be more stringent, but may not be less stringent, than applicable terms and conditions provided for in the regulations."

<sup>363</sup> Director's Response Submissions at paragraph 52.

<sup>364</sup> Director's Response Submissions at paragraph 53.

improve operations and minimize releases into the environment.<sup>365</sup> The Director further stated that other conditions included in the Approval are intended to prevent land-based releases of other substances from the Facility, including liquid digestate, industrial wastewater and industrial surface water runoff.<sup>366</sup>

[529] The Board heard from Mr. Knauss that Approval condition 4.1.11 requires the Approval Holder to control fugitive emissions from any source that is not an approved emission point. Mr. Knauss explained that the Pond, the manure, and solid digestate storage and staging areas are not among the approved emissions points listed in condition 4.1.2. He further explained that condition 4.1.12 of the Approval prevents the release of fugitive emissions or the release of any substance from any sources not identified in condition 4.1.2 which causes or may cause:

- “(a) impairment, degradation or alteration of the quality of natural resources;
- (b) material discomfort, harm or adverse effect to the well being or health of a person; or
- (c) harm to property or to vegetative or animal life.”

He noted that condition 4.1.39 contains the requirements for the monitoring program.

[530] Mr. Knauss further noted that the short-term storage of manure at the Facility or transport of manure to the Facility is not reasonably expected to increase regional odours versus storing the manure at the CFO where it is sourced (i.e., no net change to the Cumulative Case).

[531] Mr. Knauss further stated that the Pond is not expected to be a significant source of emissions. He noted the Approval had an assurance component to mitigate the risk associated with the Facility. He explained if empirical site-specific data obtained through the future emissions monitoring program demonstrated the assumptions made about the Facility are incorrect, EPA has mechanisms to take the monitoring information and rectify the situation. From an approvals perspective, the Approval could be amended under section 70(3)(a) of EPEA using the director initiative, or section 70(1) of EPEA by application from the approval holder,<sup>367</sup> providing amendment suggestions to rectify an issue that would be documented.

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<sup>365</sup> Director's Response Submissions at paragraph 54.

<sup>366</sup> Director's Response Submissions at paragraph 55.

<sup>367</sup> Section 70 of EPEA provides in part:

[532] Mr. Knauss also stated that EPA's compliance branch has several tools as well. He noted the compliance branch has the powers to enter and inspect and place for the purposes of assuring compliance with approvals and registrations, EPEA and its regulations in general. In terms of rectifying situations, their enforcement tools include warning letters, administrative penalties, as well as prosecutions. He noted that prosecutions can lead up to significant financial penalties. Mr. Knauss also noted that EPA can suspend the operations of facilities as appropriate.

[533] Mr. Knauss explained in summary that the Approval contains significant and appropriate oversight of the Approval Holder, requiring appropriate environmental outcomes and containing appropriate assurance mechanisms. He further stated that EPA through its authorities under EPEA, has the legal ability to hold the Approval Holder accountable and subject to enforcement actions.

[534] On cross-examination, Mr. Knauss indicated that after having heard the totality of evidence from the hearing, there were a few adjustments he would have made to the Approval if he could go back in time. He stated he would have changed the Fugitive Emissions Monitoring Program to be submitted for implementation prior to commencement of operations. He further stated potentially requiring a redundant set of scrubbers or at least having an additional carbon scrubber available at the Facility to allow for switchover from one to the other, without interrupting the Facility's operation. Regarding the redundant scrubber, he stated that he recognized that there is a potential that if the current design is shut down and disconnected, there could be gases from

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70(1) On application by an approval or registration holder, the Director may, in accordance with the regulations,

(a) amend a term or condition of, add a term or condition to or delete a term or condition from an approval, or

...

70(3) If the Director considers it appropriate to do so, the Director may on the Director's own initiative in accordance with the regulations

(a) amend a term or condition of, add a term or condition to or delete a term or condition from an approval

(i) if in the Director's opinion an adverse effect that was not reasonably foreseeable at the time the approval was issued has occurred, is occurring or may occur,

(ii) if the term or condition relates to a monitoring or reporting requirement,

(iii) where the purpose of the amendment, addition or deletion is to address matters related to a temporary suspension of the activity by the approval holder, or where the purpose of the amendment, addition or deletion is to address matters related to a temporary suspension of the activity by the approval holder, or...."

the process released. He further stated that he is assuming this could be mitigated through environmental engineering.

[535] Mr. Knauss further indicated that requiring a weather station in closer proximity to the site, west of the north boundary of the Project Site would help facilitate the response to complaints about the Facility because it would provide data about the wind speed and wind direction at the Project Site as opposed to some distance away. With respect to the staging area, with respect to the hopper building, potentially adding an airlock in front to the hoppers so that the door opens, truck goes in, door closes, there is negative pressure, and then the truck unloads the feedstock. Finally, with respect to the staging area, he indicated possibly adding clauses from the perspective of limiting the time and frequency, the material is staged.

[536] In response to a question regarding the EPA examining the financial status of the Approval Holder, Mr. Knauss stated that EPA is not empowered to nor does EPA look into the financial well being of an applicant. He further stated the expectation is that an approval holder meets the requirements in their approval.

[537] The Director further stated that waste management conditions in the Approval are intended to manage wastes stored at the Project Site whether to be used as feedstock or that are stored post-processing as solid digestate.<sup>368</sup>

[538] The Director stated the Approval contains conditions for the end of the Facility's life that require the Approval Holder to reclaim the Project Site to an equivalent land capability that existed prior to the construction of the Facility. The Director further stated the financial security provided by the Approval Holder to EPA will ensure that the reclamation is completed.<sup>369</sup>

[539] The Director stated that the Approval Holder must comply with EPEA in addition to the Approval, with the general provision in EPEA and its regulations regarding releases into the environment, and any other provincial or municipal laws that apply to the Facility. The Director

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<sup>368</sup> Director's Response Submissions at paragraph 56.

<sup>369</sup> Director's Response Submissions at paragraph 57.

explained that the conditions in the Approval are intended to complement the general regulatory provisions in legislation.<sup>370</sup>

[540] The Director noted that Alberta does not regulate odours with OU as some provinces do.<sup>371</sup>

[541] The Director noted that many of the concerns raised by the Appellant/Intervenor Group and Intervenor are not within the Director's jurisdiction under EPEA, including traffic, noise, litter, and emergency response plans. The Director stated it was a significant request for the Board to recommend to the Minister that EPA assume regulatory responsibility for the CFO and noted that this would not be possible without legislative change.<sup>372</sup>

[542] The Director stated that Town argued the Pond should be covered. The Director stated he had described in his review of the Application and assessment of the Approval conditions, that the Approval conditions, especially those in respect of fugitive emissions monitoring, provide the assurance needed that the Facility would operate within the AAAQO limits.<sup>373</sup>

[543] The Director noted the Town had also suggested that the Facility be regulated by the AER, and the Director stated this is not possible given the current legislative regime which gives EPA oversight over the Facility under EPEA.<sup>374</sup>

[544] The Town asked Mr. Knauss on cross-examination if he was aware that the BATEA study was only of upfront construction cost and did not include the ongoing maintenance costs of covering the Pond. Mr. Knauss responded that when issuing the Approval, he did not recall if he knew or not, whether the operational costs were included. He stated however that he would assume that the percentages would be increased for all three options. He noted that with the tank or the cover, there's a significant increase of infrastructure that would be needed and with that significant increase of infrastructure needed, he would ascertain there would be a similar increase in operational costs. He further stated that while the numbers might change from 23 percent to

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<sup>370</sup> Director's Response Submissions at paragraph 58.

<sup>371</sup> Director's Response Submissions at paragraph 61.

<sup>372</sup> Director's Response Submissions at paragraph 62.

<sup>373</sup> Director's Response Submissions at paragraph 63.

<sup>374</sup> Director's Response Submissions at paragraph 63.

30 percent or 43 percent to 50 percent or 2 percent to 5 percent, the outcome may still be the same. He suggested that while this information may be helpful, he did not think it was critical.

[545] The Town asked Mr. Knauss if he was concerned there was no reduction in ammonia odours from mechanical aeration as compared to covering the Pond. Mr. Knauss stated that he was not concerned because the Pond was not anticipated to be a big emission factor. He further explained that as a comparison, the Pond was expected to be like a wastewater treatment system. He noted most odorous chemicals in the feedstock will be captured, converted, and removed in the biodigestion process. He further noted that the digestate that is left will have less carbon, less nitrogen, less chemicals. He further explained the Facility will separate the solid and liquid digestate, leaving some suspended materials in the liquid digestate, which then would get aerobically degraded. He stated the material left in the liquid digestate will be converted into carbon dioxide instead of H<sub>2</sub>S. Regarding the presence of NH<sub>3</sub>, Mr. Knauss acknowledged there may be an odour, and indicated because there was no certainty, monitoring conditions had been included in the Approval to gather empirical data instead of using assumptions.

[546] The Director concluded by stating that the Approval was appropriately issued. The Director further argued the conditions in the Approval are appropriate and sufficient to mitigate any risk to adjacent landowners, as well as the environment, when viewed in the context of other statutory provisions that also apply to the Facility.<sup>375</sup>

[547] When asked by the Town if the Compliance Directive would have affected the Approval terms and conditions, Mr. Knauss responded that the odour issues are coming from a different facility. He responded that if he tried to hold the Facility accountable for the impact of the CFO, speaking in general if the department were challenged in a legal perspective, the department would lose because they do not have authority to do so.

[548] When asked, Mr. Knauss stated that he does not think the CFO and the Facility are the same. He stated they are different corporate entities, and from his understanding a different corporate entity is different, even if owned by the same person.

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<sup>375</sup> Director's Response Submissions at paragraph 64.



[549] In response to a question from Mr. Dalton regarding the disregard of the property rights of people living adjacent to the Facility, Mr. Knauss explained that the regulations under EPEA were based on an environmental perspective and other considerations and concerns are not intended to be addressed under EPEA because they are captured by other pieces of legislation such as the MGA. He further explained under the MGA from his understanding, the local land authority has authority to consider that information. He noted with respect to traffic, as it was something specifically being addressed by another piece of legislation, he could not address or consider the matter.

[550] Mr. Knauss further explained that frequently there will be projects that require multiple jurisdictional approvals, and requiring an authorization from a partner of EPA, such as a development permit through a local municipality, which is the situation here. He explained that EPA makes the decision based on the information provided and on the limitations of its authority under the legislation. He further explained that the expectation is that the other regulatory authorities exercise their authority regarding their authorizations as well. He clarified that the director having issued an approval does not create automatically create a requirement for the land authority to issue a development permit for the same project, because this would be fettering the land authority's discretion. This means that a decision by one regulator under their legislation does not require another regulator to make a similar decision. Mr. Knauss described the regulatory scheme in Alberta as a collection of different regulators working cooperatively to regulate a lot of activities that do not fall solely under one regulator. He noted that authorizations from each applicable regulator are required before an activity can commence.

## **7. CLOSING ARGUMENTS**

### **7.1. The Appellant/Intervenor Group**

[551] The Appellant/Intervenor Group noted that the Compliance Directive indicated that shortly after the CFO was purchased by the Rimrock Cattle, RCC was installed on the CFO pen floors, which increased both the volume of runoff and the amount of solid manure runoff from the pens into the CFO's catch basins. The Appellant/Intervenor Group further argued that the

installation of the concrete was not solely related to the operational practices of the CFO but was rather an integral part of the Facility project, because the Facility requires “clean manure.”<sup>376</sup>

[552] The Appellant/Intervenor Group argued this was confirmed by Mr. Boisvert at the hearing, who stated the purpose of putting the RCC on the pen floors was to “produce clean manure as a source for clean renewable energy” and “to upgrade conventional feedlot manure into cleaner, less odorous, and homogenous manure that with further processing produces renewable fuel.”<sup>377</sup>

[553] The Appellant/Intervenor Group argued that the Approval Holder had stated during the hearing that the objective of the Facility was to capture greenhouse gas emissions and not to reduce odours from the CFO, contrary to consultations with local residents where the Approval Holder had repeatedly cited a reduction of odours from the CFO as a significant benefit of the Facility.<sup>378</sup>

[554] The Appellant/Intervenor Group argued there was irony in the Facility being the cause of the area’s odour problem, noting the installation of the RCC was both integral to the Facility and according to the Appellant/Intervenor Group, the proximate cause of the increase in the CFO’s odours.<sup>379</sup>

[555] The Appellant/Intervenor Group noted that the Director commented as an Albertan he reluctantly agreed the current odour/air quality situation is not acceptable, but that he would not provide the same response on behalf of EPA.<sup>380</sup> The Appellant/Intervenor Group noted this was because EPA does not regulate CFOs and the AAAQO do not apply to feedlots.<sup>381</sup> The Appellant/Intervenor Group argued EPA should not be allowed to ignore the installation of RCC at the CFO, if it is an integral part of the Facility.<sup>382</sup>

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<sup>376</sup> Appellant/Intervenor Group’s Initial Closing Comments at paragraph 4 and paragraph 5.

<sup>377</sup> Appellant/Intervenor Group’s Initial Closing Comments at paragraph 5.

<sup>378</sup> Appellant/Intervenor Group’s Initial Closing Comments at paragraph 6.

<sup>379</sup> Appellant/Intervenor Group’s Initial Closing Comments at paragraph 7.

<sup>380</sup> The Board clarifies that Mr. Knauss indicated it would “be a concern.” Mr. Knauss also noted that the AAAQO do not apply to agricultural operations, but in response to a question asking what if the AAAQO showed massive exceedances of H<sub>2</sub>S and NH<sub>3</sub> in the High River area, stated that those exceedances would be considered. In response to whether EPA would address this odour/air quality situation, he indicated the NRCB would.

<sup>381</sup> Appellant/Intervenor Group’s Initial Closing Comments at paragraph 9.

<sup>382</sup> Appellant/Intervenor Group’s Initial Closing Comments at paragraph 10.

[556] The Appellant/Intervenor Group argued the issue of jurisdiction over an “on-farm” biodigester co-located with a feedlot is difficult. The Appellant/Intervenor Group noted EPA has jurisdiction over the Facility and the NRCB has jurisdiction over the CFO. The Appellant/Intervenor Group argued that when the CFO installed RRC in the pens, EPA should have had the authority to regulate the CFO. The Appellant/Intervenor Group argued the Digestate MOU only applies to storage and the application of digestate and does not allocate or discuss the regulation of odour. The Appellant/Intervenor Group argued the Digestate Directive is similarly unhelpful.<sup>383</sup>

[557] The Appellant/Intervenor Group stated that since July 2024, the AAAQO include Table 3, Alberta Ambient Air Quality Guidelines for Odour Management (“Odour Guidelines”). They noted the AAAQO state the Odour Guidelines

“... do not apply to some activities carried out by the agricultural sector as odour emissions from agricultural activities carried out under generally accepted practices are addressed under [AOPA as referred to in section 116 of EPEA].”<sup>384</sup>

[558] The Appellant/Intervenor Group submitted the effect of the NRCB issuing the Compliance Directive is that the CFO must be understood to not be following generally accepted agricultural practice. The Appellant/Intervenor Group further stated that the effect of the Compliance Directive is that EPA now has jurisdiction to enforce the Odour Guidelines against the CFO.<sup>385</sup> The Appellant/Intervenor Group argued that while EPA does not have the jurisdiction to tell the CFO how to operate as this is under the jurisdiction of the NRCB. The Appellant/Intervenor Group argued that EPA can enforce the AAAQO, stating there is no conflict or inconsistency between EPA’s and the NRCB’s jurisdictions.<sup>386</sup>

[559] The Appellant/Intervenor Group argued that as they relate to the odours from the CFO and the Facility, the jurisdiction of EPA and the NRCB are not separate and distinct but are

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<sup>383</sup> Appellant/Intervenor Group’s Initial Closing Comments at paragraph 11 and paragraph 12.

<sup>384</sup> Appellant/Intervenor Group’s Initial Closing Comments at paragraph 7, citing the *Alberta Ambient Air Quality Objectives and Guidelines 2024*, Government of Alberta, Environment and Protected Areas, July 19, 2024 (“2024 AAAQO”).

<sup>385</sup> Appellant/Intervenor Group’s Initial Closing Comments at paragraph 14.

<sup>386</sup> Appellant/Intervenor Group’s Initial Closing Comments at paragraph 15.

overlapping and complementary.<sup>387</sup>

[560] The Appellant/Intervenor Group submitted that the Odour Guidelines provide tools for: odour assessment and management to identify and characterize odour, identify the source, provide a quantitative, evidence-based validation of odour-based complaints, and where applicable manage emissions from sources that impact local ambient air quality through tools such as regulatory air quality monitoring and management plans.<sup>388</sup>

[561] The Appellant/Intervenor Group further argued that section 116 of EPEA<sup>389</sup> and the provisions of the AAAQO relating to odour management appear to specifically contemplate that the Odour Guidelines may be used to enforce compliance by informing the content of environmental protection orders where the Director “is of the opinion that a substance or thing is causing or has caused an offensive odour.”<sup>390</sup>

[562] The Appellant/Intervenor Group argued there is significant overlap between the 2024 AAAQO and the measures that may be permitted in an environmental protection order issued under section 116(3) of EPEA.<sup>391</sup> The Appellant/Intervenor Group disagreed with the

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<sup>387</sup> Appellant/Intervenor Group’s Final Closing Comments at paragraph 20.

<sup>388</sup> Appellant/Intervenor Group’s Initial Closing Arguments at paragraph 16.

<sup>389</sup> Section 116 of EPEA provides in part:

- 116(1) Where the Director is of the opinion that a substance or thing is causing or has caused an offensive odour, the Director may issue an environmental protection order to the person responsible for the substance or thing.
- (2) Subsection (1) does not apply in respect of an offensive odour that results from an agricultural operation that is carried out in accordance with generally accepted practices for such an operation or in respect of which recommendations under Part 1 of the *Agricultural Operation Practices Act* indicate that the agricultural operation follows a generally accepted agricultural practice.

...  
<sup>390</sup> Appellant/Intervenor Group’s Initial Closing Comments at paragraph 17.

<sup>391</sup> Section 116(3) of EPEA provides:

- 116(3) An environmental protection order under this section may order the person to whom it is directed to take any or all of the following measures:
  - (a) investigate the situation;
  - (b) take any action specified by the Director to prevent the offensive odour;
  - (c) minimize or remedy the effects of the offensive odour;
  - (d) monitor, measure, contain, remove, store, destroy or otherwise dispose of the substance or thing causing the offensive odour or lessen or prevent the offensive odour;
  - (e) install, replace or alter any equipment or thing in order to control or eliminate the offensive odour;

Director's evidence that he could not enforce the AAAQO against the CFO.<sup>392</sup>

[563] The Appellant/Intervenor Group noted the Director had stated more than once that in issuing the Approval, he considered the Facility would likely result in a reduction in regional odours. The Appellant/Intervenor Group submitted the evidence does not support this position.<sup>393</sup>

[564] The Appellant/Intervenor Group noted the Approval Holder characterized the reduction in odours as a secondary benefit to the Facility. The Appellant/Intervenor Group stated the evidence supports the Approval Holder used the reduction in odours from the CFO as a major selling point during consultation after the Application was submitted to EPA.<sup>394</sup>

[565] The Appellant/Intervenor Group noted the Approval Holder had first stated the odours would be reduced by 42 percent and then by 45 percent. They argued the problem is the evidence supporting the alleged reduction is flimsy. The Appellant/Intervenor Group further argued the better evidence is that there will be no significant reduction in the odours from the CFO. The Appellant/Intervenor Group argued the evidence suggested there was the potential for an overall increase in odours.<sup>395</sup>

[566] The Appellant/Intervenor Group stated the Approval Holder did not assess odour from either the Facility or the CFO, until asked to do so by EPA in SIR No. 1, after which the Approval Holder had Horizon Compliance prepare the Updated AQA. The Appellant/Intervenor Group noted that in support of the updated AQA the Approval Holder had prepared an odour assessment.<sup>396</sup>

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- (f) construct, improve, extend or enlarge a plant, structure or thing if that is necessary to control or eliminate the offensive odour;
  - (g) take any other action the Director considers to be necessary;
  - (h) report on any matter ordered to be done in accordance with directions set out in the order.

<sup>392</sup> Appellant/Intervenor Group's Initial Closing Comments at paragraph 18 and paragraph 19.

<sup>393</sup> Appellant/Intervenor Group's Initial Closing Comments at paragraph 20.

<sup>394</sup> Appellant/Intervenor Group's Initial Closing Comments at paragraph 21.

<sup>395</sup> Appellant/Intervenor Group's Initial Closing Comments at paragraph 22.

<sup>396</sup> Appellant/Intervenor Group's Initial Closing Comments at paragraph 23.

[567] The Appellant/Intervenor Group noted that Triton had indicated that the odour assessment acknowledges that the quantification of odours is “highly variable and dependent on multiple factors” and “assumptions.”<sup>397</sup>

[568] The Appellant/Intervenor Group noted that Triton had observed that the Facility would result in significant changes to the manure management practices at the CFO, increasing the frequency of pen cleaning and reducing manure storage times, which would result in an overall reduction in the catch basin volumes. The Appellant/Intervenor Group cited the Triton Memorandum as providing that the feedlot pens would have an assumed odour reduction of 47 percent, and the catch basins would have an odour reduction of 50.9 percent.<sup>398</sup>

[569] The Appellant/Intervenor Group noted the Triton Memorandum was provided to Dr. Piorkowski, who stated the estimated odour reduction and reduction in emission rates for CFO’s pens was a gross overestimate as odour from feedlot pens is a function of animal unit numbers and environmental conditions, and manure removal would likely only influence odour by approximately 15 percent. He further stated that the influence of the frequency of manure removal had likely been overestimated by a factor of 3. Dr. Piorkowski also commented that the estimated reduction in odour from the catch basins was also exaggerated, and that the Facility would likely have a minimal effect on the emissions from the catch basins.<sup>399</sup>

[570] The Appellant/Intervenor Group argued that Dr. Piorkowski’s comments were not shared with the Approval Holder nor did Dr. Piorkowski review the Updated 2023 AQA. The Appellant/Intervenor Group further noted that Dr. Piorkowski had indicated that his opinion had not changed.<sup>400</sup>

[571] The Appellant/Intervenor Group argued that the Approval Holder did not prepare an updated odour assessment for SIR No. 2, nor did it justify the claims to the odour reductions, beyond stating that the Facility would reduce onsite storage volumes at the CFO, increase the

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<sup>397</sup> Appellant/Intervenor Group’s Initial Closing Comments at paragraph 24, citing the Triton Memorandum.

<sup>398</sup> Appellant/Intervenor Group’s Initial Closing Comments at paragraph 25, citing the Triton Memorandum.

<sup>399</sup> Appellant/Intervenor Group’s Initial Closing Comments at paragraph 26, citing Dr. Piorkowski’s email to Ping Zhao, dated February 27, 2023, Director’s Record Tab 34.

<sup>400</sup> Appellant/Intervenor Group’s Initial Closing Comments at paragraph 27.

frequency of pen cleanings, and reduce the amount of matter entering the catch basins through surface water runoff.<sup>401</sup> The Approval Holder argued the Director seemed to accept the Approval Holder's claim that the Facility would reduce the mass emission rates for H<sub>2</sub>S and NH<sub>3</sub> for the CFO by 48.2 percent.<sup>402</sup>

[572] The Appellant/Intervenor Group argued the Director did not attempt to confirm or verify the emission rates in the Approval Holder's dispersion modelling. The Appellant/Intervenor Group argued this was a dereliction of the Director's obligation to critically assess and evaluate the Approval Holder's claims about the environmental performance of the Facility.<sup>403</sup> The Appellant/Intervenor Group further argued that the Director did not consider the risk of the Facility not reducing odours at all.<sup>404</sup>

[573] The Appellant/Intervenor Group summarized Mr. Urbain's testimony:

1. H<sub>2</sub>S emissions from manure at the feedlot are likely overestimated;
2. NH<sub>3</sub> emissions from the feedlot are significantly underestimated;
3. H<sub>2</sub>S emissions from the manure storage and blending area at the Facility are likely underestimated;
4. H<sub>2</sub>S emissions from the food waste at the Facility are likely underestimated;
5. NH<sub>3</sub> emissions from the solid digestate storage are likely underestimated; and
6. Emissions from the liquid digestate pond are likely underestimated.<sup>405</sup>

[574] The Appellant/Intervenor Group argued the results of the AQA do not correlate with the complaints. The Appellant/Intervenor Group noted that according to Mr. Urbain, the AQA indicates the primary concern is H<sub>2</sub>S emissions, yet the complaints indicate that the primary concern is ammonia odours.<sup>406</sup> The Appellant/Intervenor Group argued that if the AQA were accurate, the complaints would relate to rotten eggs, not ammonia. They further argued this lack of correlation corroborates Mr. Urbain's opinion that the AQA modelling contains major errors.<sup>407</sup>

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<sup>401</sup> Appellant/Intervenor Group's Initial Closing Comments at paragraph 29.

<sup>402</sup> Appellant/Intervenor Group's Initial Closing Comments at paragraph 31.

<sup>403</sup> Appellant/Intervenor Group's Initial Closing Comments at paragraph 32.

<sup>404</sup> Appellant/Intervenor Group's Initial Closing Comments at paragraph 33.

<sup>405</sup> Appellant/Intervenor Group's Initial Closing Comments at paragraph 36.

<sup>406</sup> Appellant/Intervenor Group's Initial Closing Comments at paragraph 37.

<sup>407</sup> Appellant/Intervenor Group's Initial Closing Comments at paragraph 38.

[575] The Appellant/Intervenor Group argued observed that Mr. Halleran had not correlated the AQA to the odour complaints, and had testified that the dispersion modelling was carried out according to standard protocols and guidelines. The Appellant/Intervenor Group noted Mr. Urbain's professional credentials and experiences, and argued that his evidence should be preferred to Mr. Halleran's evidence.<sup>408</sup>

[576] The Appellant/Intervenor Group noted that the Director's proposed changes to the Approval to require a Fugitive Emissions Monitoring Program prior to commencing operations, a redundant set of scrubbers in the Odour Abatement System, and requiring a meteorological station, were suggestions made by Mr. Urbain. The Appellant/Intervenor Group further noted that enclosing the manure staging area appeared to be a suggestion in response to a concern raised by Mr. Urbain regarding NH<sub>3</sub> emissions from the solid digestate piles. The Appellant/Intervenor Group further noted that Mr. Urbain had also recommended requiring an airlock to be constructed around the manure receiving hoppers.<sup>409</sup>

[577] The Appellant/Intervenor Group requested that if the Board did not recommend that the decision to issue the Approval be reversed, that the Board recommend that the Approval be varied to reflect the proposed changes by the Director,<sup>410</sup> and to include Mr. Urbain's recommendation that the Facility meet an odour impact limit of 10 OU at the property line.<sup>411</sup> The Appellant/Intervenor Group argued that compliance with this condition could be determined through odour monitoring at the source and conducting dispersion monitoring to determine the OU limit at the property line.<sup>412</sup>

[578] The Appellant/Intervenor Group argued it was appropriate to reverse the decision to issue the Approval as the evidentiary basis for issuing the Approval was undermined. They further argued the Approval cannot stand if there is no persuasive evidence that the environmental effects of the project will be acceptable.<sup>413</sup>

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<sup>408</sup> Appellant/Intervenor Group's Initial Closing Comments at paragraph 39 and paragraph 40.

<sup>409</sup> Appellant/Intervenor Group's Initial Closing Comments at paragraph 41 and paragraph 42.

<sup>410</sup> Appellant/Intervenor Group's Initial Closing Comments at paragraph 38, at page 18.

<sup>411</sup> Appellant/Intervenor Group's Initial Closing Comments at paragraph 42, at page 19 and page 20.

<sup>412</sup> Appellant/Intervenor Group's Initial Closing Comments at paragraph 43, at page 20.

<sup>413</sup> Appellant/Intervenor Group's Initial Closing Comments at paragraph 40, at page 18.



[579] The Appellant/Intervenor Group restated that another remedy would be to allow the Approval to stand but to not allow construction to commence until a revised AQA is resubmitted which satisfies the Director that odour emissions from the Facility and CFO have been properly assessed.<sup>414</sup>

[580] The Appellant/Intervenor Group noted section 116(2) of EPEA<sup>415</sup> and argued the Director may issue an environmental protection order (“EPO”) in respect of offensive odours. The Appellant/Intervenor Group argued the plain meaning of section 116(2) of EPEA was that if an agricultural operation is not being carried out in accordance with generally accepted agricultural practices, an EPO may be issued.<sup>416</sup>

[581] The Appellant/Intervenor Group referred to section 1(1)(b.8) of AOPA<sup>417</sup> and argued the plain meaning is that a practice that is not conducted in a manner consistent with appropriate and accepted customs and standards is not a “generally accepted agricultural practice.” The Appellant/Intervenor Group noted the NRCB had determined the CFO was creating an inappropriate disturbance and submitted that an inappropriate disturbance cannot be created by following a generally accepted agricultural practice.<sup>418</sup>

[582] The Appellant/Intervenor Group argued that section 116(2) of EPEA does not apply and the Director therefore has jurisdiction to issue an EPO against the CFO, and the Director’s

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<sup>414</sup> Appellant/Intervenor Group’s Initial Closing Comments at paragraph 41, at page 18.

<sup>415</sup> Section 116 of EPEA provides in part:

116(1) Where the Director is of the opinion that a substance or thing is causing or has caused an offensive odour, the Director may issue an environmental protection order to the person responsible for the substance or thing.

(2) Subsection (1) does not apply in respect of an offensive odour that results from an agricultural operation that is carried out in accordance with generally accepted practices for such an operation or in respect of which recommendations under Part 1 of the *Agricultural Operation Practices Act* indicate that the agricultural operation follows a generally accepted agricultural practice.

...

<sup>416</sup> Appellant/Intervenor Group’s Final Closing Comments at paragraph 3 and paragraph 4.

<sup>417</sup> Section 1(1)(b.8) of AOPA provides:

“generally accepted agricultural practice” means a practice that is conducted in a manner consistent with appropriate and accepted customs and standards as established and followed by similar agricultural operations under similar circumstances, and without restricting the generality of the foregoing includes the use of innovative technology used with advanced management practices;

<sup>418</sup> Appellant/Intervenor Group’s Final Closing Comments at paragraph 5 and paragraph 6.

assertion that an EPO can only be issued to a feedlot not operating under an AOPA regulatory permit is not supported by the legislative scheme. The Appellant/Intervenor Group acknowledged that regardless of this jurisdiction, the Director issuing an EPO now would have little value, in light of the Compliance Directive having been issued.<sup>419</sup>

[583] The Appellant/Intervenor Group argued that the Approval Holder was incorrect in arguing that section 8(2)(b) of AOPA<sup>420</sup> requires a Practice Review Committee (“PRC”) to determine what constitutes a generally accepted agricultural practice, arguing that section 8(2)(b) is permissive and the entire PRC process in AOPA is voluntary. Therefore, a PRC does not need to be established for an odour to be found the result of conduct that is not a generally accepted agricultural practice. The Appellant/Intervenor Group argued this interpretation is supported by section 5(1)(a) of AOPA<sup>421</sup> which provides the Minister of Agriculture and Irrigation with discretion to establish a PRC if the subject matter of the application is the subject matter of an enforcement order issued under section 39 of AOPA.<sup>422</sup> The effect of this, argued the

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<sup>419</sup> Appellant/Intervenor Group’s Final Closing Comments at paragraph 8.

<sup>420</sup> Section 8(2)(b) of AOPA provides:

8(2) The practice review committee may inquire into and assist the parties in resolving the matter and, if the matter is not resolved, may recommend to the Minister

...

(b) what should constitute a generally accepted agricultural practice in respect of an agricultural operation.

<sup>421</sup> Section 5(1)(a) of AOPA provides:

5(1) On receipt of a request under section 1.3, an application under section 3 or a referral under section 38.1, the Minister may

(a) refuse to consider the request, application or referral if, in the Minister’s opinion,

- (i) the subject-matter of the request, application or referral is without merit, frivolous or vexatious,
- (ii) the subject-matter of the request, application or referral has already been considered by a practice review committee,
- (iii) the subject-matter of the application or referral is the subject-matter of an enforcement order under section 39, a review being held by the Board under section 41 or an emergency order under section 42.1,
- (iv) the request, application or referral is not made in good faith, or
- (v) the applicant or person aggrieved does not have a sufficient connection to the subject-matter of the application,

<sup>422</sup> ...

Section 39 of AOPA provides:

Appellant/Intervenor Group, is that the Minister of Agriculture and Irrigation can refuse to appoint a PRC to inquire into generally accepted agricultural practices because the issuance of the inappropriate disturbance order means the issue has already in effect been addressed.<sup>423</sup>

[584] The Appellant/Intervenor Group noted that if an operator is creating an inappropriate disturbance, under section 38.1 of AOPA,<sup>424</sup> the matter may be referred to the Minister of Agriculture and Irrigation to establish a PRC. The Appellant/Intervenor Group argued the ability of the PRC to inquire both into whether an operator is following a generally accepted agricultural practice or is creating an inappropriate disturbance “makes sense,” as one is essentially the reverse of the other. The Appellant/Intervenor Group further argued that an application under section 3 of AOPA<sup>425</sup> and referral under section 38.1 of AOPA concern the same thing, an

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39(1) 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 ordering any of the following:

- (a) repealed 2004 c14 s19;
- (b) directing the person to create a plan to ensure compliance with this Act, the regulations and the approval, registration, authorization, variance or cancellation;
- (c) directing the person to stop engaging in anything that is described in the enforcement order, subject to any terms or conditions set out in the order;
- (d) directing the person to undertake any investigation, construction, alteration, repair or other measures specified in the enforcement order, within the time specified in the enforcement order;
- (e) suspending an approval, registration or authorization until a specified time or until specified conditions are met;
- (f) specifying the measures that must be taken in order to effect compliance with the approval, registration, authorization, variance, cancellation, this Act or the regulations.

...

<sup>423</sup> Appellant/Intervenor Group’s Final Closing Comments at paragraph 9 through paragraph 12.

<sup>424</sup> Section 38.1 of AOPA provides:

38.1 If in the opinion of the Board a person may be creating an inappropriate disturbance, the Board may refer the matter to the Minister and request the Minister to establish a practice review committee.

<sup>425</sup> Section 3 of AOPA provides:

3(1) A person who is aggrieved by, or an owner or operator who is aware that a person is aggrieved by, any odour, noise, dust, smoke or other disturbance resulting from an agricultural operation may apply in writing to the Minister to request consideration of whether the disturbance results from a generally accepted agricultural practice.

agricultural operation is creating a nuisance disturbance, and the PRC may inquire into whether the disturbance is inappropriate, based on whether the operator is following generally accepted agricultural practices.<sup>426</sup>

[585] The Appellant/Intervenor Group argued that the NRCB did not request the Minister of Agriculture and Irrigation establish a PRC against the CFO because it did not need to, as its investigation determined the CFO was creating an inappropriate disturbance. The Appellant/Intervenor Group argued that based on the foregoing analysis this is the same as finding the CFO is not following generally accepted agricultural practices, and therefore EPA could issue an EPO against the CFO if the odour problem does not improve because of the Compliance Directive.<sup>427</sup>

[586] The Appellant/Intervenor Group argued against “approval creep,” where if individual projects do not exceed the AAAQO, they will be approved notwithstanding a continued deterioration of regional air quality.<sup>428</sup>

[587] The Appellant/Intervenor Group argued the Approval Holder’s citation of *Vipond* was selective and that *Vipond* supports that most of the concerns raised by the Appellant/Intervenor Group are relevant.<sup>429</sup> The Appellant/Intervenor Group argued its concerns regarding odour, noise, pests, aesthetics, and emergency response are relevant and within the Board’s jurisdiction.<sup>430</sup>

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(2) An application under subsection (1) must be in writing and must contain a statement of the nature of the disturbance, the name and address of the applicant, the location of the agricultural operation, the name and address of the owner or operator, if known, the name and address of the person who is aggrieved and the steps taken by the applicant, if any, to resolve the disturbance.

(3) The parties to an application are the applicant, the owner or operator or the person aggrieved and any other person the Minister considers appropriate.

(4) The parties to a referral to the Minister under section 38.1 are the Board, the owner or operator about whom the referral is made and, if a practice review committee is appointed to consider the referral, any other person the practice review committee considers to be directly affected.

<sup>426</sup> Appellant/Intervenor Group’s Final Closing Comments at paragraph 14 through paragraph 16.

<sup>427</sup> Appellant/Intervenor Group’s Final Closing Comments at paragraph 17.

<sup>428</sup> Appellant/Intervenor Group’s Final Closing Comments at paragraph 19.

<sup>429</sup> Appellant/Intervenor Group’s Final Closing Comments, citing *Vipond* at paragraphs 104 through 106, and paragraph 116.

<sup>430</sup> Appellant/Intervenor Group’s Final Closing Comments at paragraph 21 and paragraph 22.

[588] The Appellant/Intervenor Group noted that Mr. Urbain was clear that he had not conducted his own dispersion modelling, which was not possible in the context of the Board proceedings. The Appellant/Intervenor Group stated that Mr. Urbain had indicated that he could not definitely state if the Facility would result in a reduction of odours; there would be a reduction in odours from the CFO, but these may be offset by new odours from the Facility. The Appellant/Intervenor Group argued that what could be stated with certainty is that the claim of a 47 percent reduction in odours was not realistic.<sup>431</sup>

[589] The Appellant/Intervenor Group argued that while there may be a reduction in odours from the CFO, these will be balanced against a new source of odours, the Facility.<sup>432</sup>

[590] The Appellant/Intervenor Group argued that given the errors in the AQA the Director had no basis for determining the Facility would not make the air quality worse.<sup>433</sup>

[591] The Appellant/Intervenor Group argued the AQA did not assess odour, but assessed two chemicals, H<sub>2</sub>S and NH<sub>3</sub>.<sup>434</sup>

[592] The Appellant/Intervenor Group noted Dr. Piorkowski's evidence regarding the influence of animal unit numbers and environmental conditions such as wind, temperature, moisture and pH of the manure, and argued that the changes in management practices at the CFO are expected to have minimal impacts to odour.<sup>435</sup>

[593] The Appellant/Intervenor Group argued that the Approval Holder's argument that the high number of odour complaints starting after July 2022 was in part because of objections to the Facility was spurious. The Appellant/Intervenor Group further stated that when this suggestion was put to Ms. Estes in cross-examination, she denied encouraging people to lodge odour complaints about the CFO by starting a Facebook page opposing the Facility and indicated she had

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<sup>431</sup> Appellant/Intervenor Group's Final Closing Comments at paragraph 24 and paragraph 25.

<sup>432</sup> Appellant/Intervenor Group's Final Closing Comments at paragraph 24.

<sup>433</sup> Appellant/Intervenor Group's Final Closing Comments at paragraph 26.

<sup>434</sup> Appellant/Intervenor Group's Final Closing Comments at paragraph 27.

<sup>435</sup> Appellant/Intervenor Group's Final Closing Comments at paragraph 28.

created the page in December 2022. The Appellant/Intervenor Group stated Ms. Estes simply provided information on how a person could complain.<sup>436</sup>

[594] The Appellant/Intervenor Group acknowledged Mr. Urbain had said that the H<sub>2</sub>S and NH<sub>3</sub> emissions from the Facility likely meet the AAAQO, but noted he also stated the Facility is unlikely to reduce complaints about regional odours.<sup>437</sup>

[595] The Appellant/Intervenor Group noted that Mr. Urbain used the Approval Holder's own studies to demonstrate where errors were made in selecting emission factors and rates. The Appellant/Intervenor Group stated they dispute the studies and articles relied upon by Dr. Facey. The Appellant/Intervenor Group argued that Mr. Urbain did not need to be an expert in manure management to read the studies and articles, and form judgements regarding the emission factors and whether they were supported.<sup>438</sup>

[596] The Appellant/Intervenor Group argued that Mr. Urbain was not retained to review the Odour Monitoring Report. Further, the Appellant/Intervenor Group rejected the Approval Holder's argument that its AQA is supported by the Odour Monitoring Report, noting that the Odour Monitoring Report identified confined feeding operations as a source of NH<sub>3</sub> odours. The Appellant/Intervenor Group noted that if the Approval Holder's AQA is to be believed, there is no issue with NH<sub>3</sub> odours from the CFO and therefore, the thousands of odour complaints are somehow not legitimate.<sup>439</sup>

[597] The Appellant/Intervenor Group stated Mr. Urbain recommended sampling emissions at the source, the Odour Abatement System stack, the manure and solid digestate storage area, and the Pond, and using the measurements to convert into OU fence line values through standard air dispersion modeling. The Appellant/Intervenor Group argued that not having done this to date in Alberta, does not mean it is an appropriate way to do it this time.<sup>440</sup>

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<sup>436</sup> Appellant/Intervenor Group's Final Closing Comments at paragraph 29 and paragraph 30.

<sup>437</sup> Appellant/Intervenor Group's Final Closing Comments at paragraph 31.

<sup>438</sup> Appellant/Intervenor Group's Final Closing Comments at paragraph 32 and paragraph 34.

<sup>439</sup> Appellant/Intervenor Group's Final Closing Comments at paragraph 35 through paragraph 37.

<sup>440</sup> Appellant/Intervenor Group's Final Closing Comments at paragraph 38 through 40.

[598] The Appellant/Intervenor Group stated that regarding the Director's not relying on the AQA, nothing in the Director's Record documents EPA's use of technology-based limits rather than the Approval Holder's calculated emission rates. The Appellant/Intervenor Group further stated the technology-based limits only apply to the Odour Abatement System stack, not the manure and digestate storage area, the Pond, or the CFO.<sup>441</sup>

[599] The Appellant/Intervenor Group noted the Director had not cited an authority for the proposition that he could not issue an approval solely because the Cumulative Case exceeds the AAAQO. The Appellant/Intervenor Group argued there must be a reason why the Director requires the applicants to model the Project Case and Cumulative Case.<sup>442</sup>

[600] The Appellant/Intervenor Group noted that while the Director has compared the conditions in the Approval requiring a fugitive emissions monitoring program as being uniquely similar and comparable to standards for oil sands mines and tailings ponds, the Facility is unique in Alberta. The Appellants argued there is no facility in Alberta of comparable size or using comparable feedstock. The Appellant/Intervenor Group further stated that to their knowledge, no one was living within 200 m of an oil sands mine or tailings pond.<sup>443</sup>

[601] The Appellant/Intervenor Group noted the Director had suggested it may be possible to add conditions to the Approval to make structural changes to the Facility to further reduce emissions, including a redundant carbon filter, enclosing the manure hoppers and adding an airlock, and installing an onsite meteorological station to support the Fugitive Emissions Monitoring Program.<sup>444</sup>

[602] The Appellant/Intervenor Group noted the Approval Holder provided costs and a BATEA study for these options, arguing against potential revisions. The Appellant/Intervenor Group further noted the Approval Holder was not against including a second filter or adding a meteorological station. The Appellant/Intervenor Group argued the response to the request for the

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<sup>441</sup> Appellant/Intervenor Group's Final Closing Comments at paragraph 41 through 43.

<sup>442</sup> Appellant/Intervenor Group's Final Closing Comments at paragraph 44 and paragraph 45.

<sup>443</sup> Appellant/Intervenor Group's Final Closing Comments at paragraph 46 and paragraph 47.

<sup>444</sup> Appellant/Intervenor Group's Final Closing Comments at paragraph 48.

costs was not a time to reargue against potential revisions and the Approval Holder's response was inappropriate.<sup>445</sup>

[603] The Appellant/Intervenor Group noted the AQA did not include the emissions from the activity of unloading the feedstock into the hopper and the Approval Holder had argued that 97 percent of the emissions were considered to be captured by the Odour Abatement System and were not treated as fugitive emissions. The Appellant/Intervenor Group argued that as the trucks are outside the building, the Approval Holder had to acknowledge some percentage of manure emissions would not be captured. The Appellant/Intervenor Group further argued that it is highly unlikely that a majority of the emissions will be captured by the Odour Abatement System.<sup>446</sup>

[604] The Appellant/Intervenor Group requested the Board vary the Approval as recommended by the Director in relation to the feedstock hopper building.<sup>447</sup>

[605] The Appellant/Intervenor Group submitted that:

1. the CFO and the Facility have common ownership;
2. the CFO was not a source of odour complaints prior to the change in ownership;
3. the Odour Monitoring Report, Odour Complaints Report, and Compliance Directive establish the CFO is a prime contributor to the poor air quality in the High River area;
4. installation of the RCC at the feedlot was required to ensure a clean source of manure for the Facility, which has been described as an "on-farm facility;"
5. EPA could not rely on the Approval Holder's calculated emission factors and rates for the CFO and the Facility contained in the AQA;
6. the Approval Holder's position that the Facility will reduce odours from the CFO by 47 percent is not tenable; and
7. the Approval Holder would not have installed an odour abatement system if the Director had not required it.<sup>448</sup>

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<sup>445</sup> Appellant/Intervenor Group's Final Closing Comments at paragraph 49.

<sup>446</sup> Appellant/Intervenor Group's Final Closing Comments at paragraph 51 and paragraph 52.

<sup>447</sup> Appellant/Intervenor Group's Final Closing Comments at paragraph 53.

<sup>448</sup> Appellant/Intervenor Group's Final Closing Comments at paragraph 54.



The Appellant/Intervenor Group argued that based on the foregoing, the CFO and the Facility should be treated as an integrated facility, and therefore the cumulative exceedances of H<sub>2</sub>S and NH<sub>3</sub> should be considered.<sup>449</sup>

[606] The Appellant/Intervenor Group further argued that the Facility will not make things better but will worsen the situation. The Appellant/Intervenor Group argued the decision to issue the Approval should be reversed or varied to include the conditions recommended by Mr. Urbain and the Director.<sup>450</sup>

## **7.2. The Presties**

[607] The Presties argued the decision to issue the Approval was inappropriate. They argued all regulatory bodies involved with the Facility should have been involved in the decision to approve the Facility.<sup>451</sup>

[608] The Presties argued that as the Facility would be producing renewable natural gas being injected into the AUC low pressure system, the AUC should have made the decision to approval the Facility or have been involved in the decision to approve the Facility.<sup>452</sup>

[609] The Presties argued the County should have been involved in the Application prior to the Approval being issued, as the Approval was issued for a facility in the wrong land use zone. The Presties stated the County has not redesignated the land use zone.<sup>453</sup>

[610] The Presties argued the Approval Holder should be responsible for the odours from the CFO, being dependent upon the CFO and having an ownership interest in the CFO. The Presties argued that as the CFO is a partner in the Facility, the combined impact should be considered.<sup>454</sup>

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<sup>449</sup> Appellant/Intervenor Group's Final Closing Comments at page 19, paragraph 40. Note the numbering in the Appellant/Intervenor Group's restarted around page 18.

<sup>450</sup> Appellant/Intervenor Group's Final Closing Comments at page 19, paragraph 41.

<sup>451</sup> Presties' Initial Closing Comments at page 1.

<sup>452</sup> Presties' Initial Closing Comments at page 1.

<sup>453</sup> Presties' Initial Closing Comments at page 1.

<sup>454</sup> Presties' Initial Closing Comments at page 1. See also Presties' Final Closing Comments at page 1.

[611] The Presties restated the CFO has created several impacts which affect their quality of life and ability to enjoy being outside on their property. They further stated they have made several complaints to the NRCB without improvements to the odour.<sup>455</sup>

[612] The Presties argued the Facility will aggravate many of their longstanding issues with the CFO, further reducing their quality of life. The Presties argued the Facility will further decrease their quality of life by increasing the odour, noise, and traffic problems they are already experiencing. The Presties argued the Facility will affect their views. The Presties argued the Facility will also diminish their property values.<sup>456</sup>

[613] The Presties argued the Pond will add new odour from a new location along with additional pests. The Presties argued the Pond should be covered and attached to the Odour Abatement System. The Presties argued the Pond will generate fog in the winter months that will obscure roads in addition to generating odours.<sup>457</sup>

[614] The Presties argued reducing the Facility's NH<sub>3</sub> emissions by 8.2 percent may be insignificant to the Approval Holder, however it is huge to the immediate neighbours and surrounding communities.<sup>458</sup>

[615] The Presties argued that if covering the Pond is unaffordable, the size of the Facility should be reduced.<sup>459</sup>

[616] The Presties noted the Approval Holder objected to the Director's proposed conditions to enlarge the feedstock receiving hopper building to enable the trucks to enter and be enclosed in negative air pressure, and to not storing manure in the manure storage area for longer than 24 hours per occurrence and no more than one occurrence every 30 days. The Presties argued these conditions would minimize the negative effects of the Facility and should not be removed.<sup>460</sup>

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<sup>455</sup> Presties' Initial Closing Comments at page 2.

<sup>456</sup> Presties' Initial Closing Comments at page 2.

<sup>457</sup> Presties' Final Closing Comments at page 1.

<sup>458</sup> Presties' Final Closing Comments at page 2.

<sup>459</sup> Presties' Final Closing Comments at page 2.

<sup>460</sup> Presties' Initial Closing Comments at page 2.

[617] The Presties argued the Approval is quite lenient and the codes, methods, practices, directives, and criteria are antiquated. The Presties further argued the regulations have not kept paces with the changing world.<sup>461</sup>

[618] The Presties restated the Facility will visually impact the rural setting and should be relocated to the 2A Industrial Corridor.<sup>462</sup>

[619] The Presties restated their concerns regarding the noise, odours, traffic, and impacts caused by the CFO operations. The Presties referred to section 687 of the MGA<sup>463</sup> and argued that development should not materially interfere with or affect the enjoyment or value of neighbouring parcels of land.<sup>464</sup>

### **7.3. The Daltons**

[620] The Daltons argued the Government of Alberta and the regulatory bodies should consider the rights of the citizens over business interests, economics, and political ideologies.

[621] The Daltons argued the Facility is not economically sustainable without the benefit of government credits and grants. The Daltons argued the Facility could be equally economically viable in the 2A Industrial Corridor north of the Town.<sup>465</sup>

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<sup>461</sup> Presties' Final Closing Comments at page 2.

<sup>462</sup> Presties' Final Closing Comments at page 2 and page 3.

<sup>463</sup> The Board assumes Ms. Prestie intended to refer to section 687(3)(d)(i) of the MGA. Section 687(3)(d)(i) of the MGA provides:

687(3) In determining an appeal, the board hearing the appeal referred to in subsection (1)

...

(d) may make an order or decision or issue or confirm the issue of a development permit even though the proposed development permit does not comply with the land use bylaw if, in its opinion,

(i) the proposed development would not

(A) unduly interfere with the amenities of the neighbourhood, or

(B) materially interfere with or affect the use, enjoyment or value of neighbouring parcels of land,

....

The Board notes that pursuant to section 685 of the MGA, a person may appeal certain decisions under the MGA to the subdivision and development appeal board or the Land Property Rights Tribunal, including development permits. Section 687 of the MGA relates to the appeal of a development permit under the MGA. The appeals before the Board are of an EPEA Approval issued to the Approval Holder, which is governed by different legislation.

<sup>464</sup> Presties' Initial Closing Comments at page 2. See also Presties' Final Closing Comments at page 3 and page 4.

<sup>465</sup> Dalton's Closing Comments at paragraph 4.

[622] The Daltons argued the Facility is inconsistent with a rural farm setting. They further argued that while the Facility is not a wind turbine or solar project as contemplated by the Pristine Landscape Restriction Zones, the Facility will still have a negative impact on rural views.<sup>466</sup>

[623] The Daltons argued it was irrelevant and moot that they moved knowing the CFO was near their home. They further argued that the feedlot was essentially closed when they moved, and they would have purchased elsewhere had they known it would reopen.<sup>467</sup>

[624] The Daltons argued the uncertainty around the science and the data relied on for the Application means that the Application should have been rejected based on a lack of reliability. They further argued the Director should have commissioned an independent expert to review the data to ensure there were no mistakes or exaggerations.<sup>468</sup>

[625] The Daltons argued the Director should not have used industrial release limits for determining if the Application met regulatory requirements. They argued the Facility will not be located on industrial land or next to industrial properties, but residential properties. They further argued that by the Director's own admission this was the first facility of "this kind and of this magnitude, to be co-located with a beef feedlot."<sup>469</sup>

[626] The Daltons argued it was not sufficient for the Director to argue that siting of the Facility fell under a different jurisdiction, but that the Director had to consider the location when applying industrial release limits to a facility near residences and a town.<sup>470</sup>

[627] The Daltons argued it would have been sensible for EPA to include a remedy in the regulations for shortfalls to align with current technologies prior to approving the Application and maintaining the status quo. The Daltons further argued it was insufficient to cite the current regulations to justify the Application when there are clear regulatory gaps. They argued that EPA

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<sup>466</sup> Dalton's Closing Comments at paragraph at 5(a) through 5(c).

<sup>467</sup> Dalton's Closing Comments at paragraph at 5(d).

<sup>468</sup> Dalton's Closing Comments at paragraph at 6.

<sup>469</sup> Dalton's Closing Comments at paragraph 7(b).

<sup>470</sup> Dalton's Closing Comments at paragraph 7(c).

not being able to weigh in on the appropriateness of the location was a shortfall in EPA's regulatory authority.<sup>471</sup>

[628] The Daltons argued the same outcomes for oversight of the Facility could be achieved if EPA had its authority expanded, and therefore AER did not need to be given regulatory authority to oversee the Facility. The Daltons specifically noted one change should be that if the CFO and the Facility are co-located and basically one and the same, both should fall under the regulation of EPA. The Daltons argued this would reduce the "hot potato" effect of different regulatory bodies approaching noncompliance and complaints, as EPA would be able to act on a complaint. The Daltons further argued EPA should have been required to have the appropriate regulatory body weigh in on commercial traffic and traffic safety prior to the Approval being issued, and that there should be a directive or regulation requiring EPA to do so.<sup>472</sup>

[629] The Daltons argued that if the best available technology is too expensive for the location, the project is not suitable for the selected location, and the Application should have been rejected.<sup>473</sup>

[630] The Daltons argued that regardless of the expense to the Approval Holder, the Facility caused them to lose property value. The Daltons further queried why they should be the ones forced to move. They noted they will not be compensated for that loss unless the Approval Holder chooses to negotiate with them. They further stated they are members of the local community, have social connections in the community and they do not want to move.<sup>474</sup>

[631] The Daltons argued that the Board should consider the current legislation as binding EPA to ensuring that every aspect of an application/approval is taken into consideration such as location, traffic, and co-location with the CFO.<sup>475</sup>

[632] The Daltons asked the Board to recommend to the Minister that the current regulations are inadequate in failing to require EPA to consider all aspects of an application

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<sup>471</sup> Daltons' Closing Comments at paragraph 8(a) and 8(b).

<sup>472</sup> Daltons' Closing Comments at paragraph 8(c)(i).

<sup>473</sup> Daltons' Closing Comments at paragraph 9.

<sup>474</sup> Daltons' Closing Comments at paragraph 10.

<sup>475</sup> Daltons' Closing Comments at paragraph 13.

including location, traffic, and collocation with the CFO. The Daltons further asked that the Board recommend to the Minister that a separate set of regulations be drafted to deal with this technology.<sup>476</sup>

[633] The Daltons asked for the Board to recommend to the Minister that the decision to issue the Approval be reversed and that the Approval Holder be required to resubmit the Application, with the Facility to be sited in the 2A Industrial Corridor.<sup>477</sup>

#### **7.4. The Town**

[634] The Town submitted that based on the evidence adduced at the hearing, the decision to issue the Approval was inappropriate, and the terms and conditions of the Approval are inappropriate.<sup>478</sup>

[635] The Town restated its requested relief of containing the liquid digestate in either an enclosed pond or in tanks. The Town further requested stricter operational conditions be implemented for the construction and ongoing operation of the Facility to ensure proper operations and maintenance is undertaken over the lifespan of the Facility. The Town argued the Facility should be subject to the regulation and oversight of the AER.<sup>479</sup>

[636] The Town submitted that if the Approval could not be varied to incorporate the requested relief, the decision to issue the Approval should be reversed.<sup>480</sup>

[637] The Town stated that it and its residents remain concerned that an uncovered liquid digestate pond will increase the existing odours emanating from the CFO.<sup>481</sup>

[638] The Town noted that Mr. Urbain had stated the Approval Holder's calculation of the NH<sub>3</sub> levels at the digestate pond were a gross underestimate and that the current calculation of the NH<sub>3</sub> levels were at least 10 times too low, meaning the NH<sub>3</sub> levels at the Project Site are more

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<sup>476</sup> Daltons' Closing Comments at paragraph 13(a) and paragraph 13(b).

<sup>477</sup> Daltons' Closing Comments at paragraph 14.

<sup>478</sup> Town's Initial Closing Comments at paragraph 7.

<sup>479</sup> Town's Initial Closing Comments at paragraph 2.

<sup>480</sup> Town's Initial Closing Comments at paragraph 4.

<sup>481</sup> Town's Initial Closing Comments at paragraph 21.

than 80 times the AAAQO levels. The Town argued that despite this information, the Director decided the CFO could operate in exceedance of the AAAQO.<sup>482</sup>

[639] The Town noted the AAAQO was developed “to protect human health and the environment and address the concerns of Albertans.”<sup>483</sup> The Town argued the AAAQO were developed with human health as the primary consideration, not corporate economic interests. The Town further stated that EPA has no ability to require the CFO to reduce current odour emission levels from the CFO.<sup>484</sup>

[640] The Town noted the CFO has been delinquent in even the most basic odour mitigation step, draining the catch basins, which the Compliance Directive had concluded was a significant contributor to the extensive odours emanating from the CFO.<sup>485</sup>

[641] The Town noted the catch basins at the CFO are approximately 6.7 ha and the Pond will be 8 ha, which the Town argued meant that the total area storing various liquid manure products will be more than double the area of the current catch basin.<sup>486</sup>

[642] The Town argued that if the CFO’s 6.7 ha had generated 4,500 odour complaints in a 2-year period, the odour complaints generated by 14.7 ha of uncovered ponds would be unfathomable.<sup>487</sup>

[643] The Town also noted Mr. Urbain’s comment that it does not look good when an owner fails to control odours for an existing pond, and then proposes an even larger pond at the same location.<sup>488</sup>

[644] The Town argued the co-location of the facilities and division between regulators of the facilities creates uncertainty around enforcement of odour issues. The Town further stated

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<sup>482</sup> Town’s Initial Closing Comments at paragraph 22.

<sup>483</sup> Town’s Initial Closing Comments at paragraph 23, citing the AAAQO.

<sup>484</sup> Town’s Initial Closing Comments at paragraph 23 and paragraph 24.

<sup>485</sup> Town’s Initial Closing Comments at paragraph 25.

<sup>486</sup> Town’s Initial Closing Comments at paragraph 26.

<sup>487</sup> Town’s Initial Closing Comments at paragraph 27.

<sup>488</sup> Town’s Initial Closing Comments at paragraph 55.

the situation is compounded by the difficulty in differentiating between odour sources resulting in each facility blaming the other and potential inaction against both facilities.<sup>489</sup>

[645] The Town argued that as the Project Site exists in an area already exceeding the AAAQO, the Facility must reduce existing odours as much as possible, which can be achieved by enclosing the liquid digestate. The Town noted the Approval Holder had considered this option, confirmed that it was possible to implement, but had deemed it economically unviable. The Town argued the Approval Holder did not want to expend the additional financial resources to enclose the liquid digestate and that while it was in the Approval Holder's interests to maximize its profits, it was at the expense of the AAAQO, odour abatement and the wellbeing of the Town and surrounding areas.<sup>490</sup>

[646] The Town further argued the Approval was inconsistent with section 2 of EPEA, and that to the extent that economic considerations are considered under EPEA, it is to ensure that economic growth and prosperity are achieved in an environmentally responsible manner. The Town argued environmental protection and economic decisions were to be integrated at the earliest stages of planning. The Town argued the Director's decision to issue the Approval with an uncovered digestate pond was inappropriate as it allowed for the Approval Holder's economic interests to trump the protection of the environment and human health.<sup>491</sup>

[647] The Town argued the Approval Holder failed to provide critical information regarding the overall cost difference between a covered or uncovered Pond over the lifespan of the Facility, and that Mr. Boisvert acknowledged this at the hearing. The Town noted that the Director had acknowledged that he was not aware that this was the case when analyzing the BATEA Study. The Town argued that since the Director did not consider the operating costs of both options prior to issuing the Approval, this was an error. The Town further argued that the 23 percent increase in costs may be offset over the lifespan of the Facility.<sup>492</sup>

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<sup>489</sup> Town's Initial Closing Comments at paragraph 29.

<sup>490</sup> Town's Initial Closing Comments at paragraph 30, paragraph 31, and paragraph 32.

<sup>491</sup> Town's Initial Closing Comments at paragraph 33, paragraph 34, and paragraph 35.

<sup>492</sup> Town's Initial Closing Comments at paragraph 37 and paragraph 38.



[648] The Town further noted that the Approval Holder's study confirmed that covering the liquid digestate would reduce project-case NH<sub>3</sub> emissions by 8.2 percent, whereas mechanical aeration would not reduce these emissions and odours.<sup>493</sup>

[649] The Town noted that per Mayor Snodgrass' evidence at the hearing, the most common odour complaint related to the CFO is NH<sub>3</sub> related. The Town further noted that the Odour Monitoring Report noted that the highest concentration of NH<sub>3</sub> odours is within the proximity of confined feeding operations.<sup>494</sup> The Town argued a reduction in NH<sub>3</sub> odours would address an odour compound most often complained of by the residents of the Town and surrounding area.<sup>495</sup>

[650] The Town restated that per the testimony of Mr. Urbain, the Approval Holder had underestimated the NH<sub>3</sub> emissions from the CFO and from the Pond. The Town noted that Mr. Urbain did not believe the Facility would reduce NH<sub>3</sub> levels and he had predicted the odour complaints would increase.<sup>496</sup>

[651] The Town argued that even if the costs of the Facility are increased, any improvement to the odours should be ordered as a part of the Approval, and it was unreasonable for the Director to omit conditions in the Approval requiring the Pond to be covered.

[652] The Town argued the Facility is a fuel-producing facility and that the Town has concerns about potential gaps in regulatory oversight once the Facility is operational. The Town argued that although the Facility is described as agricultural in nature, because its intended purpose is to create pipeline-grade methane gas injected into an existing ATCO distribution system, there is an energy producing component. The Town argued that once the Facility is completed the AER and not the NRCB or EPA should have regulatory oversight of the Facility. The Town further argued that the fact that methane is produced from biodegrading manure as opposed to

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<sup>493</sup> Town's Initial Closing Comments at paragraph 39.

<sup>494</sup> Town's Initial Closing Comments at paragraph 40, citing the Odour Monitoring Report at page 17.

<sup>495</sup> Town's Initial Closing Comments at paragraph 41.

<sup>496</sup> Town's Initial Closing Comments at paragraph 42.

conventional drilling operations does not change the fact that methane is being produced and fed into an existing pipeline system.<sup>497</sup>

[653] The Town argued this was coupled with the NRCB's inaction addressing the CFO's odours until the Compliance Directive was issued in January 2025. The Town argued the CFO failed to address known odour issues and the NRCB demonstrated an unwillingness or inability to act against the CFO with respect to known odour issues. The Town stated it has grave concerns that similar issues will persist and worsen with the Facility under EPA and NRCB oversight.<sup>498</sup>

[654] The Town argued AER oversight of the Facility would provide greater certainty to the Town and other affected parties that Facility operations will meet the appropriate standards. The Town argued that to the extent that the Approval was issued without AER oversight of the Facility, the decision to issue the Approval was inappropriate.<sup>499</sup>

[655] The Town argued that the current legislation is inadequate to address the objective issue faced by the Town and surrounding residents, the odours. The Town argued that it is not acceptable for the Director to accept flagrant breaches of acceptable odour levels because it is not formally a part of EPA's jurisdiction. The Town argued that doing so would allow administrative inefficiency to trump the human health and safety objectives that EPEA is meant to address.<sup>500</sup>

[656] The Town stated it was aware of the jurisdictional limitations on the Board. The Town further stated that it is also aware of the long-standing issues Town residents and the surrounding areas have had with the NRCB's failure to respond meaningfully to the complaints regarding the CFO, which is the reason the Town is seeking for the Facility to fall under the oversight of the AER.<sup>501</sup>

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<sup>497</sup> Town's Initial Closing Comments at paragraph 49 and paragraph 50.

<sup>498</sup> Town's Initial Closing Comments at paragraph 51 and paragraph 53.

<sup>499</sup> Town's Initial Closing Comments at paragraph 57.

<sup>500</sup> Town's Initial Closing Comments at paragraph 58 and paragraph 59.

<sup>501</sup> Town's Initial Closing Comments at paragraph 60.

[657] The Town argued the Minister makes the ultimate decision under section 100 of EPEA, and it was the Town's position that oversight of the Facility should be considered as a part of the appeals and form part of the Board's report and recommendations to the Minister.<sup>502</sup>

[658] The Town argued that the Director's argument that the CFO's compliance with the Compliance Directive would provide a far larger reduction of NH<sub>3</sub> and other emissions in the localized area than can be achieved by covering the digestate pond was dependent on a lot of contingencies that the evidence before the Board suggests may not bear out:

1. the CFO will comply with the Compliance Directive despite the evidence showing a "crass disregard for basic odour mitigation efforts;"<sup>503</sup>
2. the NRCB will vigorously enforce the Compliance Directive, noting that it took 4,500 complaints and several years for the Compliance Directive to be issued, and a compliance directive was chosen instead of an enforcement order; and
3. compliance with the Compliance Directive will provide a larger overall reduction in NH<sub>3</sub> odours compared to covering the Pond, noting that the Approval Holder's evidence is that covering the Pond would reduce the NH<sub>3</sub> emissions by 8.2 percent and reduce the odour complaints by 37 percent.<sup>504</sup>

The Town argued that everything possible should be done to reduce the CFO's odours given the NRCB's current approach.

[659] The Town argued that while the remaining number of complaints is still large, the potential to eliminate 375 complaints from residents of the Town and the surrounding area is significant. The Town further argued that the concerns of those citizens should not be considered *de minimis*.<sup>505</sup>

[660] The Town noted that the Approval Holder had argued that if the "Facility cannot operate, the regional odour issues currently being experienced by the community will continue unabated."<sup>506</sup> The Town argued the Approval Holder, a related entity to the CFO, was

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<sup>502</sup> Town's Initial Closing Comments at paragraph 61.

<sup>503</sup> Town's Final Closing Comments at paragraph 9.

<sup>504</sup> Town's Initial Closing Comments at paragraph 7 through 11.

<sup>505</sup> Town's Final Closing Comments at paragraph 12.

<sup>506</sup> Town's Final Closing Comments at paragraph 13, citing the Approval Holder's Closing Arguments at paragraph 55.

acknowledging the odours at the CFO would continue unabated despite the Compliance Directive.<sup>507</sup>

[661] The Town argued that the Approval Holder had suggested that the Pond needed to be drained twice a year, or the Facility could not operate. The Town argued that it was concerned that the volume of the 8 ha Pond would allow the Facility to operate even if the Pond is not drained twice a year.<sup>508</sup>

[662] The Town stated that it understood the catch basin and the Pond both serve different purposes, but being operated by related entities would de facto serve the same purpose: to store manure products and manure by-products for extended periods of time.<sup>509</sup>

[663] The Town asked the Board to put themselves in the shoes of a resident of the Town or the surrounding area residents, and argued in that context, everything must be done to reduce odours.<sup>510</sup>

[664] The Town argued it was unacceptable for the Director to ignore the CFO's odours because the CFO was regulated by the NRCB. The Town further argued the CFO and the Facility are integrally connected and all efforts to reduce odours from both sources should also be connected.<sup>511</sup>

[665] The Town argued it was clear from the evidence before the Board there were other options to reduce odours before the Approval Holder, but that these were rejected for financial reasons.<sup>512</sup>

[666] The Town restated its request that the Approval Holder be required to store the liquid digestate in a covered pond or in tanks. The Town further asked that the Facility be under the oversight of the AER.<sup>513</sup>

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<sup>507</sup> Town's Final Closing Comments at paragraph 13.

<sup>508</sup> Town's Final Closing Comments at paragraph 15.

<sup>509</sup> Town's Final Closing Comments at paragraph 17.

<sup>510</sup> Town's Final Closing Comments at paragraph 18.

<sup>511</sup> Town's Final Closing Comments at paragraph 19.

<sup>512</sup> Town's Final Closing Comments at paragraph 20.

<sup>513</sup> Town's Final Closing Comments at paragraph 21.

## **7.5. The Approval Holder**

[667] The Approval Holder argued that the decision to issue the Approval should not be rescinded and subject to comments contained in Appendix A to the Approval Holder's Closing Arguments, should not be varied.<sup>514</sup>

[668] The Approval Holder argued that appropriate means proper, suitable, and reasonable in the circumstances. The Approval Holder argued the Director's decisions to issue the Approval and regarding the terms and conditions of the Approval were proper, suitable, and reasonable in the circumstances. The Approval Holder argued EPA is the appropriate regulator of the Facility.<sup>515</sup>

[669] The Approval Holder restated that the primary purpose of the Facility was to capture greenhouse gases that are currently being emitted into the atmosphere and to process the greenhouse gases into RNG. The Approval Holder stated this was communicated to the public, stakeholders, and EPA.<sup>516</sup>

[670] The Approval Holder noted that a significant portion of the written evidence and oral testimony at the hearing was focussed on the CFO, the CFO's operations, and the NRCB's regulation of the CFO.<sup>517</sup> The Approval Holder restated that the CFO was relevant only in the context of background or baseline conditions.<sup>518</sup>

[671] The Approval Holder stated that the appeal was not about the CFO, and that the Approval Holder does not have a regulatory requirement to reduce odours generated by the CFO. The Approval Holder stated that notwithstanding this lack of regulatory requirement, the Approval Holder, EPA, the NRCB, and Mr. Urbain all agree that there will be some reduction in the cumulative odours in conjunction with the Facility.<sup>519</sup>

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<sup>514</sup> Approval Holder's Closing Comments at paragraph 1.

<sup>515</sup> Approval Holder's Closing Comments at paragraph 3.

<sup>516</sup> Approval Holder's Closing Comments at paragraph 5.

<sup>517</sup> Approval Holder's Closing Comments at paragraph 7.

<sup>518</sup> Approval Holder's Closing Comments at paragraph 7.

<sup>519</sup> Approval Holder's Closing Comments at paragraph 4.

[672] The Approval Holder further stated that although the purpose of the Facility is not to reduce emissions of H<sub>2</sub>S and NH<sub>3</sub> emissions from the CFO, the preponderance of evidence from the subject matter experts is that the H<sub>2</sub>S and NH<sub>3</sub> emissions from the CFO will be reduced because of the Facility. The Approval Holder stated this view was supported by every subject matter expert including: Triton, Horizon Compliance, Obsidian Engineering, Dr. Piorkowski, Mr. Urbain (sometimes), and EPA.<sup>520</sup>

[673] The Approval Holder argued that Mr. Urbain's evidence regarding the reduction in odours was contradictory and speculative, and the Approval Holder noted that Mr. Urbain did not conduct any modeling to confirm or verify his conclusions.

[674] The Approval Holder further argued that Mr. Urbain contradicted his earlier written testimony that the Facility will reduce odours at the CFO, stating "it is more likely there will be an increase."<sup>521</sup> The Approval Holder stated this was in direct contradiction to Mr. Urbain's Witness Statement, where he had stated "[i]n my opinion there will be some reduction of the H<sub>2</sub>S and ammonia from changes proposed to the feedlot operation. However, that reduction will be minimal."<sup>522</sup>

[675] The Approval Holder noted that the Appellant/Intervenor Group's Rebuttal Submission stated "[t]o be clear, what Mr. Urbain says is that while there is likely to be some reduction in odour, it is not nearly as great as claimed by Rimrock and is unlikely to be noticeable and is therefore not significant."<sup>523</sup>

[676] The Approval Holder noted that the Director indicated in his submissions that his decision requires the Project Case to not make the air quality worse. The Approval Holder argued

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<sup>520</sup> Approval Holder's Closing Comments at paragraph 4.

<sup>521</sup> Approval Holder's Closing Comments at paragraph 15.

<sup>522</sup> Approval Holder's Closing Comments at paragraph 16, citing Mr. Urbain's Witness Statement at page 17. The Approval Holder also cited Mr. Urbain's Witness Statement at page 27, "[t]here will be perhaps some emission reduction but it will be minor," and at page 29, "[i]t is more likely that there will only be a very small emission reduction compared to the existing operation."

<sup>523</sup> Approval Holder's Closing Comments at paragraph 17, citing the Appellant/Intervenor Group's Rebuttal Submission at page 9.

“[t]hat the Project Case will not make the existing air quality worse is clearly supported by the evidence of all the air quality and emissions subject matter experts involved in this [h]earing.”<sup>524</sup>

[677] The Approval Holder argued that while there was debate on how much the Facility will reduce cumulative odours, it is undisputed that the Facility will reduce odours because the Facility will reduce large area sources of raw manure storage, raw manure laden runoff reaching the catch basin, and the amount of raw manure spread on adjacent lands.<sup>525</sup>

[678] The Approval Holder also noted that the complaints collected by the NRCB show a strong correlation with the public Notice of Application that was posted and hand delivered in July 2022. The Approval Holder noted that of the 4,618 complaints received by the NRCB since 2020, 98.4 percent were registered after July 2022 when the Notice of Application was issued. The Approval Holder noted the above was true, even though the RCC was already in place at the CFO for several years prior to the spike in complaints, and no significant increase in complaints was noted in the Odour Monitoring Report prior to July 2022. The Approval Holder further noted that in 2021, the CFO had RCC and was operating at full capacity, however that year only represents 0.6 percent of the complaints registered with the NRCB.<sup>526</sup>

[679] The Approval Holder stated that in her testimony Ms. Estes had begun a Facebook page protesting the Facility and the CFO, providing the public with information to submit complaints about the CFO to the NRCB.<sup>527</sup>

[680] The Approval Holder stated much of the submissions at the hearing focused on the CFO, its operations, the NRCB’s regulation of the CFO, and suggestions on regulatory improvement of the CFO. The Approval Holder stated all this information is irrelevant to the appeals. The Approval Holder noted the Board had confirmed the CFO was only relevant in the context of background or baseline conditions, and that “the Board agrees with the Approval Holder that it is not responsible for the odours or odour abatement from other sources.”<sup>528</sup>

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<sup>524</sup> Approval Holder’s Closing Comments at paragraph 18.

<sup>525</sup> Approval Holder’s Closing Comments at paragraph 19.

<sup>526</sup> Approval Holder’s Closing Comments at paragraph 20.

<sup>527</sup> Approval Holder’s Closing Comments at paragraph 21.

<sup>528</sup> Approval Holder’s Closing Comments at paragraph 8 and paragraph 11, citing the Board’s Letter to the Parties, January 24, 2025.

[681] The Approval Holder relied on *Vipond* and noted that the Board has previously determined that the regulation of a waste facility's feedstock is only within the Board's jurisdiction as it enters the facility. The Approval Holder further noted that in *Vipond*, the Board had considered the appeals of an Approval granted for a waste management facility for the storage and processing of waste to produce biogas. The Approval Holder noted that the facility was adjacent to composting and waste storage sites that held registrations under the *Code of Practice for Compost Facilities*,<sup>529</sup> and the Appellants had argued that odours and other environmental impacts from the existing composting and waste storage sites should be considered issues in the appeals. The Approval Holder noted the Board had stated that the "handling of feedstock as it enters the facility is an acceptable issue..." and "the facilities that provide the feedstock operate under their own approvals or registrations..."<sup>530</sup>

[682] The Approval Holder stated that the modelling of the AQA predicts that the Facility will comply with the AAAQO. The Approval Holder argued the AQA is reliable, followed established and accepted guidelines, met all regulatory requirements and could be trusted by EPA in their decision-making to issue their Approval. The Approval Holder further argued that a revised AQA was not required.<sup>531</sup>

[683] The Approval Holder stated that the Facility will meet the AAAQO for H<sub>2</sub>S and NH<sub>3</sub>. The Approval Holder noted that Mr. Halleran, Obsidian Energy, testified that his modelling predicted that the Facility would comply with the AAAQO in the Project Case. The Approval Holder stated that Frauke Spurell, EPA's Senior Air Quality Specialist, stated "...I have no concerns with the submitted modelling."<sup>532</sup> The Approval Holder noted that Mr. Urbain had testified that the Facility would meet the criteria. The Approval Holder further noted that both Mr. Urbain and Frauke Spurell had stated that the AQA was completed correctly in accordance with the Air Quality Modelling Guidelines.<sup>533</sup>

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<sup>529</sup> *Code of Practice for Compost Facilities*, Government of Alberta, 2022.

<sup>530</sup> Approval Holder's Closing Comments at paragraph 9, citing *Vipond* at paragraph 107.

<sup>531</sup> Approval Holder's Closing Comments at paragraph 23, citing Ms. Spurell's Email to Ms. Zhao, September 6, 2023, Director's Record at Tab 30.

<sup>532</sup> Approval Holder's Closing Comments at paragraph 23, citing the Director's Record at page 1087.

<sup>533</sup> Approval Holder's Closing Comments at paragraph 22, see also Approval Holder's Closing Arguments at paragraph 23, paragraph 24, and paragraph 25.



[684] The Approval Holder argued the current Facility design includes robust and reliable odour abatement and mitigation measures, and rigorous assurance as to their proper implementation, maintenance, and monitoring.<sup>534</sup>

[685] The Approval Holder argued that changing the Approval or the design of the Facility will not solve the existing regional odour issues.<sup>535</sup>

[686] The Approval Holder argued that its public and stakeholder consultation met all of EPA's requirements and led the Approval Holder to optimize the Facility's odour mitigation.<sup>536</sup>

[687] The Approval Holder argued the Facility will be safe and the Approval Holder stated it will develop, implement, and maintain an Emergency Response Plan to prevent, manage, and mitigate conditions in the unlikely event of an on-site emergency.<sup>537</sup>

[688] The Approval Holder argued that Mr. Urbain does not have experience with feedlots, manure management, or on-farm biodigesters.<sup>538</sup> The Approval Holder noted that the emission factors selected for its AQA were selected by Dr. Facey, and that Dr. Facey has over 35 years engineering experience, holds Doctorate in Environmental Engineering. Dr. Facey has direct agricultural biodigester experience including lead design engineer for Lethbridge Biogas, lead design engineer for Biorefinex, and holds a patent on biogas production.<sup>539</sup>

[689] The Approval Holder argued that Mr. Urbain did not attempt to correlate the AQA with the NRCB's actual air monitoring data, and instead argued the AQA was wrong after correlating the AQA to complaints.<sup>540</sup>

[690] The Approval Holder argued that offensive odours are experienced instantaneously and can occur intermittently, whereas ambient air quality emissions are based on specified averaging periods, such as the hourly averaging periods for NH<sub>3</sub>, and the hourly and 24-hour

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<sup>534</sup> Approval Holder's Closing Comments at paragraph 4(f).

<sup>535</sup> Approval Holder's Closing Comments at paragraph 4(h).

<sup>536</sup> Approval Holder's Closing Comments at paragraph 4(i).

<sup>537</sup> Approval Holder's Closing Comments at paragraph 4(j).

<sup>538</sup> Approval Holder's Closing Comments at paragraph 30.

<sup>539</sup> Approval Holder's Closing Comments at paragraph 30.

<sup>540</sup> Approval Holder's Closing Comments at paragraph 31.

averages for H<sub>2</sub>S. The Approval Holder noted that as a result, concentrations of H<sub>2</sub>S and NH<sub>3</sub> may be experienced at concentrations that are well above the AAAQOs for short periods of time, and argued that it may be possible that concentration of odorous compounds can be over the odour perception threshold for short periods yet still comply with the AAAQOs.<sup>541</sup> The Approval Holder argued that a more appropriate comparison would be to compare the AQA with the Odour Monitoring Report.<sup>542</sup>

[691] The Approval Holder argued the results of the AQA and the Odour Monitoring Report correlate for H<sub>2</sub>S.<sup>543</sup> The Approval Holder further argued that the results of the AQA and the Odour Monitoring report correlate for NH<sub>3</sub>.<sup>544</sup> The Approval Holder argued that the comparison of the AQA with the empirical evidence of the Odour Monitoring Report demonstrates that the AQA is not wrong and does not need to be revised.<sup>545</sup>

[692] The Approval Holder noted that Mr. Urbain had indicated that the Biorem Odour Abatement System would work.<sup>546</sup>

[693] The Approval Holder noted the Town's arguments regarding not having included operating costs in its BATEA Study. The Approval Holder restated that covering the Pond will increase the chances of the Pond becoming septic and produce more odours, because the Pond will be deprived of oxygen.<sup>547</sup>

[694] The Approval Holder stated that the Town did not note that the air beneath the Pond cover would require treatment in a large odour abatement system before it is released to atmosphere. The Approval Holder further stated the Pond's odour abatement system will have ongoing operational costs. The Approval Holder noted the operational costs for an odour abatement system for a covered pond will be significantly higher than operational costs of the

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<sup>541</sup> Approval Holder's Closing Comments at paragraph 32.

<sup>542</sup> Approval Holder's Closing Comments at paragraph 33.

<sup>543</sup> Approval Holder's Closing Comments at paragraph 34.

<sup>544</sup> Approval Holder's Closing Comments at paragraph 35.

<sup>545</sup> Approval Holder's Closing Comments at paragraph 36.

<sup>546</sup> Approval Holder's Closing Comments at paragraph 37.

<sup>547</sup> Approval Holder's Closing Comments at paragraph 40.

approved aeration system and, together with the capital costs of covering the Pond, would make the Facility uneconomical.<sup>548</sup>

[695] The Approval Holder noted the Town tried to correlate the CFO not emptying the catch basin with the Pond at the Facility not being emptied. The Approval Holder stated the Pond at the Facility and the catch basin at the CFO serve two different purposes. The Approval Holder stated the catch basin at the CFO does not directly affect its operations whereas the Facility needs to drain the Pond every 6 months to operate. The Approval Holder stated it objected to a requirement to covering the Pond for the reasons it had mentioned.<sup>549</sup>

[696] The Approval Holder stated the conditions in the Approval are appropriate.

[697] The Approval Holder noted the Approval contains:  
“conditions specific requirements to measure the operational air emissions from both point sources (stacks, including the odour abatement system stack) and area sources (liquid digestate pond, manure and digestate staging areas), and a Fugitive Emissions Monitoring Program intended to allow Rimrock Renewables to take empirical measurements to validate the assumptions (mass emission rates for instance) and results of the ambient air modeling in the AQA.”<sup>550</sup>

[698] The Approval Holder noted the Director’s evidence regarding the Approval condition for a fugitive emissions monitoring program as a project-specific approach to address SOC filer concerns, which is not normally present in similar EPEA approvals. The Approval Holder argued this demonstrated the Director’s consideration of concerns regarding regional odours and application of stricter conditions to mitigate emissions from the Facility.<sup>551</sup>

[699] The Approval Holder noted that the Appellants and Intervenors did not challenge or dispute most of the Approval conditions.

[700] The Approval Holder argued there was no need to implement OU at the fence line of the Facility, and that the AAAQO specifically account for odours in their limits. The Approval Holder further argued that applying a condition to require monitoring for H<sub>2</sub>S and NH<sub>3</sub> at the fence

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<sup>548</sup> Approval Holder’s Closing Comments at paragraph 41 and paragraph 42.

<sup>549</sup> Approval Holder’s Closing Comments at paragraph 43, paragraph 44, and paragraph 45.

<sup>550</sup> Approval Holder’s Closing Comments at paragraph 47.

<sup>551</sup> Approval Holder’s Closing Comments at paragraph 48 and paragraph 49.

line was inappropriate given the proximity of the CFO.<sup>552</sup> The Approval Holder argued the regional odour issues will continue unabated if the Approval Holder could not operate.<sup>553</sup>

[701] The Approval Holder argued the Facility will help improve the current situation by capturing greenhouse gases from manure feedstock by reducing raw manure storage at the CFO, a reduction of raw manure laden runoff entering the CFO's catch basin, and elimination of land spreading raw manure from the CFO on local land parcels.<sup>554</sup>

[702] The Approval Holder argued that even if it were to reduce the Facility's emissions to zero, this would have a negligible effect on the regional airshed because the predicted emissions are so small compared to the baseline emissions.<sup>555</sup>

[703] The Approval Holder restated that its public and stakeholder consultation met all of EPA's requirements. The Approval Holder noted regional odour concerns were the primary driver for the re-design of the Facility and changes to the design in response to SIR No. 2 demonstrate a successful public consultation process. The Approval Holder further noted that while concerns regarding the changes to the Facility design were expressed at the hearing, update project packages were mailed to all SOC filers, residents within 2000 m of the Facility, the Town, and the County in January 2023, March 2023, and April 2023. The Approval Holder also observed that as Ms. Powell had testified, all the SOC filers were also invited to meet with the Approval Holder in July 2023 and none accepted this offer.<sup>556</sup>

[704] The Approval Holder argued that some of the Director's proposed conditions were not appropriate.

1. no objection to submitting a Fugitive Emissions Monitoring Program prior to commencing operations;<sup>557</sup>
2. no objection to a duplicate carbon filter;<sup>558</sup>
3. objected to a requirement to expand the feedstock hopper building to enclose the delivery trucks and create an airlock;

<sup>552</sup> Approval Holder's Closing Comments at paragraph 51 and paragraph 52.

<sup>553</sup> Approval Holder's Closing Comments at paragraph 53.

<sup>554</sup> Approval Holder's Closing Comments at paragraph 58.

<sup>555</sup> Approval Holder's Closing Comments at paragraph 59.

<sup>556</sup> Approval Holder's Closing Comments at paragraph 62 through paragraph 66.

<sup>557</sup> Approval Holder's Closing Comments at Appendix A, at 4.1.33 page 1.

<sup>558</sup> Approval Holder's Closing Comments at Appendix A, at 3.2.7 page 1.

4. objected to constructing a fugitive emission control system in the receiving feedstock hopper building;
5. no objection to installing a meteorological station;<sup>559</sup> and
6. objected to prescriptive conditions for manure storage.

[705] The Approval Holder noted that manure receiving hoppers will be located inside the feedstock receiving hopper building and when the doors are closed the building will be under negative pressure, which will capture more than 95 percent of the emissions from the building.<sup>560</sup>

[706] The Approval Holder argued that the amount of odours captured by an airlock system would be the de minimis, and that the manure hopper building doors would be closed 95 percent of the time. The Approval Holder noted the Odour Abatement System would capture air with the door open and argued it was reasonable to assume that 97 percent of the emissions from the manure receiving hoppers would be captured in the current design. The doors would only open for a few minutes to allow a feedstock to be deposited in the manure hoppers. The Approval Holder stated the airlock system for the manure hopper building would capture only 0.009 percent and 0.015 percent of the cumulative h<sub>2</sub>s and NH<sub>3</sub> emissions, enclosed and connected to the odour abatement system. The Approval Holder argued the additional infrastructure required to capture the insignificant fugitive emissions using a dual door airlock system is therefore unreasonable, especially considering manure is stored, handled, scraped, and loaded into trucks from the CFO pens less than 200 m away from the manure receiving hoppers.<sup>561</sup>

[707] The Approval Holder stated that it objected to prescriptive conditions regarding the manure storage area for several reasons. The Approval Holder argued the Facility meets the AAAQO as currently approved including the manure staging area at its maximum allowed capacity. The Approval Holder argued limiting storage to 24 hours and not more than one occurrence in 30 days would increase the amount of manure handling and regional odours. The Approval Holder noted the CFO is currently permitted to store manure approximately 100 m from

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<sup>559</sup> Approval Holder's Closing Comments at Appendix A, at 3.2.10 page 2.

<sup>560</sup> Approval Holder's Closing Comments at Appendix A, at 3.2.8 page 2.

<sup>561</sup> Approval Holder's Closing Comments at Appendix A, at 3.2.8 page 1 and 2.

the Facility which may be utilized with these conditions, and such conditions would unnecessarily restrict the operational efficiency of the Facility.<sup>562</sup>

[708] The Approval Holder noted that the manure staging area was calculated to be a small contributed to the cumulative H<sub>2</sub>S and NH<sub>3</sub> emissions, contributing only 0.06 percent and 0.09 percent respectively. The Approval Holder further noted that the Approval requires the Approval Holder to conduct operational fugitive emissions testing on the manure staging area, and if the results of the monitoring.<sup>563</sup>

[709] The Approval Holder noted the Approval limits the manure staging area to 5000 tonnes of manure. The Approval Holder further noted that by storing the manure within 10 m to 20 m of the manure receiving hoppers, emissions are reduced because this allows for loading into the manure receiving hoppers by loaders instead of trucks.<sup>564</sup>

[710] The Approval Holder noted that Mr. Boisvert had testified that the Facility will be designed, constructed and operated to all applicable codes and standards, including to the requirements of the Alberta Boilers Safety Association, the Canadian Standards Code 149.6 for biodigesters and the National Fire Protection Association requirements. The Approval Holder stated the anaerobic biodigester technology will be provided by DLS Biogas, a Canadian company that owns and operates 13 agricultural biodigesters in Canada.<sup>565</sup>

[711] The Approval Holder noted that Mr. Boisvert had testified that an Emergency Response Plan is not developed prior to completion of the Facility's detailed design. The Approval Holder stated that the Approval Holder will develop, implement, and maintain an Emergency Response Plan to prevent, manage, and mitigate conditions in the unlikely event of an onsite emergency.<sup>566</sup>

[712] The Approval Holder restated that after calculating the emergency planning zone, there was no need for sheltering in place or evacuation in the event of an emergency. The Approval

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<sup>562</sup> Approval Holder's Closing Comments at Appendix A, at 4.4.4.1 page 2.

<sup>563</sup> Approval Holder's Closing Comments at Appendix A, at 4.4.4.1 page 3.

<sup>564</sup> Approval Holder's Closing Comments at Appendix A, at 4.4.4.1 page 4.

<sup>565</sup> Approval Holder's Closing Comments at paragraph 70 and 71.

<sup>566</sup> Approval Holder's Closing Comments at paragraph 73.

Holder further stated the risk of H<sub>2</sub>S release and explosion remained within the fence line, and the composition of the RNG indicates a near zero risk of the digester tanks exploding. The Approval Holder stated in the unlikely event that all 6 biodigester tanks failed, the H<sub>2</sub>S concentrations outside the Facility would be well below those of safety and exposure limits.<sup>567</sup>

[713] The Approval Holder noted that the Appellant/Intervenor Group and Town's concerns regarding the jurisdiction of EPA and the NRCB cannot be addressed by the Board. The Approval Holder noted their concerns must be addressed by the Legislature. The Approval Holder noted the Director has the authority to issue the Approval under EPEA, the AUC regulates the low-pressure gas pipeline into which the Facility will inject the RNG, and the County regulates land use as well as traffic, noise, and lighting.<sup>568</sup> The Approval Holder argued the AER has not authority to regulate the Facility or the pipeline.<sup>569</sup>

[714] Regarding the Appellant/Intervenor Group's arguments that EPA can apply the AAAQO to the CFO, the Approval Holder noted that the RCC was installed at the CFO several years before the Approval Holder was even formed. The Approval Holder further noted the AAAQO does not apply to generally accepted agricultural practices, and argued that the Compliance Directive does not mean the CFO is not operating under generally accepted agricultural practices or that EPA has jurisdiction over the CFO. The Approval Holder noted that section 116(2) of EPEA specifically precludes the application of EPEA to an activity if it is undertaken under Part 1 of AOPA.<sup>570</sup>

[715] The Approval Holder argued that Part 1 of AOPA section 8(2)(b) requires a Practice Review Committee to determine what constitutes a generally accepted agricultural practice in respect of an agricultural operation. The Approval Holder further argued the Compliance Directive does not make a finding that the CFO is not operating under generally accepted agricultural practices or that a Practice Review Committee had been struck. The Approval Holder argued there

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<sup>567</sup> Approval Holder's Closing Comments at paragraph 73.

<sup>568</sup> Approval Holder's Closing Comments at paragraph 75, paragraph 76, and paragraph 77.

<sup>569</sup> Approval Holder's Closing Comments at paragraph 78.

<sup>570</sup> Approval Holder's Closing Comments at paragraph 79 and paragraph 80, citing section 116(2) of EPEA.

was no regulatory mechanism for EPA to assume jurisdiction of the CFO under the AAAQOs regardless of the presence of the RCC or the Compliance Directive.<sup>571</sup>

[716] The Approval Holder noted that Mr. Boisvert had testified that the size and location of the Facility is designed as a series of integrated components to ensure efficient and cost-efficient operations. The Approval Holder further noted that Mr. Boisvert had testified that moving the Facility to the Highway 2A Industrial Corridor would require numerous truckloads of raw manure on public roads including those close to the Town, which would increase manure handling, regional odours, and ultimately reduce environmental benefits. The Approval Holder also noted Mr. Boisvert's observation regarding the numerous residents residing within 500 m of the Highway 2A Industrial Corridor.<sup>572</sup>

[717] The Approval Holder noted Mr. Boisvert's testimony regarding the planting of trees on the Facility's site to serve as a wind break and for aesthetics.<sup>573</sup>

[718] The Approval Holder noted it has committed to complying with municipal noise bylaws.<sup>574</sup>

[719] The Approval Holder stated the only expert to testify on behalf of the Appellant/Intervenor Group was Mr. Urbain, in relation to the AQA. The Approval Holder noted that Mr. Urbain had stated that expert opinion can legitimately vary when it comes to emission factors, and that he had noted that even if redone with different factors the Project Case would still meet the AAAQOs for both H<sub>2</sub>S and NH<sub>3</sub>.<sup>575</sup>

[720] The Approval Holder argued the Facility will reduce H<sub>2</sub>S and NH<sub>3</sub> emissions from the CFO, even though this is not the Facility's primary purpose.<sup>576</sup>

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<sup>571</sup> Approval Holder's Closing Comments at paragraph 81, paragraph 82, and paragraph 83.

<sup>572</sup> Approval Holder's Closing Comments at paragraph 85 and 86.

<sup>573</sup> Approval Holder's Closing Comments at paragraph 87.

<sup>574</sup> Approval Holder's Closing Comments at paragraph 88.

<sup>575</sup> Approval Holder's Closing Comments at paragraph 93.

<sup>576</sup> Approval Holder's Closing Comments at paragraph 94.



[721] The Approval Holder argued the Appellant/Intervenor Group have not met burden of demonstrating the decision to issue the Approval was inappropriate, or that the terms and conditions of the Approval are inappropriate.<sup>577</sup>

#### **7.6. The Director**

[722] The Director argued the decision to issue the Approval was appropriate and the terms and conditions of the Approval are also appropriate.<sup>578</sup> The Director further argued the Approval complies with all relevant legislation, EPA policies, and guidelines.<sup>579</sup>

[723] The Director argued that based on the information before him at the application review stage and the evidence adduced at the hearing, the Director reasonably anticipates the Facility will meet the AAAQO, and may aid in decreasing the cumulative concentration of odours in the region from pre-existing non-EPA regulated operations.<sup>580</sup>

[724] The Director argued the Approval requirements are appropriate for the proper operation of the Facility and the mitigation of identified potential risk to the environment, human health, including the overall management of odours and responses to complaints.<sup>581</sup>

[725] The Director restated that he had reviewed and processed the Application according to the procedural requirements in EPEA and the regulations. The Director stated there was sufficient technical information in the Application for him to make a regulatory decision.<sup>582</sup>

[726] The Director stated that the H<sub>2</sub>S and NH<sub>3</sub> emissions from the Facility are not expected to exceed the AAAQO.<sup>583</sup>

[727] The Director restated that he does not have the jurisdiction to regulate the CFO that will be co-located with the Facility, noting that compliance concerns relating to the CFO are under

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<sup>577</sup> Approval Holder's Closing Comments at paragraph 91.

<sup>578</sup> Director's Closing Comments at paragraph 6.

<sup>579</sup> Director's Closing Comments at paragraph 37.

<sup>580</sup> Director's Closing Comments at paragraph 38.

<sup>581</sup> Director's Closing Comments at paragraph 39.

<sup>582</sup> Director's Closing Comments at paragraph 2.

<sup>583</sup> Director's Closing Comments at paragraph 3.

the jurisdiction of NRCB and AOPA. The Director further noted that a Compliance Directive has been issued to the CFO and once complied with, is expected to show a reduction in area odours.<sup>584</sup>

[728] The Director stated there are standard monitoring, reporting and complaint investigation conditions in the Approval for ambient emissions that are appropriate, as well as novel fugitive emissions monitoring program requirements that reflect the monitoring techniques used for oil sands tailings ponds and by the United States Environmental Protection Agency.<sup>585</sup>

[729] The Director noted that following the hearing, the Director had provided some potential amendments to the Approval to the Board pursuant to an undertaking provided to the during the hearing. The Director stated that if these amendments are accepted by the Board, the Approval will have even more stringent odour management conditions.<sup>586</sup>

[730] The Director restated the activities in the Application fall within Schedule 1, Division 1 of the *Activities Designation Regulation*; specifically, that the Facility is a waste management facility that will process wastes to produce fuel. The Director restated his argument that the AER cannot regulate the Facility without legislative change. Similarly, he noted the Facility and CFO cannot be regulated as one project by EPA without legislative change.<sup>587</sup>

[731] Regarding the authority of other regulatory bodies, the Director noted that the AUC has jurisdiction for the two co-generation units as per *AUC Rule 024: Rules Respecting Micro-Generation* at the power plant, but has no jurisdiction for the CFO or the Facility.<sup>588</sup> The Director noted the County has previously been involved in the matter, by permitting the Facility to be located next to the CFO. The Director stated the AER does not have jurisdiction over the Facility or the CFO and is not a party to the appeals.<sup>589</sup>

[732] The Director stated the Approval Holder submitted an AQA and additional technical reports in February 2023 and July 2023 in support of the Application, which were

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<sup>584</sup> Director's Closing Comments at paragraph 4.

<sup>585</sup> Director's Closing Comments at paragraph 5.

<sup>586</sup> Director's Supplemental Closing Comments at paragraph 5.

<sup>587</sup> Director's Supplemental Closing Comments at paragraph 6 and paragraph 8.

<sup>588</sup> Director's Supplemental Closing Comments at paragraph 6, citing the Approval Holder's Response to SIR No. 1, Director's Record at Tab 23.

<sup>589</sup> Director's Supplemental Closing Comments at paragraph 7.

rigorously reviewed by EPA staff. The Director further stated that after considering the Application and supporting data, concerns of SOC filers, advice and recommendations from EPA subject matter experts reviewing the Application, the Director issued the Approval to the Approval Holder.<sup>590</sup>

[733] The Director noted that much of the evidence at the hearing captured the fact that high concentrations of odorous compounds are emitted from the catch basins at the CFO and have increased significantly since Rimrock Cattle commenced operating the CFO in around 2019.<sup>591</sup>

[734] The Director noted that in his testimony, Dr. Piorkowski indicated that catch basins associated with confined feeding operations are not intended to function as liquid waste storage ponds but rather are intended for surface water control to capture large precipitation events and will contain surface runoff that has contacted manure. The Director noted this is different from containing more concentrated liquid manure. The Director noted that Dr. Piorkowski had indicated that catch basins should not be full of water or liquid manure all the time and are to provide available capacity for future storm events.<sup>592</sup>

[735] The Director stated that catch basins for confined feeding operations are not the same as digestate ponds for biodigestion facilities. The Director noted the Approval Holder had provided evidence that a digestate pond is more akin to an inert municipal sewage lagoon common across the province for the treatment and temporary storage of wastewater.<sup>593</sup>

[736] The Director stated he provided oral evidence that the Pond was not expected to be a major source of emissions given its content will be treated liquid digestate. The Director further noted that for greater certainty, the Approval prohibits fugitive emissions from the Pond that cause or may cause the criteria set out in condition 4.1.12. The Director also noted there are additional stringent odour management conditions in the Approval that are designed to ensure the Pond does not become a source of offensive odours.<sup>594</sup>

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<sup>590</sup> Director's Closing Comments at paragraph 11 and paragraph 13.

<sup>591</sup> Director's Closing Comments at paragraph 18.

<sup>592</sup> Director's Closing Comments at paragraph 19 and paragraph 20.

<sup>593</sup> Director's Closing Comments at paragraph 21.

<sup>594</sup> Director's Closing Comments at paragraph 22.

[737] The Director noted that the Approval Holder had provided a BATEA Study for odour abatement technologies indicating that covering the Pond would lead to a marginal reduction in NH<sub>3</sub> emissions that would not justify the costs. At the hearing, the Director noted he was not concerned with the increased NH<sub>3</sub> emissions from the Pond because most of the NH<sub>3</sub> compounds would be removed during the biodigestion process, meaning the overall amount of NH<sub>3</sub> will be low by the time the liquid digestate is sent to the digestate pond. The Director argued that if an offensive odour is emitted from the digestate pond, the Approval conditions are designed to collect the necessary empirical data to address the issue through further emissions management actions or further regulatory amendments to the Approval.<sup>595</sup>

[738] The Director further indicated that while incorporating operating costs into the BATEA Study could be helpful, this is not critical, as the outcome of including the operating costs in the BATEA Study may be the same since covering the Ponds would require significant infrastructure that would lead to equivalent increased operational costs for the Approval Holder, with similar impacts to H<sub>2</sub>S and NH<sub>3</sub> emissions.<sup>596</sup>

[739] The Director noted that he had indicated the difficulty in using traditional ambient air monitoring techniques and equipment at the Project Site for emission sources not directed to the Odour Abatement System, due to the adjacent CFO and its ambient air emissions. The Director explained that because of this difficulty, he included conditions requiring the Approval Holder to submit a proposal for a Fugitive Emissions Monitoring Program. The Director stated these conditions are stringent and comparable to the conditions used for measuring fugitive emissions on oil sands tailings ponds in Alberta, noting that a Fugitive Emissions Monitoring Program has not been included in other EPEA approvals in respect of other odour-generating activities.<sup>597</sup>

[740] The Director stated that EPA does not employ subject matter experts in every area. The Director stated that EPA has Industrial Approvals Engineers with expertise and access to other specialists who focus on a variety of subject matters, and in recognition of other specialists with

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<sup>595</sup> Director's Closing Comments at paragraph 23 and paragraph 24.

<sup>596</sup> Director's Closing Comments at paragraph 25.

<sup>597</sup> Director's Closing Comments at paragraph 26.

more specific expertise, also leverage outside expertise through applicants who have access to additional expertise.<sup>598</sup>

[741] The Director stated the Approval limits for air emissions released into the atmosphere were developed in accordance with key EPA guidelines and policies, and along with their associated monitoring and reporting requirements. The Director stated the Approval requires all major point emission sources to be directed to the Odour Abatement System which is expected to remove 95 percent of total reduced sulfur compounds, volatile organic compounds, NH<sub>3</sub>, and other odour causing compounds.<sup>599</sup>

[742] The Director stated the AAAQO is the basis for determining acceptable air quality in Alberta, and the AAAQO for H<sub>2</sub>S, NH<sub>3</sub>, nitrogen dioxide, and sulphur dioxide were applicable to the review of the Application. The basis for the AAAQO for H<sub>2</sub>S and NH<sub>3</sub> is odour perception. The Director stated that EPA's method for establishing industrial release limits for these specific chemical parameters includes evaluating technology-based limits and the limits necessary for ambient environmental quality protection and choosing the most stringent option. The Director explained that the technology-based limits use the most effective demonstrated pollution prevention and control technologies, ensuring uniform standards across similar industrial facilities. The Director further explained that air-quality based limits are determined based on site-specific assessments of release limits needed to meet ambient environmental quality protection, using techniques such as dispersion modelling.<sup>600</sup>

[743] The Director stated that Ms. Zhao had provided evidence that EPA could neither accept nor refute the air dispersion modelling provided by the Approval Holder in the AQA because there was insufficient information in the Application to verify the Approval Holder's predicted maximum ground level concentration values. The Director further stated that due to the Approval Holder's use of the Odour Abatement System and uncertainties regarding the modelling in the AQA, Ms. Zhao applied the conservative technology-based limits for the point of source

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<sup>598</sup> Director's Closing Comments at paragraph 27.

<sup>599</sup> Director's Closing Comments at paragraph 28.

<sup>600</sup> Director's Closing Comments at paragraph 29 and paragraph 30.

emission limits in the Approval instead of the air quality-based limits suggested by the Approval Holder.<sup>601</sup>

[744] The Director stated that on cross-examination he had provided evidence that EPA's regulatory process for odours is parameter-based using chemical compounds typically indicative of odour and that moving to a concept of measuring OU would be inconsistent with the regulatory system in Alberta. The Director stated the Fugitive Emissions Monitoring Program is the Approval supports the regulatory scheme by looking at parameters that have been assessed to address odour concerns in Alberta previously.<sup>602</sup>

[745] The Director noted that Dr. Piorkowski indicated that AOPA does not compel agricultural operations to comply with the AAAQO; to determine if an agricultural operation is creating a disturbance, that statutory decision-maker will look at the frequency, intensity, duration, and offensiveness of an odour to individuals, and can consider the regulatory tools available under AOPA.<sup>603</sup>

[746] The Director stated the Approval does not contain conditions regarding the CFO because it is regulated under AOPA. The Director stated the Director can and did look at the cumulative effect of the Facility on the regional air shed when considering the Application, and that his main concern was whether the Facility itself would make the cumulative situation worse as this was within his legislative authority.<sup>604</sup>

[747] The Director stated he cannot refuse to issue an Approval on the sole basis that the current Cumulative Case exceeds the AAAQO. The Director stated that a director must examine an application on its own merits, including whether the proposed project itself exceeds the AAAQO, and noted that in this case, Mr. Urbain conceded on cross-examination that the emissions from the Facility are not predicted to exceed the AAAQO, even when considering his concerns with the Approval Holder's modelling.<sup>605</sup>

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<sup>601</sup> Director's Closing Comments at paragraph 31.

<sup>602</sup> Director's Closing Comments at paragraph 32.

<sup>603</sup> Director's Closing Comments at paragraph 33.

<sup>604</sup> Director's Closing Comments at paragraph 34.

<sup>605</sup> Director's Closing Comments at paragraph 35.

[748] The Director stated that notwithstanding his position on the appropriateness of the Approval conditions, in response to undertakings provided at the hearing, the Director had provided draft approval conditions for the Board's consideration regarding changes that he stated during cross-examination he would now consider making to the Approval considering the totality of evidence. The proposed conditions included:

1. change the date in the fugitive emissions monitoring clause 4.1.33, to require the submission of the Fugitive Emissions Monitoring Program prior to the Facility commencing operations and to be finalized upon commencement of operations;
2. add a requirement for a redundant set of Odour Abatement System scrubbers be available onsite to eliminate the potential for emission release that is not treated through the Odour Abatement System if the Odour Abatement System is shut down to change carbon media;
3. add a requirement for the Approval Holder to install and operate a weather station at the Facility to provide "at location" data for the Fugitive Emissions Monitoring Program. It must be located at the west and north property line;
4. require the manure feedstock staging area to be contained within a building that is connected to the Odour Abatement System or add a clause that limits the time and frequency the feedstock may be staged at the location; and
5. require the building to be expanded to allow for a hauling truck to enter the building for unloading of the feedstock and for the use of an overhead door that closes with an air lock system prior to unloading. The truck would only be permitted to unload when the door is closed and the Odour Abatement System is operating to capture any emissions that are released.<sup>606</sup>

[749] The Director stated that with outcome-based conditions and enhanced monitoring and reporting, EPA retains the ability to assess the environmental performance of facilities and to amend approvals once new information is obtained through the monitoring requirements of approvals, or to take regulatory compliance actions when needed.<sup>607</sup>

[750] In response to the Town's comments regarding the size of the catch basins and Pond, the Director noted the Compliance Directive requires the CFO to close cell 2 of the catch basin, which appears to be 75 percent of the catch basin area. The Director stated this leaves only

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<sup>606</sup> Director's Closing Comments at paragraph 42.

<sup>607</sup> Director's Closing Comments at paragraph 44.

1.5 to 2 ha of liquid surface area remaining at the CFO in cell 1 available for normal intended operations as a catch basin. Noting that the Pond would be a maximum of 6 ha and the remaining catch basin at the CFO would be between 1.5 and 2 ha, the Director further stated that the total surface area of the Pond and the CFO's catch basin combined would be a maximum of 7.7 ha.<sup>608</sup>

[751] The Director stated there was no evidence to suggest the Approval Holder would allow the contents of the Pond to exceed the full capacity of 6 ha, and further stated that the 8-ha cited by the Town is if the Pond were filled to the top of the flood protection/containment berms surrounding the Pond.<sup>609</sup>

[752] The Director stated the contents of the Pond is liquid digestate after the processing of raw manure and organic food slurry. The Director stated the modelling provided by the Approval Holder predicts that any H<sub>2</sub>S or NH<sub>3</sub> emissions from the Pond alone are within the AAAQO.<sup>610</sup>

[753] The Director stated that air emissions from the Pond are not an approved emission source in condition 4.1.12 of the Approval, and are subject to restrictions prohibiting the release of fugitive emissions, which prohibits the any emission from a source not specified in condition 4.1.2, if it causes "impairment, degradation or alteration of natural resources; material discomfort, harm or adverse effect to the well-being or health of a person; or harm to property or vegetative or animal life."<sup>611</sup>

[754] The Director restated there are several conditions in the Approval to address odours.

[755] The Director noted the Town argued the Director should have required the Pond to be covered due to a concern that the Pond would contribute to the high ammonia odours from the CFO which already exceed the AAAQO. The Director noted the Approval Holder's modelling estimates the CFO's NH<sub>3</sub> emissions are currently over 8,000 ppbv compared to the AAAQO value of 2,000 for NH<sub>3</sub>, while Mr. Urbain had stated this was an underestimate. The Director further

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<sup>608</sup> Director's Closing Comments at paragraph 46(a) citing the Compliance Directive at paragraphs e, f, and h.

<sup>609</sup> Director's Closing Comments at paragraph 46(b).

<sup>610</sup> Director's Closing Comments at paragraph 46(c).

<sup>611</sup> Director's Closing Comments at paragraph 46(d) citing the Approval at condition 1.1.2(cc).



noted the Approval Holder provided evidence at the hearing that covering the Pond would likely have a minimal reduction of 8.2 percent of the NH<sub>3</sub> emissions for the Facility.<sup>612</sup>

[756] The Director stated the Facility's predicted ground level concentration for NH<sub>3</sub> from all sources at the Facility is 369 ppbv.<sup>613</sup> The Director noted that while Mr. Urbain had indicated that the NH<sub>3</sub> emissions for the Pond were underestimated, he also did not think they would exceed the AAAQO. The Director stated the Approval prohibits fugitive emissions from the Pond that exceed the AAAQO and includes rigorous odour management requirements.<sup>614</sup>

[757] The Director stated that if the H<sub>2</sub>S or NH<sub>3</sub> emissions for the Facility exceed the AAAQO as determined through the monitoring data, he retains the authority to amend the Approval to ensure ambient air emissions and odour are prevented and managed within regulatory levels.<sup>615</sup>

[758] The Director stated the CFO's compliance with the Compliance Directive, if vigorously enforced by the NRCB, may provide a far larger reduction in the NH<sub>3</sub> emissions and other emissions in the localized area than can be achieved by covering the Pond. The Director noted that no party at the hearing provided any evidence of the predicted reductions to the H<sub>2</sub>S or NH<sub>3</sub> emissions of the CFO after the measures in the Compliance Directive are implemented.<sup>616</sup>

[759] The Director stated it was not unreasonable or inappropriate for the Director to not require the Pond to be covered. The Director argued there is insufficient evidence to demonstrate that the NH<sub>3</sub> emissions from the Pond will exceed the AAAQO, and noted even Mr. Urbain could not derive an estimate.<sup>617</sup>

[760] The Director noted there is no definition of generally accepted agricultural practices within EPEA, and that the authority within section 116 of EPEA would only apply to those agricultural operations that do not operate under a regulatory permit issued under AOPA, such as

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<sup>612</sup> Director's Closing Comments at paragraph 47, citing the Response to SIR No. 2, Illustration 1 through 3.

<sup>613</sup> Director's Closing Comments at paragraph 47(a) citing Table 14 of the Updated 2023 AQA, Director's Record at Tab 28. The Board understands that ppbv means parts per billion by volume.

<sup>614</sup> Director's Closing Comments at paragraph 47(c).

<sup>615</sup> Director's Closing Comments at paragraph 46(d).

<sup>616</sup> Director's Closing Comments at paragraph 46(d).

<sup>617</sup> Director's Closing Comments at paragraph 47 and paragraph 48.

individual farming operations. The Director stated it would be highly inappropriate for EPA to exercise its regulatory jurisdiction by issuing an EPO to a confined feeding operation, including the CFO, which is regulated by the NRCB under a permit issued under AOPA.<sup>618</sup>

[761] The Director observed that an EPO would have little added value in the current case as the NRCB retains the authority to amend the Compliance Directive or to issue an enforcement order. In these circumstances, the Director argued it would be inappropriate for EPA to exercise authority under EPEA.<sup>619</sup>

[762] The Director stated that although Dr. Piorkowski's concerns contained in his email dated February 27, 2023, to Ms. Zhao were not relayed to the Approval Holder, SIR No. 2 was based on his comments. The Director further stated the Updated AQA was not sent to Dr. Piorkowski as EPA did not have enough information to substantiate the Approval Holder's emission rates or Dr. Piorkowski's opinions regarding the emission reduction claims by the Approval Holder. The Director further stated that as the H<sub>2</sub>S and NH<sub>3</sub> emissions from the CFO already exceeded the AAAQO, Ms. Zhao did not feel it would add value to EPA's review and final decision.<sup>620</sup>

[763] The Director argued that rather than accepting the Approval Holder's emission reductions at "face value," EPA neither accepted nor refuted the estimated emission rates or claimed cumulative reduction rates from the operation of the Facility. The Director argued the recommendation was that the Director instead use more conservative technology-based limits, which the Director further argued was within the acceptable realm of options available for setting emission limits from permitted emission sources in the Approval. The Director further noted this is consistent with EPA's *Industrial Release Limits Policy*.<sup>621</sup>

[764] The Director stated that some of the concerns around traffic, land use planning, noise, road safety, light pollution, emergency planning, and interference with enjoyment of

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<sup>618</sup> Director's Closing Comments at paragraph 54(a) and paragraph 54(b).

<sup>619</sup> Director's Closing Comments at paragraph 54(c) and paragraph 54(d).

<sup>620</sup> Director's Closing Comments at paragraph 55.

<sup>621</sup> Director's Closing Comments at paragraph 56, citing the *Industrial Release Limits Policy*, Director's Record at Tab 94.

property relate to matters outside of the Director's jurisdiction. The Director stated that he does not have the jurisdiction within EPEA to address those concerns but was mindful of the purposes of EPEA, specifically in section 2(b) to balance economic growth in an environmentally responsible manner.<sup>622</sup>

[765] The Director argued there are other regulatory processes and avenues for individuals to bring forward their concerns around these municipal issues to their local authority, who may have bylaws which specifically address their concerns, as well as other authorities under the MGA. The Director stated the impacts to property value from the presence of the Facility or the CFO are not within the jurisdiction of the Director under EPEA.<sup>623</sup>

[766] The Director stated that in early 2024, the Government of Alberta announced plans to establish buffer zones around pristine viewsapes along the eastern slopes of the Rocky Mountains and on certain classes of agricultural lands, by renewable wind and solar energy projects. The Director stated the Facility is not included within the renewable energy projects captured by Government's decisions on buffer zones and pristine viewsapes, and as such this issue is not relevant to the current appeal.<sup>624</sup>

[767] The Director stated that EPA's use of the *Industrial Release Limits Policy* is not limited or restricted to lands that are designated industrial or commercial at the municipal level. The Director clarified that a land use decision under the MGA is separate and distinct from a decision of the Director under EPEA. The Director stated both pieces of legislation look at different aspects of the same project from the lens of the jurisdiction granted under those acts.<sup>625</sup>

[768] The Director stated that he disagrees with the characterization of the Facility as a test case due to its size and use of beef manure. The Director noted EPA has regulated other Facility's in the province including one co-located with a beef feedlot. The Director further stated there are many activities regulated by EPA that share characteristics with the Facility, including power generation and open-air sewage lagoons. The Director stated that EPA has significant

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<sup>622</sup> Director's Closing Comments at paragraph 58 and paragraph 59.

<sup>623</sup> Director's Supplemental Closing Comments at paragraph 10.

<sup>624</sup> Director's Closing Comments at paragraph 46(b).

<sup>625</sup> Director's Supplemental Closing Comments at paragraph 15.

experience regulating emissions from point sources and has the regulatory tools to make it the appropriate regulator for the Facility.<sup>626</sup>

[769] The Director restated that there are safeguards in the Approval to protect the environment in the event of abandonment. The Director noted that under section 137(1) of EPEA an operator has the duty to reclaim the land in accordance with section 137(2) of EPEA and to obtain a reclamation certificate. The Director further stated that Part 6 of Approval sets out additional decommissioning and land reclamation conditions for the Facility, including the requirement in condition 6.1.2 for the Approval Holder to submit a decommissioning plan and land reclamation plan within 5 months of the Facility ceasing operations.<sup>627</sup>

[770] The Director restated that the Approval Holder had provided financial security and that this amount is reviewed annually to ensure EPA has an adequate amount to cover the Facility's end of life costs. The Director noted that the Approval Holder had provided financial security in the amount of \$3,153,353.50 before the Approval was issued. The Director noted the financial security is intended to be an amount sufficient to hire a third party to reclaim the Facility if the Approval Holder cannot fulfill its legal obligations under section 137 of EPEA or the Approval.<sup>628</sup>

[771] The Director argued that it was imperative that the Board focus on the Director's fundamental rationale for his decision to issue the Approval, that the operation of the Facility will meet the AAAQO for NH<sub>3</sub>, even taking into account concerns surrounding the Approval Holder's emission modelling calculations, and Mr. Urbain's evidence that it will likely meet the AAAQO and will not make the current NH<sub>3</sub> odours from the CFO worse.<sup>629</sup>

[772] The Director stated that he was of the same view with respect to H<sub>2</sub>S; that if operated in strict accordance with the Approval, the baseline case or emissions from the CFO will not be made worse.<sup>630</sup>

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<sup>626</sup> Director's Supplemental Closing Comments at paragraph 21 and paragraph 22.

<sup>627</sup> Director's Supplemental Closing Comments at paragraph 17.

<sup>628</sup> Director's Supplemental Closing Comments at paragraph 18 and paragraph 19.

<sup>629</sup> Director's Closing Arguments at paragraph 60.

<sup>630</sup> Director's Closing Arguments at paragraph 61.

## **8. STATEMENT OF ISSUES**

[773] The Board set the following issues for the hearing of these appeals:

1. Was the Director's decision to issue EPEA Approval No. 484778-00-00 appropriate?
2. Are the terms and conditions in EPEA Approval No. 484778-00-00 appropriate?<sup>631</sup>

## **9. ANALYSIS**

### **9.1. Preliminary Matter – Change in Ownership**

#### **9.1.1. Does the Recent Change in Ownership of the Approval Holder Affect the Approval?**

[774] Prior to the hearing, several of the Intervenors including Mr. Leuw made an application for the Board to adjourn the hearing and cancel the Approval on the basis of Tidewater Renewables Ltd., which held a controlling interest in the Approval Holder, having sold its interest to Biocirc Canada Holdings Inc.<sup>632</sup> The Intervenors argued EPA should review the Approval as the sale called into question who owned the Approval Holder and the Approval, the involvement of foreign ownership in the Approval Holder, the financial stability of the Approval Holder, and several argued it was unfair of the Approval Holder to make the change without notice to the Parties.

[775] The Approval Holder advised the Parties on January 14, 2025, that the Approval Holder remains Rimrock Renewables Ltd. and the biodigester project has not changed.<sup>633</sup> The Board denied the adjournment application. The Board was not persuaded that a partial change in ownership interest in the Approval Holder was relevant to the environmental issues before the Board, noting that more information about the owner of the Approval Holder would not change

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<sup>631</sup> See the Board's Letter dated September 22, 2023.

<sup>632</sup> The Board understands that Biocirc Canada Holdings Inc. is an affiliate of Biocirc Group ApS, which is in the business of renewable natural gas and the development of biogas projects. See <https://www.tidewatermidstream.com/news/?id=122626>.

<sup>633</sup> The Approval Holder indicated one of the companies involved in the purchase and sale is a publicly traded company, and information regarding the sale could not be made public prior to its finalization without violating securities legislation.

the Application or the Approval being appealed.<sup>634</sup> The Board also advised the Parties it did not have the authority to summarily cancel the Approval based on a change in ownership.

[776] The Board notes several concerns regarding ownership of the Approval Holder, the financial stability of the Approval Holder, the economic viability of the Facility, and the Approval Holder's ability to uphold reclamation obligations were raised at the hearing. The Board restates that it is not relevant whether the Approval Holder is owned by Tidewater Renewables Ltd. or Biocirc Canada Holdings Inc. As stated in the Board's letter to the Parties on January 16, 2025, the Approval Holder is responsible for meeting the environmental obligations of the Approval.

[777] The Board notes neither the Board nor EPA have the mandate to review the ownership or the financial liability of the Approval Holder in the same manner as the AER or the Alberta Utilities Commission.<sup>635</sup> The Board further notes EPA does not mandate a financial review of applicants for authorizations, nor does EPA have the mandate to review the economic viability of proposed projects. At the hearing, the Board heard the Director confirm that EPA does not review the financial information of approval holders. Accordingly, the Board finds it does not have the authority to review the financial information of the Approval Holder or the economic viability of the Facility.

### **9.1.2. Background Conditions**

[778] The Board heard evidence and submissions from the Appellant/Intervenor Group, the Town, and the Intervenor's regarding the impacts created by the CFO's operations. The Board heard the CFO operations have created obnoxious odours, increased pests, additional truck traffic, created noise and light pollution, and impacted property values. The Board appreciates that living near a facility such as the CFO can present significant challenges. The presence of noticeable odours, increased truck traffic, and elevated noise levels can undoubtedly disrupt daily routines and the expectations of rural living. The Board recognizes these impacts on those experiencing

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<sup>634</sup> See the Board's Letter to the Parties, January 16, 2025. This letter contains the Board's decisions on the adjournment application, application to summarily cancel the Approval, and comments on review of the financial information of the Approval Holder.

<sup>635</sup> For example, see AER Directive 88: *Licensee Life-Cycle Management*, April 9, 2024. See also AUC Decision 27084-D02-2023, in which the Board understands the AUC established deemed equity ratios for the utilities, which in turn determines the ratio of debt to equity in their capital structures.

them and the complex situations that can arise. Accordingly, the Board notes that while proximity to the proposed Facility and tolerance thresholds to agricultural odours varied, the common concern to Appellant/Intervenor Group, Town, and the Intervenor was the potential for the Facility to worsen circumstances already viewed by some as intolerable.

[779] Under section 99 of EPEA, the Board provides its report and recommendations to the Minister of Environment and Protected Areas (the “Minister”) to confirm, reverse, or vary the Director’s decision to issue the Approval, which in this case, is the decision to approve the construction, operation, and reclamation of the Facility. The Board notes it cannot consider matters outside the jurisdiction of the Board and the Board can only consider issues related to the Approval.

[780] The Board notes that the CFO is regulated by the NRCB and is operated under a grandfathered permit issued by the NRCB under AOPA on October 8, 2020, for 35,000 head of beef finishers.<sup>636</sup> Therefore, while the Board appreciates the Appellant/Intervenor Group, the Town, and the Intervenor have concerns related to the CFO and the impacts caused by the CFO’s operations, the Board can only consider the CFO to the extent that the impacts caused by the CFO’s operations form part of the background conditions and the context in which the Approval was granted.

**9.1.2.1. Background Conditions – Appellant/Intervenor Group, Town, and Intervenor**

[781] The Appellant/Intervenor Group, Town, and Intervenor were consistent in their descriptions of the odours generated by the CFO. The Ayers referred to the odours as “disgusting and putrid,” while the Presties indicated that they “choke on the smell” from the CFO frequently.<sup>637</sup> Many said the odours impacted their ability to enjoy being outdoors on their properties and their quality of life. Several indicated the odours had led to health effects which included headaches and asthma. Mr. Denney for example noted that his wife required an inhaler for asthma, which he attributed to the strength of the odours. The Town noted the NRCB had received approximately

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<sup>636</sup> See NRCB Decision RFR 2020-08/PL 20001 dated November 13, 2020.

<sup>637</sup> Presties’ Witness Statement at page 2.

4,500 complaints since ownership of the CFO had changed and Mayor Snodgrass observed at the hearing that he was frequently approached in public by Town residents about the CFO and odours.

[782] The Appellant/Intervenor Group and Intervenorors were similarly consistent with their evidence regarding the increase in flies and mosquitoes, truck traffic, noise and light pollution. The Board heard flies had become overwhelming to the point that as with the odours, the Appellant/Intervenor Group and many of the Intervenorors could no longer enjoy being outdoors on their properties. The Board heard truck traffic had greatly increased along Meridian Street with the CFO's operations, bringing with it safety and noise concerns from engine retarder brakes. During the hearing, the Daltons stated they could hear the noise of employees and cattle from the CFO at night as well as see the lighting from the facility. The Board heard the lights from the CFO were disruptive to night sky views and sleep. A further example was provided by Mr. James and Ms. Estes, who stated they had put up a grain bin and parked a recreational vehicle to block the lights.

[783] The Board notes that the Appellant/Intervenor Group and many of the Intervenorors stated they reside in rural communities. Most stated they were familiar with and expected some degree of agricultural odours. The Board further notes however, that the background conditions as described by the Appellant/Intervenor Group, the Town, and the Intervenorors were above and beyond the odours that one may expect in a rural or agricultural setting.

### **9.1.3. NRCB – Dr. Piorkowski – Odour Monitoring Report**

[784] The Board heard evidence from Dr. Piorkowski regarding the information in the Odour Monitoring Report and context for the NRCB Compliance Directive CD 25-04 recently issued under AOPA to the CFO, to the extent that both documents also inform the background conditions in which the Approval was issued.

[785] At the hearing, Dr. Piorkowski explained that the Odour Monitoring Report was a synthesis of the results of the NRCB's air monitoring in the High River area in 2023 and in 2024, and the "NRCB's understanding of the situation in the air." The Board heard NRCB's process first starts with trying to understand an odour's frequency, intensity, duration, and offensiveness. Dr. Piorkowski stated the next step was to try to understand what the community is being exposed



to and the likely source of the exposure with more site-specific investigations. He further explained that the third and fourth objectives of the Odour Monitoring Report are to direct more site-specific investigations and to validate the efficacy of management practices. He indicated the Odour Monitoring Report would become a baseline for any further assessment or community level monitoring.

[786] Regarding the Odour Monitoring Report, Dr. Piorkowski stated “the major takeaways from this [report] are that odorous compounds are predominantly sourced from operations or activities that occur west to southwest of the Town of High River ... however, there are multiple sources in the area that do contribute a more minor amount of odorous compounds that the community experiences.” He further explained this was due to the prevailing winds in the area, which are from the west – southwest direction. The Board further heard there are multiple confined feeding operations, some of which are to the northwest, rodeo grounds to the north of the Town which temporarily operates, a meat processing facility to the north – northeast, a municipal wastewater lagoon northeast of the Town, and that there is also wastewater infrastructure within the Town such as lift stations and other sewage conveyance structures. Dr. Piorkowski explained that odours also occurred from manure spreading and from additional agricultural operations, which he noted that while not confined feeding operations, also spread manure.

[787] The Board heard that the assessments for the Odour Monitoring Report measured odorous compounds known to elicit odour response to human perception such as  $\text{NH}_3$  and reduced sulfur compounds. Dr. Piorkowski explained there were limitations to the study, as these compounds were more related to industrial or municipal sources like wastewater treatment plants than livestock operations. He further explained that there was such a high degree of variability between samples from the same sources at different points in time that it was difficult to connect a community odour to a source profile with any degree of confidence.

[788] During the Town’s cross-examination of Dr. Piorkowski, the Board heard the CFO did not have any AAAQO exceedances for  $\text{NH}_3$  during the 2023 or 2024 assessment periods.<sup>638</sup> Dr. Piorkowski further noted that approximately 36 percent of the total reduced sulfur exceedances

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<sup>638</sup> The Board notes the assessment periods were from May to September 2023, and May to October 2024. See Odour Monitoring Report at the Summary and page 13.

during the assessment periods were attributable to the direction of the CFO. He stated that while the AAAQO are used as guideline values, under AOPA the CFO is not required to abide by the AAAQO.

[789] The Board heard that the Compliance Directive issued under AOPA to the CFO was related to an inappropriate disturbance caused by the CFO and that the Compliance Directive specifically relates to the design or maintenance of the catch basins.<sup>639</sup> Dr. Piorkowski explained the CFO has catch basins towards the southeast of the feedlot, and that the catch basins are surface water control holding catchments intended to hold a 1 in 30-year storm event for a 24-hour duration. The Board heard this means the catch basins should have the capacity to hold a storm event of that size and they are not intended to function as ponds or be full of water at any given time or to store liquid manure.<sup>640</sup> During the Town's cross-examination, Dr. Piorkowski stated the Compliance Directive concludes that the catch basins were having more of an effect on odour as opposed to the rest of the CFO. He explained the conclusion is consistent with the measurements the NRCB obtained throughout the course of 2024, supported by the high concentrations of odorous compounds emitted from the catch basins. He acknowledged while the catch basins were the most significant source of odours at the CFO, it was not the only source of odours.

[790] Dr. Piorkowski also restated his earlier opinion provided to EPA during the Application review that the Facility would have a negligible effect on reducing the CFO's emissions from the catch basins. He explained that while he did not run any modelling in support of his opinion, he had based his conclusions on assumptions for the model not being defensible.

[791] Dr. Piorkowski further explained that the odour was a function of the surface area. He provided an example that a very deep catch basin that holds the same volume but with less surface area would have less odour. In contrast, a shallow wide catch basin would have more odour because odour is generated at the air water interface. He stated when looking to calculate

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<sup>639</sup> The Board highlights the language difference between EPEA and AOPA. AOPA and the NRCB manages for "inappropriate disturbance," such as in section 39(1) of AOPA. EPEA and EPA manages releases and emissions, for example see Part 5 of EPEA.

<sup>640</sup> Dr. Piorkowski clarified that liquid manure and runoff from a feedlot are not equivalent. "Liquid manure is a manure product that through various operations... has very low percentage of solids..., so it's classified as a liquid... Runoff has contacted manure, does transport manure solids in it, but it's not nearly to the same extent as liquid manure."

emissions, the emission rate is mass per unit time per unit area. He further stated that odour would also be dependent upon the amount of material transported to the catch basins.

[792] In response to the Board's request for clarification on his opinion that the management of manure provides minimal influence on the overall reduction of odours as opposed to the livestock themselves, Dr. Piorkowski explained that stockpiles would create less odours than spreading manure on fields, by virtue of the stockpile being on a smaller surface area of landscape. He further explained that a certain amount of odour generation is a generally acceptable agricultural practice, and that spreading manure would be an event that temporarily generates odour. Dr. Piorkowski stated that liquid sources tend to generate more odours than solid sources on an equivalent field.

[793] The Board notes the Compliance Directive requires the CFO to submit a plan to the NRCB outlining how the CFO will meet AOPA runoff containment requirements without the regular use of cell 2 of the catch basin, and a plan for the regular management and cleanout system for the catch basin which would eliminate the ongoing need for the use of cell 2. The Compliance Directive requires the clean out, closure, and reseedling of cell 2, and further requires the semi-annual cleaning of all swales that direct pen runoff to the catch basin.<sup>641</sup>

[794] The Board also notes that Dr. Piorkowski explained that the NRCB would continue to provide community level monitoring in High River at the western boundary for H<sub>2</sub>S, NH<sub>3</sub>, and volatile organic compounds to see if there has been an improvement in the frequency, intensity, duration, and offensiveness of odours. He further explained this information would be used to validate whether the management practices in the Compliance Directive were leading to a benefit in the community.

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<sup>641</sup> See the Compliance Directive at page 5.

## **9.2. Consideration of Issues**

### **9.2.1. Was the Director's Decision to issue EPEA Approval No. 484778-00-00 Appropriate?**

[795] The Appellant/Intervenor Group argued the Director's decision to issue the Approval was not appropriate for the following reasons:

1. the Approval worsens cumulative air quality and odours experienced in the region;
2. EPA is not the appropriate body to regulate the Facility;
3. the Facility and CFO should be co-regulated;
4. the Facility is an industrial facility located in the wrong land use zone; and
5. several matters related to the personal enjoyment and financial valuation of their property, including water quantity, traffic, noise and light pollution, and property values incidentally impacted by the Approval, but are not regulated by EPEA or EPA under the Approval.<sup>642</sup>

[796] The Town argued the Director's decision to issue the Approval was not appropriate for the following reasons:

1. the Approval worsens cumulative air quality and odours experienced in the region;
2. the Town argued the Pond should be covered or liquid digestate stored in tanks; and
3. EPA is not the appropriate body to regulate the Facility; and
4. the Facility and CFO should be co-regulated.

### **9.2.2. Cumulative Effects / Pond**

[797] The Board heard evidence from the Appellant/Intervenor Group and Dr. Piorkowski regarding the impacts created by an existing CFO to the west of the Town and the background conditions in which the Approval was issued. This evidence is relevant to the extent that it informed the background and cumulative conditions in which the Approval decision was made.

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<sup>642</sup> The Board notes it can only consider and make recommendations related to the authorization that is currently before the Board.

[798] The Appellant/Intervenor Group argued impacts caused by the CFO created horrendous odours and generated flies, reducing their ability to enjoy being outside on their properties and impacting their quality of life. The Appellant/Intervenor Group argued the Approval should not have been issued as the Facility would worsen already intolerable conditions and add to the negative ambient air quality conditions already experienced by the CFO's neighbours.

[799] The Board heard evidence and arguments from the Appellant/Intervenor Group that the Application overstated the benefit the Facility would provide to regional air quality. The Board heard arguments that as the existing air quality in the region already exceeded the AAAQO for H<sub>2</sub>S and NH<sub>3</sub> emissions, the Director should not have issued an approval which added to those emissions, even if the addition was incremental.

[800] The Appellant/Intervenor Group argued the Approval Holder should have more thoroughly addressed odour in the Application given the concerns related to the CFO, noting odour was only addressed in response to SIR No. 2, after which an Odour Abatement System, Best Odour Management Practices Control Plan, and Odour Complaint Management and Response Plan were required. The Appellant/Intervenor Group argued while these were improvements to the original application, the Application and Approval were still deficient.

[801] At the hearing, the Board heard from the Appellant/Intervenor Group's expert Mr. Urbain, who expressed concerns regarding the relevancy of the studies used to determine the emission factors to calculate the emissions for the CFO, the predicted emissions for the Facility, and the predicted benefit of the Facility were based. The Board heard from Mr. Urbain these errors resulted in an overprediction of H<sub>2</sub>S levels and underprediction of NH<sub>3</sub> levels at the CFO, and that these errors were subsequently carried through to the Project Site calculations, resulting in a net overestimation of the Facility's potential benefit. The Board further heard from Mr. Urbain that the Pond would have NH<sub>3</sub> emissions because of these errors.

[802] The Appellant/Intervenor Group argued the Approval Holder's AQA contained errors for the calculated emissions rates for the CFO and the Facility, and therefore the Director could not rely on the AQA as an accurate assessment of the cumulative effects of both facilities.

The Appellant/Intervenor Group argued the decision to issue the Approval should be reversed because there was no longer a foundational basis to support the Facility having an acceptable environmental effect.

[803] The Town argued the decision to issue the Approval was inappropriate as the current baseline levels for H<sub>2</sub>S and NH<sub>3</sub> were almost eight times higher at the Project Site than the levels contained in the AAAQO. The Town noted that Mr. Urbain considered the NH<sub>3</sub> levels at the Project Site to be grossly underestimated and had suggested they were at least 10 times higher. The Town argued the Director should not have issued the Approval without requiring the Facility to reduce the current emission levels at the CFO.

[804] The Town noted that Mr. Urbain had predicted the Facility would increase odour compounds and argued that any improvement to the odours should form part of the Approval. Mr. Urbain's evidence regarding the limited benefit of the Facility relative to the CFO appears to be supported in part by the independent evidence of Dr. Piorkowski. The Board heard EPA asked Dr. Piorkowski to review the Approval Holder's response to SIR No. 1, and at the time he stated a 50 percent reduction in emission rates for odour causing parameters for the CFO was likely a gross overestimate of the proportional reduction in emission rates. During cross-examination at the hearing, Dr. Piorkowski stated his opinion regarding the overestimation of the potential reduction in cumulative emission rates at the Project Site had not changed and was likely overestimated by a factor of 3. The Board heard it was his opinion that odour reduction would be more in the range of 15 percent and that he based this figure on the more frequent removal of the manure, noting that typically calculations for pens do not factor in manure management.

[805] In this regard, the Board heard from Dr. Piorkowski that the Compliance Directive concludes that the catch basins at the CFO were having more of an effect on odour as opposed to the remainder of the feedlot. The Board heard this conclusion is consistent with the measurements the NRCB obtained throughout the course of 2024 and is supported by the high concentrations of odorous compounds emitted from the catch basins. The Board heard that during the NRCB's odour monitoring, the assessment periods demonstrated there were no AAAQO exceedances for

NH<sub>3</sub> during the 2023 or 2024 assessment periods for the CFO.<sup>643</sup> Dr. Piorkowski explained that with respect to the catch basins, odour was a function of surface area. He further explained that a very deep catch basin holding the same volume but having less surface area would have less odour. In contrast, a wide shallow catch basin would have more odour because odour is generated at the air to water interface.

[806] The Town argued the design of the Facility would encourage odours, as it included an uncovered digestate pond. The Board heard from Mayor Snodgrass that the Town has received thousands of complaints related to the CFO. Most of the odour complaints were ammonia based. The Town noted the Pond was 14.7 ha and asked that if the CFO's catch basins were 6.7 ha in size and generated almost 4,500 complaints in two years, how many complaints would the Pond generate? The Board heard that the Town was primarily concerned that the Pond would be used in a similar manner as the CFO's catch basins and would store manure and manure by-products for extended periods of time. The Town argued that since the existing odours at the Project Site exceeded the AAAQO, the Facility must reduce the existing odour as much as possible. The Town argued the odours could be significantly reduced by covering the Pond and reducing the H<sub>2</sub>S and NH<sub>3</sub> emissions.

[807] The Town noted the Approval Holder had considered enclosing the Pond. The Board heard from Mr. Boisvert that this option was considered but had been deemed "economically unviable." The Board further heard on cross-examination of Mr. Boisvert that only the up-front construction costs of enclosing the Pond had been considered in the BATEA Study and that the long-term maintenance options of aeration or enclosure had not been considered. The Town argued this was an error and the Director should have also considered the operating costs of both an open- and enclosed-digestate pond when issuing the Approval.

[808] The Board heard arguments from the Town that the Approval should require the Pond to be covered or the liquid digestate stored in tanks. The Town argued the Director's decision violated section 2 of EPEA as it did not allow for economic growth in an environmentally

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<sup>643</sup> The Board notes the assessment periods were from May to September 2023, and May to October 2024 which appear to coincide with the time periods just after the catch basins were cleaned at the CFO. See the Compliance Directive.

responsible manner. The Town further argued economic considerations do not outweigh environmental considerations and that the decision to issue the Approval with an uncovered digestate pond was not appropriate as it permitted the Approval Holder's economic interests to "trump the protection of the environment and human health."

[809] The Appellant/Intervenor Group supported coverage of the Pond, arguing that given the terrible air quality and odour concerns in the area, the Approval Holder had an obligation to reduce its impact to air quality and odour in any possible way as they were unable to use and enjoy their properties.

[810] The Board heard from Mr. Urbain that there was a potential for the Pond to become septic or grow blue-green algae, depending on the percentage of solids reaching the Pond, passing through the cells of the Pond, and the adequacy of the air exchange. He further stated if there was not enough oxygen in the Pond, the Pond would become septic and start to release emissions. Mr. Urbain noted that while the Approval requires the Approval Holder to take oxygen readings, the Approval does not provide a required solution if the oxygen reading is too low and there is problem, such as chemical injection or requiring a system to bubble in air.

[811] The Approval Holder argued it was not required to regulate the emissions of other operators, in particular the CFO, and whether the Facility reduced emissions from the CFO by 40 percent, 10 percent, or even 2 percent, the decision to issue the Approval was appropriate as the emissions from the Facility itself were below the requirements of the AAAQO. Notwithstanding this argument and the primary purpose of the Facility to capture greenhouse gases, the Approval Holder noted that the Facility could also be considered one large odour abatement system for the manure generated by the CFO by providing a means of processing the manure.

[812] The Board heard from Mr. Boisvert who stated separation and aeration were the primary odour abatement strategies used at the Facility, and that the Odour Abatement System would remove 94 percent of the Facility's H<sub>2</sub>S emissions and 53 percent of the Facility's NH<sub>3</sub> emissions. The Board notes the Director indicated he had determined from the available information that the emissions from the manure staging area at the Facility would be comparable



to the storage of manure at the adjacent CFO. Taking this information into account, the Board notes the Facility's removal of NH<sub>3</sub> emissions exceeds 90 percent if the emissions from the manure staging area are excluded. This is in recognition of the proximity of the CFO's manure storage as approximately 45 percent of the Facility's NH<sub>3</sub> emissions are associated with the manure staging area. Therefore, regardless of where the manure feedstock is stored, there is no net increase in NH<sub>3</sub> emissions to the regional airshed.<sup>644</sup>

[813] The Board heard from Mr. Boisvert that the Facility represented 1.5 percent of the cumulative H<sub>2</sub>S emissions and 0.6 percent of the cumulative NH<sub>3</sub> emissions for the area, which he argued demonstrated the Facility itself was a very small regional contributor to odour. The Board also heard from Mr. Boisvert that the Odour Abatement System for the Facility operates as a forced air system directing airflow from the building intakes through the tanks and then onward towards the odour abatement unit. Mr. Boisvert explained that all the buildings and tanks within the feedstock receiving area and digestate separation areas are integrated into the Odour Abatement System. The Board heard the biogas will initially be pretreated to remove NH<sub>3</sub>, H<sub>2</sub>S, and other volatile compounds. Mr. Boisvert explained separation is intended to remove the volume of solids allowed to enter the Pond and that this process is expected to significantly reduce the risk of odours in the liquid digestate. He clarified that the solid digestate staging area is intended as a backup, as the solid digestate would be sent to the CFO for use as bedding.

[814] The Board understands the Odour Abatement System consists of two stages, wet chemical and dry scrubbers to remove H<sub>2</sub>S and NH<sub>3</sub>, reduced sulphur compounds and volatile organic compounds. The Board heard from Mr. Boisvert that these compounds will not be released into the atmosphere from the Odour Abatement System. Mr. Boisvert indicated the remaining two components are approximately 35 percent CO<sub>2</sub> which is vented and 63 percent biomethane which is ultimately compressed and further refined into biogas.

[815] At the hearing, Mr. Fothergill stated the Odour Abatement System was designed to allow for general maintenance and downtime without releasing any untreated odours. He explained that when required, the Approval Holder will stop receiving feedstock and will process

<sup>644</sup>

See the Approval Holder's Response to SIR No. 2, BATEA Study at 4.2, Director's Record at Tab 28.

the manure into the system and digestors, reducing the amount of active organic material in the system. He further explained that once that first step has been completed, the ducting system and tanks will be sealed, confining the odorous air to the empty tanks and ducting while maintenance is being completed. Mr. Fothergill stated the Approval Holder will store critical spares on site to ensure repairs can be made in a timely manner, and once the Odour Abatement System is back online, air trapped in the ducting system and tanks will be treated before being released.

[816] The Board notes that the Director stated that a director must examine an application on its own merits, including whether the proposed project itself exceeds the AAAQO, and noted that in this case, Mr. Urbain conceded on cross-examination that the emissions from the Facility are not predicted to exceed the AAAQO, even when considering his concerns with the Approval Holder's emission rates and modelling.

[817] The Board notes that Approval condition 4.1.19 require continuous monitoring of the chemical scrubber in the Odour Abatement System. The Board further notes the Approval Holder stated that whether planned, or during maintenance, no untreated air will be released into the atmosphere from the Odour Abatement System.

[818] The Board heard evidence from the Approval Holder that the Pond will be similar in size, design and nature to municipal wastewater treatment lagoons such as the wastewater treatment lagoon north of the High River and operated by the Town. The Board heard Cell 1 of the Pond will treat the liquid digestate with aeration and Cell 2, which is separated from Cell 1 by a berm, will hold the liquid digestate that has drained into it through the process of gravity from Cell 1.

[819] At the hearing, Mr. Dawes explained that Cell 1 of the Pond has an aeration system to ensure the Pond does not go anerobic and to minimize the emission of odours. Mr. Dawes indicated that a fine bubble diffuser will release air into the liquid digestate through weighted air pipes resting at the bottom of Cell 1, keeping that portion of the Pond aerobic. The Board further heard from Dr. Facey that the aeration would oxidize the H<sub>2</sub>S into sulfates or elemental sulfur, reducing the potential for sulfur emissions from the Pond. The Board also heard that a certain

level of oxygen in the Pond would also prevent the development of anaerobic conditions and control algae growth within the Pond.

[820] The Board further heard that by the time the liquid digestate is in Cell 2, the liquid digestate will have been treated, solids will have been separated from the liquid digestate, and odours will have been mitigated to the point where additional treatment by aeration should not be required. The Board heard from Dr. Facey that Cell 2 of the Pond is a larger storage shelf designed to avoid anaerobic conditions from developing within the cell and that it would allow for aerobic bacteria to break down any residual biodegradable organic matter remaining in the liquid digestate.

[821] The Approval Holder stated that the emissions from the Facility were predicted to comply with the ground level AAAQO for H<sub>2</sub>S and NH<sub>3</sub> emissions. The Board heard that covering the Pond or placing the liquid digestate into tanks would only reduce the NH<sub>3</sub> emissions emitted by the project by a further 8.2 percent, and would only reduce the cumulative NH<sub>3</sub> emissions in the region by 0.1%.<sup>645</sup> The Board further heard that covering the Pond would result in a 23 percent increase to the overall project cost and that placing the liquid digestate in tanks would increase the project cost by 43 percent.

[822] The Board heard that the Director noted the Approval Holder's modelling estimates the CFO's NH<sub>3</sub> emissions are currently over 8,000 ppbv compared to the AAAQO value of 2,000 for NH<sub>3</sub>. The Board notes that the Director stated the Facility's predicted ground level concentration for NH<sub>3</sub> from all sources at the Facility is 369 ppbv.<sup>646</sup> The Director noted that while Mr. Urbain had indicated that the NH<sub>3</sub> emissions for the Pond were underestimated, Mr. Urbain had also stated that he did not think they would exceed the AAAQO. The Director similarly was of the view that the NH<sub>3</sub> emissions from the Pond would not exceed the AAAQO and stated the Approval prohibits fugitive emissions from the Pond that exceed the AAAQO, as well as includes rigorous odour management requirements.

[823] The Board notes that the Director also indicated that he was not concerned with the NH<sub>3</sub> emissions from the Pond because most of the NH<sub>3</sub> compounds would be removed during the

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<sup>645</sup> Approval Holder's Response to SIR No. 2, BATEA Analysis at Table 4.2, Director's Record at Tab 28.

<sup>646</sup> Director's Closing Arguments at paragraph 47(a) citing Table 14 of the Updated 2023 AQA, Director's Record at Tab 28.

biodigestion process, meaning the overall amount of  $\text{NH}_3$  will be low by the time the liquid digestate is sent to the Pond. The Director argued that if an offensive odour is emitted from the Pond, the Approval conditions are designed to collect the necessary empirical data to address the issue through further emissions management actions or further regulatory amendments to the Approval.

[824] At the hearing, the Board heard from Mr. Knauss, that it was EPA's role to support and promote the protection of the environment while incorporating the principle of sustainable development of regulated activities. The Board heard that EPA has moved from a prescriptive approach to an outcomes-based approach, where EPA describes the goal, but not how to achieve it. He explained that this provides the opportunity for the proponent to be adaptable and innovative, while still arriving at the same critical environmental outcomes described or required in the approval.

[825] The Board heard from Mr. Knauss that the Approval Holder is only responsible for emissions and odours emitted from the Facility, and that the Approval Holder is not and cannot be responsible for managing the emissions of other operators and sources within the region. In this context, the Board heard that the Mr. Knauss' primary deciding factor to issue the Approval was "looking to see if the facility that is being applied for would result in the cumulative impact being lower, the same, or higher than the cumulative case ... and would not make the cumulative situation worse." The Board further heard the Director considered that the  $\text{H}_2\text{S}$  and  $\text{NH}_3$  emissions from the Facility were below the AAAQO limits applicable to the facility, and that "if it is not making the situation worse, it is a positive consideration." The Board understands that if the odour abatement technology works as anticipated, the air modelling results represented in the AQA are representative of the Facility's impacts.

[826] The Board heard from Mr. Knauss that EPA recognized there was a lack of published data regarding  $\text{H}_2\text{S}$  and  $\text{NH}_3$  emissions from area sources such as liquid digestate. The Board heard this was identified and in considering the Application and setting the outcomes, EPA did not consider that data. Mr. Knauss explained the Approval emissions rates were based on far more conservative considerations and were tied to the point sources and the efficiency of the

emission control systems. The Board notes that the Director indicated this is consistent with EPA's *Industrial Release Limits Policy*.<sup>647</sup> The Board heard from Mr. Urbain that the technology for the Odour Abatement System was fine, provided it is properly sized and properly installed. Mr. Urbain stated his concern was the potential for overloading the Odour Abatement System with too high a concentration of odours and problems with maintenance.

[827] The Board also heard from Mr. Knauss that the emissions would be monitored, and that the intent was for the actual data from the Facility to be modelled to ensure the releases for sources and assumptions based on the area sources were correct. Mr. Knauss stated that if the monitoring indicated that there was a potential for an impact, he can amend the Approval or require the Approval Holder to submit a plan to address the situation. In this regard, the Board notes that the Approval Holder had argued that its AQA was correct, as the empirical data and results of the Odour Monitoring Report correlated with the AQA, in that both indicated that H<sub>2</sub>S emissions were the primary concern.

[828] The Board notes it is assumed that the manure transferred from the CFO to the Facility site would not generate greater emissions than if it were to have remained in storage on the CFO site.<sup>648</sup> The Board further notes the processed digestate is anticipated to be less odorous than manure as organics will have been removed and vapours will have been discharged into the Odour Abatement System.<sup>649</sup> While management of cumulative odour was not a critical deciding factor for Mr. Knauss, the Board heard it was his expectation that areas of cumulative concentration would improve at the ground level with the Facility as the Facility would be able to process manure waste previously stored on the CFO site. Mr. Knauss stated it was his expectation in the cumulative case of both the Facility and the CFO operating there would be some improvement in the regional air quality.

[829] The Board understands that during normal operations of the Facility, the Pond is anticipated to be a minor source of odours as the remainder of the Facility is connected to the

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<sup>647</sup> Director's Closing Arguments at paragraph 56, citing the Industrial Release Limits Policy, Director's Record at Tab 94.

<sup>648</sup> Director's Decision and Consideration at page 3, Director's Record at Tab 2.

<sup>649</sup> Director's Decision and Consideration at page 3, Director's Record at Tab 2.

Odour Abatement System. In this context, the consideration before the Board is whether it was appropriate to issue the Approval, noting the Facility has been designed with an open liquid digestate pond. The Board heard the region has exceedances in the AAAQO for H<sub>2</sub>S and NH<sub>3</sub> emissions, however the Facility's H<sub>2</sub>S and NH<sub>3</sub> emissions will be below AAAQO applicable to the Facility.

[830] The Board heard from Mr. Urbain that although he did not agree with the predicted level of odour reduction and that the Pond may have a bit more NH<sub>3</sub> than estimated, the Facility would still fall within the AAAQO and meet the criteria.<sup>650</sup> The Board specifically notes that no evidence was presented at the hearing that the Facility's H<sub>2</sub>S or NH<sub>3</sub> emissions in the Project Case would exceed the AQA, in the Cumulative Case would exceed the Base Case.

[831] The issue the Board must determine is whether a person would be able to detect, or whether an adverse effect or harm to the adjacent property owners or regional airshed would occur as a result Facility's predicted NH<sub>3</sub> emissions from the Pond or the Facility's 0.1% contribution to regional air quality, such that increasing the capital investment cost of the Facility by 23 to 43 percent is warranted. The Board is of the view that the average person would not be able to detect the Facility's release NH<sub>3</sub> emissions and that given the overall estimate of NH<sub>3</sub> emissions of the Facility do not exceed the AAAQO, an adverse effect or harm to the adjacent property owners or regional airshed will not occur.

[832] The Board also places this consideration in the context of the similarities of the Pond to the Town's wastewater treatment lagoon. The Board notes there are similarities between the Pond and municipal wastewater treatment lagoons, both in their potential to generate odours and attract pests. The Board notes Town's wastewater treatment lagoon was mentioned by Dr. Piorkowski as a potential source of odour and that it was included in the Odour Monitoring Report. The Board heard from Mayor Snodgrass at the hearing that the wastewater treatment lagoon operated by the Town was not causing a problem and there was no suggestion that the wastewater treatment lagoon should be covered. The Board did not hear evidence regarding the need to cover the Town's wastewater treatment lagoon or regarding the wastewater treatment

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At one point Mr. Urbain had offered a higher emission factor for NH<sub>3</sub> but later rescinded his calculation.

lagoon's impacts to the overall air quality in the region. Finally, the Board understands the wastewater treatment lagoon is typical of wastewater treatment in a rural community setting.

[833] The Board is cognizant of Mayor Snodgrass' view that Town's wastewater treatment lagoon was not causing a problem, and notes that the none of the Parties argued that the municipal wastewater lagoon should be covered. However, given the similarities between the Pond and the Town's wastewater treatment lagoon, both in size, design, and function, the Board is hesitant to set a costly precedent that would require such facilities to be covered in the long term, where the benefits may prove to be minimal.

[834] The Board generally does not consider the economics of a proposed project. However, the Board will consider the impacts of proposed changes to an authorization including the financial consequences, such as those demonstrated by the Approval Holder in its BATEA Study, where those changes may result in imperceptible or limited benefits to the environment while imposing significant increases to the capital or operating costs of the Approval Holder.<sup>651</sup> The Board notes the increased costs include not only construction, but the Approval Holder indicated the air captured in the enclosure of the Pond would increase the likelihood of the Pond becoming septic and Pond would require ongoing odour abatement.<sup>652</sup>

[835] Furthermore, in considering a proposed change to an authorization, the Board needs to ensure that the costs of undertaking any change is not disproportionate to the environmental benefit. Here, the Board is of the view that requiring the Approval Holder to cover the Pond or to store the liquid digestate in tanks would significantly increase the cost of the project for the Approval Holder, assigning a disproportionate level of cost to the Approval Holder in relation to the environment benefit, which in this case, the Board views as minimal.

[836] The Board finds that the Approval Holder is responsible for managing the impacts arising from the activity of the Facility and is not responsible for managing the impacts of the CFO, in particular, the emissions and odours generated by the CFO.

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<sup>651</sup> Approval Holder's Response to SIR No. 2, BATEA Analysis, Director's Record at Tab 28.

<sup>652</sup> Approval Holder's Closing Comments at paragraph 40 and paragraph 41.

[837] The Board finds the Facility's 0.1% contribution to the cumulative NH<sub>3</sub> emissions in the region would be imperceptible to the average person. The Board finds that requiring the Approval Holder to cover the Pond or store the liquid digestate in tanks, results in minimal environmental benefit and the increased cost of doing so would be disproportionate.

[838] As an observation, the Board notes the Parties comments regarding the air quality and odour concerns in the region, which may not be attributable to just the one feedlot. Given the high concentration of industrial type agricultural and agri-processing operations in the region, the Board notes it may be beneficial in the long term if the cumulative effects were examined at a regional level and consideration were given to developing a plan and zone to manage them, similar to efforts in the Industrial Heartland and with the Lower Athabasca Regional Air Quality Framework.

### **9.2.3. Regulation of the Facility by the AER**

[839] The Town argued the decision to issue the Approval was inappropriate as EPA was not the proper body to regulate the Facility and requested the Board recommend the Facility be regulated by the AER. The Board heard that the Town was concerned with potential regulatory gaps once the project is operational. The Board further heard that the Town was concerned that because the Facility was co-located with the CFO, enforcement would be problematic as each facility could potentially deny responsibility in a regulatory action. The Board further heard that it was the view of the Town, the Appellant/Intervenor Group, and several of the Intervenors that although the Facility is largely described as agricultural in nature, it is in fact an industrial project producing RNG.

[840] The Town argued that the Facility will be producing methane gas and as such, should be under the oversight of the AER which has regulatory oversight over operations like a gas well or gas plant. The Town further argued that the fact that the methane gas is produced through biodigestion and not conventional drilling operations did not change the fact that methane was being produced and supplied to the existing pipeline system. The Town argued that oversight by the AER would provide greater certainty that the operations of the Facility meet appropriate standards.



[841] The Director argued that the current legislative scheme does not support regulation of the Facility by the AER and that EPA has oversight of the Facility under EPEA. At the hearing, the Board heard from the Director that the Facility is considered a waste management facility under EPEA and is regulated under EPEA and the WCR. The Director highlighted section 61 of EPEA<sup>653</sup> and noted that if the proposed activity is listed within the “Schedule of Activities” in EPEA, a person must refer to the ADR to determine if the proposed activity requires an approval (Schedule 1).<sup>654</sup>

[842] The Director stated an Approval is required for the activity because the proposed activity is a waste management facility using manure and other organic wastes as feedstock to produce renewable natural gas, which falls within Schedule 1 of the ADR. The Board further understands that the Director indicated there is a secondary activity which falls within Schedule 1, Division 2, Part 9, which speaks to the construction, operation or reclamation of a power plant. The Director further stated that the WCR sets out the requirements for financial security.

[843] The Board heard from the Mr. Knauss that the Approval conditions are designed to collect the necessary empirical data to address any issues through fugitive emissions management actions, and that further regulatory amendments can be made to the Approval, if issues are identified.<sup>655</sup> The Board further heard the Compliance Branch of EPA has tools to ensure compliance with the Approval, EPEA, and the regulations. These tools include warning letters, administrative penalties, as well as prosecutions. Mr. Knauss noted EPA also has the authority to suspend facilities as appropriate.

[844] The Board finds the Facility is a waste management facility with an associated power plant as contemplated by EPEA. Accordingly, the Board further finds EPA has the authority to regulate the Facility. The Board finds that it cannot make a recommendation to the Minister

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<sup>653</sup> Section 61 of EPEA provides:

“61 No person shall commence or continue any activity that is designated by the regulations as requiring an approval or registration or that is redesignated under section 66.1 as requiring an approval unless that person holds the required approval or registration.”

<sup>654</sup> Director’s Response Submissions, November 13, 2024 (“Director’s Response Submissions”), at paragraph 6, citing the ADR.

<sup>655</sup> See section 70 of EPEA.

that the AER regulate the Facility as this is outside the jurisdiction of the Board and would require legislative change.

**9.2.4. Should the Proposed Facility and CFO be Co-regulated? Or Should the Approval Regulate Impacts Arising from the CFO?**

[845] The Appellant/Intervenor Group argued the Facility and the CFO should be co-regulated by EPA as a single project. In the alternative, it was argued that the Approval should regulate certain impacts arising from the CFO's operations, which the Appellant/Intervenor Group argued were connected to the Facility, such as increased odours resulting from the use of RCC flooring at the CFO. The Appellant/Intervenor Group supported their position by arguing that in addition to co-location, the CFO was undertaking certain activities for the benefit of the Facility.

[846] The Board heard that the Facility will be using manure from the CFO, which will be transported through an internal road. The Board heard from the Appellant/Intervenor Group that early in its operations, the CFO installed RCC flooring for the feedlot pens. The Appellant/Intervenor Group argued the CFO made this change for the benefit of the Facility and that the RCC was the first step in preparing for the Facility by allowing for easier collection of clean manure to use as feedstock. The Appellant/Intervenor Group further argued that as the RCC was increasing the odour problem in the area for the benefit of the Facility, the Approval should regulate odours being emitted by the CFO.

[847] The Appellant/Intervenor Group argued the Director has the authority to issue orders under section 116 of EPEA regarding offensive odours, however the Director indicated that this authority is subject to subsection (2) which exempts agricultural activities being carried out in accordance with generally accepted practices for agricultural activities.<sup>656</sup> The Board agrees with the Director that while there is authority to regulate offensive odours in EPEA, this authority is limited to activities falling outside of generally accepted practices for agricultural activities. In contrast, the Board notes the CFO is regulated by a permit issued by the NRCB, which also has

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<sup>656</sup> Subsection 116(2) of EPEA provides:

“(2) Subsection (1) does not apply in respect of an offensive odour that results from an agricultural operation that is carried out in accordance with generally accepted practices for such an operation or in respect of which recommendations under Part 1 of the Agricultural Operation Practices Act indicate that the agricultural operation follows a generally accepted agricultural practice.”

legislation for addressing odours and standards for determining generally accepted practices for agricultural activities.

[848] The Approval Holder argued that while the Facility was expected to create a net benefit to air quality in the local area and reduce odours, it was not the responsibility of the Facility to regulate the odours emitted by the CFO. While Mr. Boisvert acknowledged at the hearing the RCC made the collection of manure easier and provided a clean source of manure for feedstock, the Board notes Mr. Boisvert was a witness for the Approval Holder. There was some indication that there were benefits to the CFO as well in making it easier for the CFO operations to keep the pens cleaner and the health of the cattle, however the Board did not hear evidence from the Rimrock Cattle Company Ltd. regarding the CFO operations or specifically, the Rimrock Cattle Company Ltd.'s reasons for the use RCC at the CFO. Therefore, the Board cannot conclusively state why the RCC was installed at the CFO, and whether it solely benefits the Facility.

[849] The Board also understands the southwest catch basins neighbouring the CFO are fed by a 381-ha upstream catchment in addition to the CFO site, which under an NRCB authorization is permitted to discharge rainwater into the catch basins. The Board notes there does not appear to be a *Water Act* application submitted for the catch basin site due to the legacy treatment of the water body as a catch basin within the site by the NRCB.<sup>657</sup> The Facility site is not anticipated to contribute its post-development flows into the catch basin, as those flows will be directed into Cell 1 of the Pond, where those flows will be treated with aeration along with the liquid digestate.<sup>658</sup> Review of the Application suggests there is also a possibility of using the water or liquid manure in the form of surface water run-off from the catch basin to be directed towards the Facility.<sup>659</sup>

[850] The issue of whether to co-regulate the CFO or impacts arising from the CFO's operations through the Approval is an issue of jurisdiction. As mentioned previously, the Approval

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<sup>657</sup> See the NRCB's Letter to Rimrock Cattle Company Ltd. dated May 4, 2022, attached as Appendix D to the Application, at page 83 of the Application, Director's Record at Tab 14. The Board notes that the NRCB has the authority to regulate catch basins constructed at confined feeding operations under the Standards and Administration Regulation, AR 276/2001.

<sup>658</sup> Response to SIR NO.1, November 28, 2022, at page 5.

<sup>659</sup> Application at page 72, Director's Record at Tab 14.

Holder and the CFO are separate legal entities. The Board notes the sale of the Approval Holder to Biocirc Canada Holdings Inc. makes common ownership between the Approval Holder and the CFO even more remote. The Approval Holder holds an Approval for the Facility and is responsible to EPA for the operation of the Facility, while the Rimrock Cattle Company Ltd. holds an authorization for the CFO and is responsible to the NRCB for the operation of the CFO. Put simply, the Approval Holder and the CFO are two separate legal entities holding authorizations issued from two different regulators under their respective jurisdictions. In the Board's view, the confusion arises in determining which regulator has jurisdiction, when the same material (manure) is potentially covered by two regulators over its life cycle as in the case of the Facility.

[851] The Board heard from the Director that EPA can only regulate matters which fall within EPA's jurisdiction under EPEA and the Approval. This means that EPA and the Director do not have jurisdiction under AOPA or jurisdiction to regulate the CFO. The Board also heard from the Director that the CFO is regulated by the NRCB under AOPA, and legislative change would be required for EPA to have jurisdiction to regulate the CFO. The Director also advised the Board that EPA and the NRCB have an MOU which sets out their respective roles and responsibilities regarding feedstock and digestate produced from manure, setting out when each regulator takes jurisdiction. According to the Director, manure stored at the CFO is regulated by the NRCB under AOPA until it enters the Facility site, at which point the manure is regulated by EPA under EPEA and the WCR as feedstock.

[852] The Board heard from Mr. Boisvert that land application of the liquid and solid digestate is regulated by the NRCB under AOPA and that the Approval Holder is required to submit a nutrient management plan to the NRCB under AOPA to the NRCB as a part of the permitting of the Facility, which includes requirements for annual soil testing. The Board notes from the Director's explanation that although the manure is not regulated by the same regulator throughout its life cycle, whether the manure is considered manure, feedstock or digestate, the manure generated by the CFO is regulated throughout each stage of its life cycle.

[853] The Board finds that the Facility is responsible for the manure generated by the CFO only once it has entered the Facility's property and has become feedstock under the Approval.

The Board further finds that the Facility can only be regulated for matters and impacts falling under the Approval, and which are within the Approval Holder's ability to control. In making this finding, the Board notes that regardless of a possible interrelationship between the Approval Holder and the CFO, the Approval Holder and Rimrock Cattle Company Ltd. are separate legal entities subject to separate authorizations issued by two distinct regulators. Further, the Board notes that even if the RCC was installed to benefit the Facility or the catchment basin at the CFO is used as a source of water for the Facility, these connections do not create sufficient interrelationships between the facilities to consider them a single operation or justify co-regulation and overriding the legislative regimes currently in place. The transfer of a by-product from a specific operation undertaken by one legal entity to a different legal entity to be used as a feedstock in a completely different operation is a commercial transaction for which the Board has no jurisdiction, nor does it create the context for coregulating these two separate facilities and legal entities.

[854] Finally, the Board notes EPA and the NRCB have the Digestate MOU which details which regulator has jurisdiction of the manure and feedstock during the lifecycle of the manure and digestate. The Board recognizes the Digestate MOU does not entirely mitigate the complications that arise from having two co-located facilities, which are different legal entities, owned and operated separately, regulated by two different regulators. In this regard, the Board notes the potential for challenges in regulatory assurance and taking action against either party should an issue arise through monitoring efforts.

[855] The Board heard from Councillor Nychuk that this was a concern for the Town, in particular "who would have care, custody, and control of the operational conditions" if something happened or in addressing odours. Councillor Nychuk's comment highlights the potential the concern for the co-location of the two facilities to create confusion for the public as to which regulator is responsible for which operation and which impacts. The Board would encourage EPA and the NRCB to work together regarding the regulation of these two facilities particularly as it relates to the management of odours. Another potential approach to simplify regulatory responsibility may be to have responsibility for regulating the life cycle of manure fall under the jurisdiction of a single regulator. To that end, the Board does see merit in reviewing the regulatory

scheme and would encourage EPA and the NRCB to work cooperatively in the regulation of the two facilities.

**9.2.5. Zoning**

[856] The Appellant/Intervenor Group argued it was improper for the Approval to proceed as it was for an industrial project located in an agricultural – residential zone. The Board heard from the Appellant/Intervenor Group and several of the Intervenors that the Facility is to be located in the County, on land that is currently zoned as agricultural land. At the hearing it was suggested that the County had initially waived the zoning decision for the Facility. However, later in the hearing, the Approval Holder suggested the County had changed its mind and would now be requiring the Approval Holder to apply to rezone the property to “Federal/Provincial Jurisdiction District.”<sup>660</sup>

[857] At the hearing, the Board asked Mr. Knauss about the siting of the Facility from an environmental and social perspective. In response, Mr. Knauss stated the siting or land use decision is outside the jurisdiction of EPA. The Board notes Mr. Knauss also commented a siting decision would be more in line with a municipal decision, looking at the perspective under the MGA, and that his decisions were more environmental in nature. The Board heard from Mr. Knauss that there are other parts of EPA that are involved in high level regional planning and create regional plans such as the *South Saskatchewan Regional Plan*,<sup>661</sup> but noted those plans do not detail areas appropriate for residential, industrial, or agricultural use.

[858] The Board heard that EPA manages for impacts to the environment arising from an activity and viewed this way, the Approval is an authorization from EPA which permits the Approval Holder to engage in an activity and impact the environment under certain terms and conditions. The Board accepts Mr. Knauss’ evidence that in deciding to issue the Approval, the Director does not consider or make land use or zoning decisions. The Board appreciates that while the Director may inquire about other regulatory requirements and the status of those authorizations,<sup>662</sup> Mr. Knauss also indicated that he cannot enforce matters outside his jurisdiction.

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<sup>660</sup> See section 17.3 of the Foothills County Land Use Bylaw, 60/2014.

<sup>661</sup> *South Saskatchewan Regional Plan 2014-2024*, Government of Alberta, 2014.

<sup>662</sup> Application at page 12, Director’s Record at Tab 14.

The Board is of the view that its jurisdiction is similarly restricted. Therefore, the Board finds that determining whether the Facility is situated in the proper land use zone is not within the jurisdiction of the Board.

[859] In making this finding, the Board notes that while conflicting evidence was provided to the Board regarding the status of the land use zone and whether a development permit is required,<sup>663</sup> the Approval Holder is ultimately responsible for ensuring the Facility complies with all local, provincial, and federal legislation applicable to the Facility. The Board also notes it is the Approval Holder's obligation to ensure the Facility is located in the correct land use zone and the County as the municipal district in which the Facility will be located, has the responsibility of enforcing its land use decisions and zoning bylaws.

#### **9.2.6. Water Quantity**

[860] The Board heard from the Appellant/Intervenor Group and the Intervenors that they were concerned with the amount of water the Facility would require. Many noted they were reliant on well water and did not have a public water system to use in the event of a shortage. The Board heard from the Daltons that they were concerned with the "massive amount of freshwater" the project would take from the river. The Ayers stated that with the water shortages recently, they were concerned about water resource impacts. Some expressed frustration that 330,000 m<sup>3</sup> water would be used each year to "cook manure."

[861] The Board did not hear many arguments related to water quantity. The Board notes the quantity of water used by the Facility is not regulated by the Approval or EPEA, and therefore the Board finds that the quantity of water used by the Facility cannot be considered by the Board.

[862] However, the Board notes the Director stated the quantity of water used by the Facility is subject to *Water Act* Licence DAUT0010346, which was transferred to Korova Feeders Ltd. and is not therefore a new allocation of water.<sup>664</sup>

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<sup>663</sup> Note the Application indicated Foothills County had provided the Approval Holder with a Development Permit Waiver on November 30, 2022, see the Application at page 12, Director's Record at Tab 14. However, there was also some suggestion at the hearing that Foothills County had reversed this decision, and one would be required.

<sup>664</sup> The Board understands that Korova Feeders Ltd. also operates as the Rimrock Cattle Company Ltd. *Water Act* Licence DAUT0010346 can be found online at EPA's Authorization Viewer: <https://avw.alberta.ca/pdf/00489136-00-00.pdf>.

### 9.2.7. Noise

[863] The Board heard from the Appellant/Intervenor Group that noise from the CFO already affects nearby residents, primarily due to noise generated by frequent truck traffic and the operation of machinery at the CFO, such as loaders scraping the RCC pens. The Board heard that the sound of engine retarder brakes could be heard at all hours from the Presties and the Daltons stated they could hear employees and cattle from the CFO at night.

[864] The Appellant/Intervenor Group argued the Facility would amplify these problems by introducing new sources of continuous noise, such as power generators, compressors, pumps for the liquid digestate, and additional noise caused by increased local truck traffic hauling additional waste to the Facility or in draining the Pond. These concerns were echoed by several of the Intervenor in their submissions to the Board. The Board notes Daltons argued they would have to listen to the steady noise of gas-powered engines, and further notes that the Approval Holder had indicated that the project was designed to “meet occupational health guidelines, [and] off-site sound levels of the co-generation equipment will meet AUC Rule 012 permissible levels at residences nearest to the project, with project sound levels further decreasing with distance from the project.”<sup>665</sup>

[865] The Director stated noise is not within the Director’s jurisdiction under EPEA. At the hearing the Board heard conditions related to noise would not be in an approval as these would be more consistent with a land use decision. In response to the Director’s arguments, the Appellant/Intervenor Group relied on *Vipond*, arguing the Board has previously determined that noise generated by a facility falls within EPA’s jurisdiction.

[866] The Board notes EPA can regulate for noise by including conditions in an approval or noise can be addressed by the municipality. If the noise is addressed by the municipality, this would be in the municipality’s role as the decision-maker regarding land uses and establishing bylaws. As previously stated by the Board in *Vipond*, the issue is one of concurrent jurisdiction.<sup>666</sup>

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<sup>665</sup> Project Information Update Letter to the Daltons, March 24, 2023, at page 14, Director’s Record at Tab 83.

<sup>666</sup> See *Vipond* at paragraph 104. See also Preliminary Motions: *Fenske v. Director, Central Region, Environmental Management, Alberta Environment*, re: *Beaver Regional Waste Management Services Commission* (22 September 2008), Appeal No. 07-128-ID1 (AEAB) at paragraph 116.



Put another way, the question is whether the impact is caused by the facility and the Board should take jurisdiction over the matter.

[867] In the current appeals, the Board notes the Appellant/Intervenor Group expressed concerns with the noises specifically related to the CFO's operations, including the cleaning of the pens, the noise of the cattle and employees, and the various sounds of equipment operating at the CFO. The CFO is currently operated pursuant to a permit issued by the NRCB and is outside the jurisdiction of the Board. The Board finds it would be inappropriate for the Board to regulate the noise levels generated by the CFO as the NRCB is currently regulating the CFO's operations.

[868] Regarding the noise generated by traffic, including the sound of the engine retarder brakes, the Board notes the County has taken steps to reduce the traffic noise by posting signage to limit the usage of engine retarder brakes. The Board further notes that noise levels are regulated within the County pursuant to the Foothills County Community Standards Bylaw No. 45/2013. While increased traffic is an impact of the Approval, traffic and the noise that accompanies the trucks on the County roads is within the jurisdiction of the County. The Board finds it would not be appropriate for the Board to take jurisdiction over the noise generated by the trucks.

[869] With respect to the Facility, the Board notes that at the hearing, Mr. Boisvert stated that the decibel levels presented were based on the original project design and while those levels were found to comply with municipal requirements, an assessment has not yet been completed for the updated design from the response to SIR No. 2. The Board understands the Approval Holder intends to update its noise impact assessment as a part of its requirements for the municipal regulatory process. The Board further understands that the co-generation units located on the site are regulated by the AUC pursuant to *AUC Rule 024: Rules Respecting Micro-generation* and accordingly must comply with *AUC Rule 12: Noise Control*.

[870] The Board is of the view that the noise generated by the Facility will most likely be regulated by the County, which is responsible for community standards and regulating nuisances. The Board is also of the view that the co-generation units are subject to the noise requirements established by *AUC Rule 12: Noise Control*. As the noise generated by the Facility is already

subject to the jurisdiction of other regulatory bodies, the Board will not take and does not need to take, jurisdiction over the matter.

#### **9.2.8. Traffic**

[871] The Appellant/Intervenor Group and several of the Intervenor expressed concern regarding the truck traffic generated by the CFO and argued the Facility would increase the traffic by receiving feedstock from additional sources. The Board heard from the Daltons that trucks pass their property day and night, and that they have seen as many as 40 trucks pass their home within an 8-hour period. They further stated that while Meridian Street is only 1.6 km long, these trucks have travelled at speeds more than 100 km an hour and passed each other, which in their view was unnecessary on such a short stretch of road. The Presties expressed similar concerns regarding the amount of traffic presently generated by the CFO, describing it as overwhelming. The Board notes several of the Intervenor commented on the truck traffic, raising concerns from increased road maintenance costs, noise, and safety concerns from these additional trucks on the roads.

[872] The Director stated he did not have the jurisdiction to consider traffic or traffic safety under EPEA. The Approval Holder further commented that traffic and traffic noise were issues for local law enforcement and the County. As with concerns regarding noise, the Board notes that EPEA does not regulate traffic, and therefore there is no ability to consider or regulate traffic under the Approval.

[873] Therefore, the Board finds that it does not have the jurisdiction to consider issues related to traffic arising from either the CFO or the Facility. In making this finding, the Board notes that responsibility for regulating traffic within the County including the setting of speed limits and the use of engine retarder brakes rests with the County under the MGA and the *Traffic Safety Act*, RSA 2000, c T-6.

#### **9.2.9. Light Pollution**

[874] The Appellant/Intervenor Group and several of the Intervenor expressed concerns regarding the potential for the Facility to increase the amount of light pollution already present in the area. The Board heard from the Ayers that they were concerned that they would see the lighting from the Facility and from the Daltons who stated the CFO already generates light pollution and

they are concerned additional lighting will be placed 400 m from their home. The Board also heard from Mr. James and Ms. Estes, who stated they had to put up a grain bin and park a recreational vehicle to obstruct the lighting already visible on their property from the CFO.

[875] The Board heard arguments that the Facility would require additional lighting in the form of security lighting, lighting for heavy equipment, and lighting for the safety of its employees. The Approval Holder and the Director argued light pollution was not regulated under EPEA or the Approval. As with noise pollution, the Director stated at the hearing that light pollution was more of a land use decision. The Board heard from Mr. Boisvert that the lighting for the Facility would follow the Dark Sky Bylaw.

[876] The Board notes that as with noise and traffic, EPEA does not provide for the regulation of light. Consequently, the Board does not have the jurisdiction to consider light pollution. In making this finding, the Board notes that Foothills County has passed the Dark Sky Bylaw, which regulates light pollution within Foothills County and that the Approval Holder has stated that the Facility will comply with the Dark Sky Bylaw.

#### **9.2.10. Nuisances and Vectors: Flies and Mosquitos, Wildlife**

[877] The Board heard from the Appellant/Intervenor Group that the flies and mosquitos in the area had greatly increased after the CFO reopened, which they attributed to the CFO's operations. The Appellant/Intervenor Group argued the Pond would increase the number of flies and mosquitos in the area and spread contaminants such as *E. coli* from the Pond to human and animal populations or transmit illnesses such as the West Nile Virus.

[878] The Board heard from Mr. Denney that he was concerned about ducks landing on the Pond and spreading diseases such as *E. coli*. He stated the Approval Holder's wildlife assessment had indicated there was "no wildlife problems ... no wildlife around there." Mr. Denney referred to the area as a wildlife corridor and observed that he has also seen ducks, eagles, Canada Geese, hawks, moose, deer, and a bear. Mr. Denney explained that he was concerned about disease transmission from ducks as they often land in wetlands then in the river and fields.

[879] The Board also heard from Mr. Urbain that ducks could also potentially spread blue-green algae if the Pond were to become stagnant. The Appellant/Intervenor Group argued the pest populations could be controlled by covering the Pond.

[880] The Board heard from the Director, who stated the Pond would only contain liquid digestate, industrial runoff, and the accidental release of manure or liquid digestate. The Board understands that the liquid digestate is less attractive to vermin and flies, and that the Approval Holder anticipates that the aeration and agitation will assist in controlling fly populations.<sup>667</sup>

[881] The Board also heard from Ms. Powell, who stated that the Approval Holder had completed environmental studies and field assessments. The Board notes that review of the wildlife and habitat assessment that forms part of the Approval Holder's Application indicates that four species were observed: the Bald Eagle, Osprey, Great Blue Heron and Grizzly Bear. Small patches of highly fragmented wildlife habitat were observed, but these were noted to have been disturbed by ongoing agricultural operations.<sup>668</sup>

[882] The Board notes that the Approval Holder has indicated that the depth of the Pond will only reach its maximum for two months of the year, will be drained twice a year, and that oxygenation and agitation of the Pond should prevent it from becoming stagnant and limit the Pond's attractiveness to birds, vermin and insects.<sup>669</sup> The Board further notes the Approval Holder indicated that the Pond should not pose a threat of contaminants to waterfowl.

[883] The Board notes no evidence was presented regarding actual fly or mosquito populations, the CFO's fly management practices, or the role the catch basins may have had in contributing to the number of flies. The Board also did not hear evidence that indicated whether wetlands are currently present on the site or whether the catch basins had presented a problem with respect to vermin. The Board further notes managing flies or mosquitoes from the Pond is complicated by the difficulty in distinguishing between fly and mosquito populations attributable to the CFO and those attributable to the Pond.

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<sup>667</sup> Response to SIR NO.1, November 28, 2022, at page 40.

<sup>668</sup> Application at 4.5 Wildlife, page 24, Director's Record at Tab 14.

<sup>669</sup> Response to SIR No. 1, November 28, 2022, at page 40.

[884] The Board finds that as with emissions, the Approval Holder is not responsible for the flies and mosquitos generated by the CFO. However, the Approval Holder as a waste management facility, is responsible for managing pests on the Facility's site. In this regard, the Board notes the Approval contains conditions requiring the management of vectors identified in the Application, including birds, vermin, and flies. These conditions include the requirement for a management program, annual updates, and the correction of any deficiencies identified by the Director.<sup>670</sup>

[885] Regarding the Appellant/Intervenor Group's argument that the Pond be covered, the Board notes municipalities are not required to manage wastewater treatment lagoons for nuisances or to cover their wastewater treatment lagoons. The Board heard evidence from Mr. Boisvert that the Pond was similar in design and function to a wastewater treatment lagoon, and in this way, the Board is of the view that the Pond would be similarly attractive to waterfowl, flies, and mosquitos as the wastewater treatment lagoon maintained by the Town.

[886] Considering the requirements already in place in the Approval, the Board finds that requiring the Approval Holder to cover the Pond would greatly increase the expense of the Facility to the Approval Holder with limited benefit to the outcomes in vector and pest management. In making this finding, the Board observes that it would be unreasonable to require the Approval Holder to cover the Pond when municipalities including the Town, are not required to cover their wastewater treatment lagoons.

#### **9.2.11. Property Values**

[887] The Board heard from the Appellant/Intervenor Group and several of the Intervenor that they were concerned the Facility would lower their property values. The Board notes that the Appellant/Intervenor Group and several of the Intervenor stated the CFO had already negatively impacted their property values because of the odours emitted by the CFO. At the hearing, the Board heard from Mr. James and Ms. Estes and the Daltons that they would like to have their property bought out. Both the Director and the Approval Holder commented that EPA did not have the jurisdiction to consider property values. At the hearing, the Board heard

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<sup>670</sup> See the Approval at Conditions 4.4.8 through 4.4.10.

from the Director that property value was an economic consideration that typically fell under a land use decision.

[888] The Board notes EPEA does not provide the Board with jurisdiction to consider impacts to property values. The Board finds that it cannot consider property values or make recommendations regarding potential buyouts of affected residents.

#### **9.2.12. Conclusion**

[889] As mentioned earlier, in preparing the report and making its recommendations, the Board cannot go beyond its jurisdiction created by legislation or the scope of the Approval. In this context, the purpose of a hearing is for the Board to gather the best information and evidence possible to enable the Board to prepare and provide a report and recommendations to the Minister,<sup>671</sup> who on receipt of the report and recommendations may confirm, reverse or vary the decision of the Director to issue the Approval.<sup>672</sup>

[890] The Appellant/Intervenor Group advanced several arguments why the decision to issue the Approval to the Facility was not appropriate, including: it is an industrial facility located in an agricultural residential zone, the Facility would impact water quantity, increase noise and light pollution, and lower property values. The Board has found that the siting of the Facility, the issues related to water quantity, increased noise and light pollution, and impacts to property values are either outside the jurisdiction of the Approval, EPEA or the Board. Consequently, the Board cannot consider these matters when reviewing the decision to issue the Approval.

[891] The Town argued EPA does not have and is not the appropriate authority to regulate the Facility and the Facility as a gas generating facility, is more suited to regulation under the AER. The Appellant/Intervenor Group argued that as the CFO had modified its operations for the benefit of the Facility to the detriment of its neighbours by increasing odours and noise, the Facility and the CFO should be coregulated.

[892] The Board restates its finding that Facility is regulated under EPEA and the WCR and notes the AER cannot be given jurisdiction over the Facility without legislative change. The

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<sup>671</sup> See EPEA section 99.

<sup>672</sup> See EPEA section 101(1)(a).

Facility and the CFO are separate facilities operated under separate authorizations issued by different regulators.

[893] The primary argument advanced by the Appellant/Intervenor Group and the Town was the decision to issue the Approval was inappropriate because the Facility would worsen H<sub>2</sub>S and NH<sub>3</sub> emissions in a region already experiencing exceedances of the AAAQO. The Appellant/Intervenor Group and Town further argued that the Facility as designed with the Pond, would increase an existing odour problem.

[894] The Town further argued the Approval should not have been issued or the Pond should have been covered.

[895] The Board found that the Pond was anticipated to remove 92 percent of the Facility's NH<sub>3</sub> emissions, and the Facility as designed would be within the AAAQO limits for the Facility. The Board notes the Facility is to be co-located with the CFO and understands from Dr. Piorkowski that a certain amount of odour generation is a generally acceptable agricultural practice. In this context, the Board is of the view that the Facility's NH<sub>3</sub> emissions will be imperceptible, and any H<sub>2</sub>S emissions will also be imperceptible. The Board restates its finding that the Facility's contribution to regional air quality would be 0.1%, which the Board finds negligible on a regional level.

[896] The Director indicated his primary consideration in reviewing the Application was whether the Facility would make the cumulative situation better, the same, or worse. The Board heard that if the Facility does not make the Cumulative Case worse, it is considered a positive consideration for the decision. The Board further heard that risks are identified through EPA's technical review as are their potential impacts and consequences, and possibility of those risks occurring. The Director indicated that while not the main consideration, if the Facility could provide a benefit, this is also a positive consideration.

[897] The potential benefit the Facility would provide in reducing the odours and emissions generated by the CFO was heavily disputed, however the Director was of the view that the Facility would provide some benefit by offering a means of processing the manure generated by the CFO. The Board notes Dr. Piorkowski's evidence that spreading manure would be an odour

event that temporarily generates odour. The Board further notes that digestate is anticipated to be less odorous than manure. In his assessment, Dr. Piorkowski had indicated that the Facility would have some benefit in reducing the odours produced by the CFO, possibly in the range of 15 percent.

[898] The Board finds that it is more likely that the Facility will not worsen the Cumulative Case in the regional air quality. The Board further finds that the Facility may provide some benefit in reducing odours, and H<sub>2</sub>S and NH<sub>3</sub> emissions by providing an alternative method for processing the manure generated by the CFO.

[899] Based on the foregoing the Board finds the Director's decision to issue the Approval was appropriate.

**9.2.13. Are the Terms and Conditions of EPEA Approval No. 484778-00-00 Appropriate?**

[900] The Town, in arguing the Director's decision to issue the Approval was inappropriate and argued that in the alternative, the Approval should be amended to require the Pond to be covered or the liquid digestate to be stored in tanks. The Board notes that as discussed previously, covering the Pond or storing the liquid digestate in tanks will greatly increase the cost of the Facility with minimal environmental benefit. For these reasons, the Board does not accept this recommended change to the Approval.

[901] The Town also requested the Board recommend to the Minister that the AER be given regulatory oversight of the Facility. The Town argued that as the Facility was an industrial facility generating RNG and as the AER is an oil and gas regulator, the AER is more suited to regulating the Facility than EPA. As discussed earlier, the Board cannot recommend the AER regulate the Facility without legislative change.

[902] The Appellant/Intervenor Group argued the Approval should be amended to require co-regulation of the Facility and the CFO together, or that the Facility be required to regulate the impacts of the CFO. For the reasons mentioned earlier, the Board cannot recommend amendments that the facilities be co-regulated or that the Approval Holder be responsible for emissions and odours generated by the CFO. The CFO and the Facility are operated by separate legal entities



under authorizations issued by EPA and the NRCB. The Board restates that it cannot make this recommendation without legislative change.

[903] The Appellant/Intervenor Group argued the terms and conditions of the Approval should be amended to reflect the recommendations of their expert, Mr. Urbain. Mr. Urbain recommended the Approval be amended to reflect the following changes:

1. a wet scrubber recirculation pump and activated carbon media vessel should be required, having redundancy to ensure that the odour management system will be operational even during maintenance events;
2. the Approval should contain a condition requiring the Approval Holder to meet an odour impact limit of 10 OU at the property fence line;
3. odour sampling by odour panels and calculation of the odour impact should be required 6 months after Facility startup;
4. as part of the odour management program the Approval Holder should install a local weather station;
5. the Approval Holder's Fugitive Emission Monitoring Program should be filed with the Director 6 months prior to the start of the Facility operation;
6. to gain public trust and acceptance, the Approval Holder should be required to post on a publicly accessible website all odour complaints and resolution within 48 hours of receipt of the complaint. As part of the posting the meteorological data should also be provided;
7. measurement of dissolved oxygen in pond cells should be done daily to ensure that the ponds do not emit odorous gases.
8. the Approval Holder should be required to take steps to stop offensive odours as required under the Approval, and all such steps must be taken within two weeks of receiving the odour complaint, unless the Director grants an extension;
9. the Approval should include a mechanism to address noise complaints and, if there are repeated noise complaints, there should be a means of ensuring the Approval Holder is required to initiate a reasonable noise assessment and mitigation plan;
10. the Approval should contain conditions requiring a litter and pest control monitoring or management program; and
11. the Approval should prescribe a deadline for the Approval Holder to publish an emergency response plan, including a neighbour notification system, emergency responder process, and potential evacuation or shelter-in-place processes to be implemented in the event of an emergency such as an on-

site spill, release during transportation, release of air emissions, fire, or explosion hazards.<sup>673</sup>

[904] During the hearing, Mr. Knauss indicated that with the benefit of hindsight, he would have changed or added a few conditions in the Approval to reflect what he had heard during the hearing and provided an undertaking regarding those proposed changes. The Director subsequently provided the wording, in consideration of potential further improvements to odour mitigation measures in the Approval. He further noted the wording was in accordance with the responsible exercise of his duties, and with the principles of section 2 of EPEA, in particular to balance economic development in an environmentally responsible manner.<sup>674</sup> The proposed conditions included:

1. change the date in the fugitive emissions monitoring clause 4.1.33, to require the submission of the Fugitive Emissions Monitoring Program prior to the Facility commencing operations and to be finalized upon commencement of operations;
2. add a requirement for a redundant set of Odour Abatement System scrubbers be available onsite to eliminate the potential for emission release that is not treated through the Odour Abatement System if the Odour Abatement System is shut down to change carbon media;
3. add a requirement for the Approval Holder to install and operate a weather station at the Facility to provide “at location” data for the Fugitive Emissions Monitoring Program. It must be located at the west and north property line;
4. require the manure feedstock staging area to be contained within a building that is connected to the Odour Abatement System or add a clause that limits the time and frequency the feedstock may be staged at the location; and
5. require the building to be expanded to allow for a hauling truck to enter the building for unloading of the feedstock and for the use of an overhead door that closes with an air lock system prior to unloading. The truck would only be permitted to unload when the door is closed and the Odour Abatement System is operating to capture any emissions that are released.

[905] The Board recognizes that Mr. Knauss offered these conditions in response to questions during the hearing. The Board notes the Director indicated that EPA retains the authority

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<sup>673</sup> Appellant/Intervenor Group’s Initial Submission at page 9 and page 10.

<sup>674</sup> Director’s Closing Arguments, February 14, 2025, at paragraphs 58 and 59.

to assess the environmental performance of the Facility, amend the Approval once new information is obtained through monitoring requirements, and take regulatory action when needed.<sup>675</sup> The Board appreciates Mr. Knauss' flexibility in responding to the evidence presented at the hearing and his willingness to suggest amendments.

#### **9.2.14. Odour Abatement**

[906] The Board heard several concerns from the Appellant/Intervenor Group and the Intervenor regarding the potential for the Facility and the Pond to emit odours. The Board notes the Town requested the Approval be varied to require the Pond be covered or the liquid digestate stored in tanks. The Board notes this request was based on concerns regarding the emissions and odours the Pond would generate.

[907] For the reasons previously discussed, the Board is of the view that there is limited environmental benefit to be gained from requiring the Pond to be covered as the Facility's design and emissions are predicted to be like those of a municipal wastewater treatment lagoon, and the costs of doing so would be disproportionate to the benefit achieved. Also as discussed earlier, the Board notes covering the Pond will only result in a regional reduction of 0.1 percent in the NH<sub>3</sub> emissions, and creates a risk of the Pond becoming septic, further increasing the potential for emissions and odours.

[908] Regarding the Odour Abatement System, the Board heard from Mr. Urbain who expressed concerns regarding the numbers used to calculate the emissions reductions created by the Facility. Mr. Urbain stated that he felt that the H<sub>2</sub>S emissions for the CFO were overly high and incorrect. He further stated that it was his opinion that the studies in the Application were not appropriate source material on which to base the factors used for the calculations in the modelling for the Application. Mr. Urbain further explained while the project was monitored for emissions that can cause odours, the project was not specifically monitoring for odours.

[909] The Board heard that the Application did not predict or assess odour from the Facility or the CFO, but instead that specific chemicals were chosen as proxies for odour, H<sub>2</sub>S and NH<sub>3</sub>. The Board heard that odour can be measured distinct from the odour causing chemicals and

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<sup>675</sup> Director's Closing Arguments at paragraph 44.

in Ontario where Mr. Urbain practices, odour is measured in OU. OU were described as the strength of the odour compared against the units of clean air required to reach a threshold detection level, where it can be detected by 50 percent of an odour panel. As described by Mr. Urbain, an odour panel is a group of people who have been trained and are checked if their noses are super sensitive or if they are the type of people who will not smell anything. The Board understands the two extremes are eliminated and the average person is taken and asked to smell a sample. Mr. Urbain explained using chemicals to approximate odour was different from measuring for odour and stated that a complete sample and odour assessment should have been taken at the source of the odour and not the property line. The Board understands that the intention of measuring at the source is to reduce confusion as to whether the odour is generated by the Facility or the CFO. Mr. Urbain further explained the sample can then be modeled to predict the odour impact of the facility. Mr. Urbain recommended that the Approval be varied to include a requirement to manage odours at the facility to a limit of 10 OU.

[910] Both the Approval Holder and the Director argued against the inclusion of OU in the Approval, noting that while OU were contemplated and regulated by Ontario's environmental legislation, odour was not managed in the same manner in Alberta. It was explained that Alberta regulates for releases and emissions. The Appellant/Intervenor Group argued the differences between the two legislative regimes were not as great as suggested by the Approval Holder and Director, and noted Ontario also regulates for chemical concentrations and operational requirements.<sup>676</sup>

[911] As a general observation, the Board notes there appear to be some similarities between Alberta's and Ontario's environmental legislation, and further notes that as with AOPA, Ontario legislation appears to exempt certain agricultural activities from the application of their regulations.<sup>677</sup> However, there also appear to be differences within the regulatory schemes, one of which is the concept of OU as raised by the Appellant/Intervenor Group. The Board notes EPEA regulates emissions and without regulatory change, the Approval cannot be amended to include OU as contemplated by the Ontario legislation.

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<sup>676</sup> *Air Pollution — Local Air Quality*, O Reg 419/05.

<sup>677</sup> *Air Pollution — Local Air Quality*, O Reg 419/05.

[912] The Board also heard that the Odour Abatement System was not included in the original design of the Facility, but was include in response to SIR No. 1. The Board understands from the evidence that the Odour Abatement System is an essential component to mitigating odours from the Facility.

[913] At the hearing, Mr. Boisvert indicated that the Facility represented 1.5 percent of the cumulative H<sub>2</sub>S emissions and 0.6% of the cumulative NH<sub>3</sub> emissions, which he argued demonstrated the project itself was a very small regional contributor to odour. Mr. Boisvert explained that the Odour Abatement System operates as a forced air system directing airflow from the building intakes through the tanks and then onward, towards the odour abatement unit. Mr. Boisvert further explained that all the buildings and tanks within the feedstock receiving area and digestate separation areas are integrated into the Odour Abatement System. He indicated digestate separation is one of the primary odour abatement technologies being used at the Facility and that the biogas will initially be pretreated to remove NH<sub>3</sub>, H<sub>2</sub>S, and other volatile compounds.

[914] Mr. Boisvert further stated separation is intended to remove the volume of solids allowed to enter the Pond which is expected to significantly reduce the risk of odours in the liquid digestate. He further explained that separation and aeration were the odour abatement strategies used at the facility. Mr. Boisvert also clarified that the solid digestate staging area is intended as a backup, as the solid digestate could be sent to the CFO for use as bedding.

[915] The Board understands that the Odour Abatement System consists of two stages, wet chemical and dry scrubbers to remove H<sub>2</sub>S and NH<sub>3</sub>, reduced sulphur compounds and volatile organic compounds. The Board heard from Mr. Boisvert that these compounds are not released into the atmosphere. Mr. Boisvert indicated the remaining two components are CO<sub>2</sub> and biomethane, which are separated through compression. The Board notes the Approval contains conditions which require continuous monitoring of the chemical scrubber in the Odour Abatement System.<sup>678</sup> The Board further notes the Approval Holder stated that whether planned or not, during maintenance no untreated air will be released into the atmosphere from the Odour Abatement System.

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<sup>678</sup> See Approval at Condition 4.1.19.

[916] At the hearing, Mr. Fothergill stated the Odour Abatement System was designed to allow for general maintenance and downtime without releasing any untreated odours. He explained that when required, the Approval Holder will stop receiving feedstock and will process the manure into the system and digestors, reducing the amount of active organic material in the system. He further explained that once that first step has been completed, the ducting system and tanks will be sealed, confining the odorous air to the empty tanks and ducting while maintenance is being completed. Mr. Fothergill stated that the Approval Holder will store critical spares on site to ensure repairs can be made in a timely manner, and once the Odour Abatement System is back online, air trapped in the ducting system and tanks will be treated before being released.

[917] The Board understands that if the Odour Abatement System is properly designed and installed, it will work as expected and control 92 percent of the Facility's emissions. The Board further understands this calculation of the Facility's NH<sub>3</sub> emissions does not include NH<sub>3</sub> emissions from the manure staging area.

[918] Regarding the manure staging area, the Approval limits the amount of manure that may be stored at the Facility to 5,000 tonnes<sup>679</sup> and requires the Approval Holder to include the manure staging area in its Fugitive Emissions Monitoring Program.<sup>680</sup> The Board notes Mr. Urbain's comments about the short life cycle for NH<sub>3</sub> which could "...be days or a week or two." The Board also notes that the CFO stores manure within 300 m of the proposed manure staging area. The Board is of the view that regardless of whether the manure is stored at the Facility or stored at the CFO, the pre-digestion NH<sub>3</sub> emissions and impact to the regional airshed will be the same. The Board also notes the Approval Holder has indicated manure is intended to be deposited directly into the manure hoppers, and the Approval Holder will only store manure in the manure staging area as a back-up. Therefore, the Board considers it appropriate to exclude the manure staging area from the Facility's estimated NH<sub>3</sub> emissions calculation for the purposes of this discussion, noting there may be a small amount of odours released when the Facility doors open to unload manure and from the Pond, which the Board will address further below.

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<sup>679</sup> See the Approval, Condition 4.4.4.

<sup>680</sup> See the Approval, Condition 4.1.35.

[919] The Board heard from Mr. Urbain that he was not concerned with the technology used for the Odour Abatement System provided it was sized properly and installed correctly. Rather, he was concerned with potential to overload the Odour Abatement System as he was concerned about the calculated H<sub>2</sub>S and NH<sub>3</sub> emissions. He was further concerned with the operational need to replace the activated carbon filters within months, not years as anticipated by the Approval Holder.

[920] The Board further heard from Mr. Urbain that it was unrealistic for the Approval Holder to claim they were shutting down the Odour Abatement System to perform maintenance as there would still be liquid and gas generated within the Facility and system. He further stated that as they are not pressure vessels, there will still be emissions and odour, one on standby and one in operation. Mr. Urbain recommended having two sets of carbon vessels installed at the Facility noting that changing the carbon and performing maintenance takes days, not hours.

[921] The Board restates that earlier it heard the Director's evidence that the Approval is outcomes-based and designed to be less prescriptive. The Board notes it was the Director's evidence that the Pond is not an approved source of emissions under the Approval and that the Pond is subject to the conditions of the Approval pertaining to fugitive emissions, in particular condition 4.1.12, which prohibits the release of a substance from fugitive emissions or any source not specified in condition 4.1.2 that may impair or degrade the quality of natural resources, cause material discomfort, harm, or an adverse effect on a person, harm property, vegetative, or animal life. The Board accepts the Director's evidence that it is the Approval Holder's responsibility to determine how the Approval Holder will meet the requirements of the Approval. However, the Board also notes the Director can and does intervene, if the Director does not approve of the methods chosen by the Approval Holder; this is consistent with EPA's responsibility to provide regulatory oversight of and ensure compliance with the Approval.

[922] Having stated the foregoing, the Board also accepts the evidence of Mr. Urbain that it may not be realistic to expect the odours to be contained within the tanks and the Odour Abatement System during maintenance. The Board notes that to address this concern, Mr. Urbain had recommended a redundant set of carbon filters be installed in the Odour Abatement System

and increased monitoring of the saturation of the filters. The Board notes the Director's comments that redundant filters was also a change the Director would have made to the Approval with the benefit of hindsight. The Board also notes that the Approval Holder has not objected to this proposed change to the Approval.

[923] The Board is also cognizant that although all the experts appeared to concur that the H<sub>2</sub>S and NH<sub>3</sub> emissions for the Facility would be below the AAAQO, none of the Parties were able to settle on an appropriate calculation for those emission factors. The Board finds this information would be relevant to the lifespan of the carbon filters at the facility. The Board is of the view that some of these concerns regarding the calculations and life span of the filters can be alleviated by having an appropriate monitoring program in place and a redundant carbon filter. While the additional carbon filter will not assist in reducing odours or emissions, it is anticipated that it will be preventative in ensuring that there are no fugitive emissions during replacement or maintenance of the Odour Abatement System.

[924] With respect to a weather monitoring station, the Board notes Mr. Urbain had proposed varying the Approval to include a requirement for the installation of a meteorological station. The Board heard at the hearing from Mr. Urbain that temperature can influence odour and emissions. The Board further heard that the information provided by a meteorological station would be integral in determining the source and dispersion of odours. While the meteorological station may not reduce odours, the Board understands that it will be beneficial in ensuring compliance with the Approval and will be of regional benefit in assisting with regulation of the CFO and other odour emitting operations in the area.

[925] The Board notes that the Director agreed with the proposed installation of the meteorological station and proposed a condition requiring one be installed at the north or west property line to monitor wind speed, direction, and ambient temperature. The Board further notes the Approval Holder did not object to the installation or maintenance of the meteorological station.

[926] The Board observes that there is value in having the meteorological station installed on the Project Site. Noting that location is critical to the proper function and collection of data from the meteorological station, the Board is of the view that it would be appropriate for a study



to be acquired prior to a location being selected, after which the Director can approve the best location as determined. The Board also believes that it is important for the information acquired from the meteorological station to be made public, so that the best use of the information can be made. In addition to being publicly available, the monitoring information should also be provided to the Director, NRCB, and the CFO.

[927] Regarding the unloading of the manure and manure hopper building, the Board understands the manure receiving hoppers will be placed in an enclosed building and connected to the Odour Abatement System. The Board heard from Mr. Boisvert that manure would be directly unloaded from the CFO's pens to the enclosed manure receiving hoppers at the Facility. He explained odours would occur when manure is unloaded from the dump truck into the manure receiving hopper. He further indicated that transporting the material by truck through an internal gravel road appeared to be the best option as opposed to other alternatives.

[928] The Board notes that the Director had proposed a condition requiring the Approval Holder to construct the buildings where the manure is unloaded to ensure that any emissions and odours released during the unloading process are captured by the Odour Abatement System and a corresponding fugitive emission control system which would prevent the release of fugitive emissions through negative air pressure.

[929] The Approval Holder indicated that doors to the manure receiving hopper building remain closed approximately 95 percent of the time. The Approval Holder further noted that the manure hopper receiving system is designed to capture 97 percent of the manure receiving hoppers contributions to emissions. The Approval Holder stated the manure receiving hopper building as designed contributes approximately 0.03 and 0.5 percent of the cumulative H<sub>2</sub>S and NH<sub>3</sub> emissions for the Facility, respectively. The Approval Holder argued enclosing the entire manure receiving hopper system and creating an airlock would only reduce the regional cumulative emissions by 0.009% and 0.015% for H<sub>2</sub>S and NH<sub>3</sub> emissions respectively, at significant expense. The Approval Holder further argued the expense to reduce these emissions was unreasonable considering the manure was being collected approximately 200 metres away from the Facility. As with enclosing the Pond, the Board finds that enclosing the entire manure hopper area in a building

within a negative air pressure system would provide minimal environmental benefit at significant expense. The Board finds that it would not be appropriate to vary the Approval to require the manure hopper building be expanded to create space for the dump trucks or to require the installation of a negative air pressure system.

**9.2.14.1. Organics**

[930] The Board heard from members of the Appellant/Intervenor Group and several of the Intervenor that they were concerned about some of the contents of the organic slurry the Facility would be accepting. At the hearing, Mr. James and Ms. Estes stated concerns about the odours created by the Pond, stating the organic slurry would be derived from: various slaughterhouses, paunch contents, animal carcasses and parts, entrails and blood, cooked and uncooked fish and meat processing, dairy processing. The Board notes these concerns were also voiced by the Daltons and appear to be based on the Tables included in the Compliance Directive.

[931] The Board heard that as the Facility will not have a thermal hydrolysis unit, products that may contain specified risk material such as blood, entrails, or carcasses, cannot be processed at the facility. The Board further heard that the Facility is designed to process 80,000 tonnes of organic food waste which will be processed off site prior to being delivered as a slurry. Mr. Boisvert explained that the pre-processed organics will be received in enclosed truck tanks and pumped into the fully enclosed and sealed organic food resource reception tanks. The Board further heard that the organics reception tanks will be enclosed and connected to the Odour Abatement System. The Board also heard that the receiving tanks would be heated to prevent freezing and monitored to ensure temperatures do not induce digestion, which would produce methane and H<sub>2</sub>S.

[932] The Board notes the organic slurry is shipped to the Facility in tanker trucks and deposited in sealed tanks. The Board understands the organic slurry will be fully contained either in a tanker truck or within the facility. Consequently, the Board is of the view that the emissions and odour generated by the organic slurry form part of the feedstock emissions and odour, and do not need to be considered separately.

[933] Further, as the Facility is not designed to accept organics that fall within Table C of the Compliance Directive, the Board is of the view that the Approval should be varied to reflect that the Facility will only accept organics falling within Table A and Table B. Should the Approval Holder wish to accept organics falling with Table C at some point in the future, the Approval Holder can alter the design of the Facility and submit an application to EPA to amend the Approval.

[934] Finally, the Board notes that during cross-examination Mr. Boisvert indicated the Approval Holder may be open to a condition regarding the acceptance of only fresh organic food waste disposed of in the last 24-hour period. The Board notes there is a degree of uncertainty with respect to this proposed condition, and whether this means organic food waste that has been processed into organic slurry within a 24-hour period, or if this proposed condition also requires delivery to the Facility within the 24-hour period.

[935] The Board further notes the Approval Holder likely does not have control over the timing of the delivery of food waste to de-packing facilities, the sorting of the organic food wastes, or the processing of the organic food wastes into slurry. While the Board agrees that the organic food waste and the resulting organic slurry should be handled as quickly as possible, the Board is not prepared to include a condition in the Approval requiring the Facility to accept only fresh organic food waste delivered within 24-hours. This is particularly the case, noting there are several steps in the generation of the organic food slurry outside the control of the Approval Holder.

#### **9.2.14.2. Groundwater and Surface Water**

[936] The Appellant/Intervenor Group expressed concern about the potential for local groundwater contamination caused by runoff from manure storage areas or potential leaks from the Pond. The Appellant/Intervenor Group stated that several of the Appellants relied on well water, and raised a concern that contamination poses issues to their health and property; other Appellants were concerned with the threat of local water way contamination in the event of overland flooding or poor waste management, and the impact this would have on wildlife and waterfowl native to the surrounding environment.

[937] The Board heard from Ms. Zhao that the Approval addresses groundwater at conditions 4.5.1 through 4.5.11. The Director argued the Approval contained conditions to prevent

land-based releases of other substances from the Facility including liquid digestate, industrial wastewater, and industrial surface water runoff.

[938] The Board notes from review of the Application that the digestate tanks will be constructed to have

“a perforated tile system and an observation well (dry well) installed beneath the base of the tanks as a leak detection system. Any unexpected leak will migrate to the bottom of the liner where it will enter into monitoring tile and will become visible within the connected monitoring well.”<sup>681</sup>

[939] The Board notes the Application indicated this was a conservative approach as preconstruction geotechnical investigations indicated the soil conductivity on site is suitable to provide containment of the digestate without risk of contaminating any groundwater.

[940] The Board notes that the Application further provides that in the event of an above ground release from staging or storage areas, clay ditches onsite will convey the material to the Pond.<sup>682</sup> The Application further indicated that such releases would be detected through the groundwater monitoring program proposed for the Project Site.<sup>683</sup> The Application notes the Pond will be large enough to hold the contents of all six digestate tanks as well as the blend and nurse tanks.<sup>684</sup>

[941] With respect to surface water and stormwater, the Board notes the Application indicates that surface water and stormwater will be collected in the drainage ditches and swales around the Project Site and diverted into the Pond.<sup>685</sup> The Application provides that stormwater will be contained to the project footprint and will not be used in facility operations. The Board notes that stormwater infrastructure has been designed for a 1:100-year flooding event and that the

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<sup>681</sup> Application at 5.6.1 Storage Tanks page 43, Directors Record at Tab 14.

<sup>682</sup> Application at 5.6.1 Storage Tanks page 43, Directors Record at Tab 14.

<sup>683</sup> Application at 5.6. 2 Material Staging and Storage page 46, Directors Record at Tab 14.

<sup>684</sup> Application at 5.6.2 Material Staging and Storage page 46, Directors Record at Tab 14.

<sup>685</sup> Application at 5.6.2 Material Staging and Storage page 46, Directors Record at Tab 14.

Application indicated that according to the Government of Alberta, Alberta Floods Map, a 1:100-year flood is unlikely to impact the project footprint.<sup>686</sup>

[942] The Board further notes review of the Approval conditions indicates the Approval requires the submission of a Groundwater Monitoring Program, which the Board understands has been submitted by the Approval Holder and is currently under review by the Director.

[943] Considering the information contained in the Application, the Board finds the terms and conditions in the Approval appropriate to address the Appellant/Intervenor Group's concerns regarding groundwater and surface water. In making this finding, the Board notes the Approval Holder has submitted its Groundwater Monitoring Program to the Director and the Groundwater monitoring report arising from that monitoring program is subject to annual review.<sup>687</sup>

#### **9.2.14.3. Emergency Response Planning**

[944] The Appellant/Intervenor Group argued the Approval Holder had not shared an Emergency Response Plan. Prior to the hearing, the Approval Holder shared three documents:

1. *Rimrock Renewables Facility, Facility Emergency Planning Zone (EPZ) (H<sub>2</sub>Safety)*, Kevin Chow P. Eng., H<sub>2</sub>Safety, October 30, 2024 ("Emergency Planning Zone Study");
2. *Land Use Risk Assessment Study*, Michael Banner MSc PEng, ALARP Engineering Ltd., August 29, 2024 ("Land Use Risk Assessment"); and
3. *Screening Risk Assessment (Horizon Compliance)*, Cody Halleran, B.Sc., EP Manager, Horizon Compliance, November 8, 2024 ("Screening Risk Assessment").

[945] The Appellant/Intervenor Group indicated they had not had adequate time to review the Emergency Planning Zone Study, Land Use Risk Assessment, or Screening Risk Assessment. The Board heard that the Appellant/Intervenor Group and several of the Intervenor were concerned that the County and the Town did not have the resources to respond to a fire, lightning strike, explosion, leak, spill, or evacuation caused by the Facility. The Board heard the Approval

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<sup>686</sup> Application at 5.8.2 Stormwater Management page 48, Directors Record at Tab 14 citing Government of Alberta 2020 Alberta Floods Map.

<sup>687</sup> See the Approval at condition 4.5.10.

did not require an Emergency Response Plan and the Appellant/Intervenor Group argued the Approval should have required a formalized emergency plan prior to being issued.

[946] The Board heard from Mr. Chow that the Approval Holder had modelled for an H<sub>2</sub>S and toxic release using the ERCB H<sub>2</sub>S model, which models for leaks and full ruptures. The Board further heard this model is used to determine the emergency planning zone. Mr. Chow explained he had examined a pipeline leak scenario and an explosion scenario from the pipeline. He noted that in both cases the hazards were confined to the Project Site and there was no need for evacuation of nearby residents or for neighbouring residents to shelter-in-place. The Board heard from Mr. Banner who prepared the Land Use Risk Assessment, that the biggest risk is compressed fuel gas escaping the facility. The Board further notes that the release of any H<sub>2</sub>S from the Facility is likely to be well below safety and exposure limits.

[947] The Board appreciates the Appellant/Intervenor Group's and Intervenor's concerns regarding lightning strikes and fires. In this regard, the Board specifically notes the evidence of Mr. Boisvert, who stated the digesters will be equipped with lightning rod protection to protect the digesters from lightning strikes and noted the digesters will comply with National Fire Protection Association Code 780.<sup>688</sup>

[948] The Board notes that the Approval Holder stated the gas lines were low pressure and that studies regarding the H<sub>2</sub>S concentrations indicated that the risk of evacuation and sheltering in place was minimal. The Board also notes that the Approval Holder further stated it would develop, implement, and maintain an emergency response plan to prevent, manage, and mitigate conditions in the event of an onsite emergency. At the hearing, the Board heard from Mr. Boisvert that the during the development of the emergency response plan, the Approval Holder would consult with local fire and emergency services.

[949] The Board also heard from Mr. Boisvert that while the exact details of staffing had not been finalized, there would likely be three to four employees on site during the day and someone on site the remainder of the time or on call. The Board further heard that as a part of the design remote monitoring systems would be used to allow monitoring of the Facility 24-hours a

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<sup>688</sup> See NFPA 780: *Standard for the Installation of Lightning Protection Systems* 2023.

day, seven days a week. These systems would be connected to alarms and further systems that would allow for the ability to remotely change process conditions if the need arose.

[950] The Board notes the Approval does not speak to an emergency response plan, however the Approval does require the Approval Holder to not treat or store waste or recyclables at the Facility in a manner that causes or may cause: a fire, explosion, violent reaction, emission of toxic dust, mist, fumes or gases, or, emission of flammable fumes or gases.<sup>689</sup> While this condition is preventative, the Board is of the view that a planning condition would also be of assistance. To that end, the Board finds that the Approval should be varied to require an emergency response plan to be in place prior to the operations at the Facility commencing. The Board further finds that the emergency response plan should identify risks and provide for mitigation, and as noted already by the Approval Holder, be developed in consultation with the local municipalities and their emergency service providers.

[951] In considering the remote monitoring by an operator, the Board is of the view that the Approval Holder should follow best management practices and the appropriateness of having remote monitoring should be evaluated by the Director as a part of the emergency response plan and addressed to the satisfaction of the Director. The Board suggests that considerations here would include what could be done by a remote operator and if the Facility can be actively managed remotely such as shutting down the system in the event of a problem.

#### **9.2.14.4. Financial Security Requirements**

[952] The Appellant/Intervenor Group and the Intervenor expressed concerns regarding the financial stability of the Approval Holder and the long-term viability of the Facility. They further expressed concerns regarding who would reclaim the facility in the event the Facility should cease operations, and the Approval Holder should become insolvent, arguing at the hearing that the decaying facility would be both an “eyesore” and a “hazard.”

[953] The Approval Holder noted it was required to post financial security with EPA pursuant to the Approval.<sup>690</sup> At the hearing, the Director indicated the Approval required the

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<sup>689</sup> See the Approval at Condition 4.3.7.

<sup>690</sup> See Approval Holder’s Letter, January 14, 2025.

Approval Holder to annually review and revise the cost assessment for the financial security and to provide the assessment to the Director. The Board further heard that the financial security could be increased to an amount that is more relevant in the future if needed, such as to address inflation. The Board notes that the Approval Holder must provide any additional financial security as required by the Director within 30 days and the financial security must be maintained until the Facility has been reclaimed.<sup>691</sup>

[954] The Board finds the terms and conditions related to financial security in the Approval are appropriate.

#### **9.2.14.5. Comments on Public Consultation**

[955] The Board heard arguments from the Appellant/Intervenor Group that the Approval Holder's public consultation for the Facility was flawed. In particular, the Appellant/Intervenor Group noted the consultation process was marked by a lack of transparency, where requests for project application details and supporting information were frequently met with either no response or partial, vague answers or meetings were with junior representatives who did not have all the answers. The Appellant/Intervenor Group further stated project expansions and details were learned only after the initial consultation period. These concerns were echoed by several of the Intervenor, many of whom felt a broader community notice should have been provided.

[956] The Appellant/Intervenor Group stated the public notices for the project were posted in locations unlikely to reach all interested parties or were provided with incomplete information, such as unclear submission deadlines. The Board heard that Notice of the Application was posted in the High River Times, a paper that does not circulate to County residents, notwithstanding the Facility's siting in the County. The Board also heard that the *Water Act* Licence for the Facility was transferred into the name of Korova Feeders Ltd., which also appears to have caused confusion. Many stated these experiences have led to a strong perception that the Approval Holder is not interested in addressing the community's concerns.

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<sup>691</sup> See the Approval, Part 5: Financial Security Requirements.



[957] The Board agrees with the Appellant/Intervenor Group that the Approval Holder's public consultation process was less than clear and agrees that there may have been room for improvement. The Board notes the Approval Holder acknowledged this at the hearing. However, as public notice was provided and the Approval Holder met with SOC filers, the Approval Holder also met the minimum standards set by legislation.

[958] As an observation, the Board is also of the view that the Appellant/Intervenor Group and the Intervenor were not entirely fair in their depiction of the Approval Holder's consultation process. The Board notes that it heard at the hearing that there was a community website and Facebook Group established by members of the community who opposed the Facility. The Board is concerned about the potential for misinformation to be shared noting some misunderstandings in the information and that more than one person stated they had not read the Application documents. The Board would caution against relying on information derived from social media. In the case of the current appeals, there is some suggestion that the websites may have hampered the Approval Holder's public consultation process and undermined community members' trust in the information provided by the Approval Holder.

[959] As one final comment, the Board notes that although the statement of concern period ended in the fall of 2022, prior to the submission of the Approval Holder's response to SIR No. 1, the Approval Holder continued to communicate design changes to stakeholders. The Board notes the Approval Holder continued its stakeholder discussions throughout 2023 and maintained a project website that was updated to include: information on the proposed facility location, design and operations, environmental aspects, regulatory and permitting requirements, project timelines and contact information for Approval Holder. The Board understands the website was regularly updated to share current information and project updates throughout 2023, including materials and responses to questions asked at meetings.

#### **9.2.15. Miscellaneous Items**

[960] The Appellant/Intervenor Group and some of the Intervenor raised visual impacts of the Facility and Pond. While the Board does not regulate visual impacts, the Board notes that during the hearing, Mr. Boisvert indicated that for aesthetic purposes trees would be strategically

planted along the north and west boundaries of the property line of the Project Site. The Board heard the trees would also help to serve as a windbreak for the Facility.

[961] The Board further notes there was some discussion during the cross-examination of Mr. Boisvert regarding the design of the Facility and amount of feedstock the Facility would accept. The Board notes the Facility's digester tank and biogas upgrader are designed to handle approximately 100,000 tonnes of cattle manure and 80,000 tonnes of organic slurry.<sup>692</sup> While both the Application and Mr. Boisvert indicated the intent is for the Facility to receive 80,000 tonnes of cattle manure from the adjacent CFO and approximately 60,000 tonnes of organic slurry per year, it appears that the Facility was in fact designed to accept a larger amount of feedstock. The Board further notes that despite this capacity, the Approval Holder indicated that it did not have the intention of trucking in an additional 20,000 tonnes of manure. The Board further notes that Mr. Boisvert observed that the weight of the feedstock fluctuates depending on the moisture content, freshness, and total solid content.

[962] Mr. Boisvert indicated at the hearing that Approval Holder was amenable to considering a condition that would limit the amount of feedstock accepted to 80,000 tonnes of cattle manure from the adjacent CFO and approximately 60,000 tonnes of organic slurry per year. He further commented that there would have to be a discussion regarding whether this was wet weight or dry weight, as the 6 storage tanks and ancillary equipment had been designed to account for the full 100,000 tonnes of cattle manure.

[963] The Board appreciates the Appellant/Intervenor Group is concerned about the potential for the Facility to expand. However, the Board notes that as designed and approved, the Facility is restricted to accepting 100,000 tonnes of cattle manure and 80,000 tonnes of organic slurry. The Facility cannot accept more without applying to EPA for an amendment to the Approval.

[964] Based on Mr. Boisvert's comments regarding the potential for the feedstock to fluctuate and the Approval Holder's comments regarding its lack of intention to truck in additional manure, it appears to the Board that the Facility has been designed to process the manure generated

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<sup>692</sup> See also the Director's Record at Tab 14, page 33.

by the CFO, and further, that flexibility in the weight that it is able to accept is required, as this may vary depending on the amount of moisture or total solid content of the feedstock. Considering this information, the Board is of the view that it would not be appropriate to change the Approval to limit the amount of feedstock the Facility accepts, as this would not only change the design of Facility but could also potentially undermine any flexibility in the Facility's design regarding the acceptance of feedstock. Therefore, the Board declines to recommend an Approval condition limiting the amount of feedstock the Facility can accept to 80,000 tonnes of cattle manure and 60,000 tonnes of organic slurry.

[965] As one final note, the Board understands the Appellant/Intervenor Group's and Intervenor's perceptions that the Facility is a "test facility," and notes there may have been some suggestion in the Approval Holder's materials that this was a test facility for the Approval Holder, in the sense of it being the first one the Approval Holder was developing, and the Approval Holder may develop more.

[966] The Board notes the Director stated EPA has regulated other similar facilities in the province including one co-located with a beef feedlot. The Board further notes the Director stated there are several activities regulated by EPA that share characteristics similar to the Facility, including power generation and open-air sewage lagoons. The Board notes EPA has regulatory tools and significant experience regulating emissions from point sources. In the Board's view, from a regulatory perspective, the Facility is not a pilot project and is a full production facility subject to stringent regulatory requirements and outcomes.

## **10. RECOMMENDATIONS**

[967] In accordance with section 99 of EPEA,<sup>693</sup> the Board recommends the Minister vary the Approval as follows:

1. 3.2.7 The approval holder shall construct the odour abatement system required in 3.2.5 to include, at a minimum, all the following:
  - a. a wet chemical scrubber as described in the application;

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<sup>693</sup> Section 99 of EPEA provides:

"In the case of a notice of appeal referred to in section 91(1)(a) to (m) of this Act or in section 115(1)(a) to (i), (k), (m) to (p) and (r) of the *Water Act*, the Board shall within 30 days after the completion of the hearing

- b. two (2) carbon filters, each with an adequate capacity to treat the air effluent streams from the facility and allow for one standby carbon filter at any time; and
  - c. sampling facilities to monitor the carbon media absorption capacity;
- 2. 3.2.8 The approval holder shall construct a meteorological station for the site at a location on the site approved by the Director in accordance with condition 3.2.9 and in accordance with the Air Monitoring Directive, Alberta Environment and Parks, 2016, as amended, to continuously monitor and record at minimum, all of the following:
  - a. wind speed;
  - b. wind direction; and
  - c. ambient temperature.
- 3. 3.2.9 Prior to constructing the meteorological station for the site, the approval holder will conduct a study to determine the most effective location for placement of the meteorological station and will acquire the Director's approval of the proposed location for the meteorological station in writing;
- 4. 3.2.10 Additionally, the approval holder shall provide the results of the monitoring data of the meteorological station contemplated by condition 3.2.8 to the following parties on October 31 and March 30 of each year:
  - a. the Director;
  - b. the Natural Resources Conservation Board;
  - c. the Rimrock Cattle Company Ltd.; and
  - d. the publicly accessible website referred to in condition 3.2.11.
- 5. 3.2.11 The approval holder shall make all monitoring data from the Facility available on a publicly accessible website. The data shall be posted on an hourly basis.
- 6. 3.2.12 The approval holder shall prepare an Emergency Response Plan for the Director to review and accept prior to the acceptance of any feedstock at the Facility; and
- 7. 3.2.13 The Emergency Response Plan must be developed in collaboration with the public, Foothills County, and the Town of High River and must include emergency measures to ensure the protection of surrounding residents, including how to notify surrounding residents of emergencies,

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of the appeal submit a report to the Minister, including its recommendations and the representations or a summary of the representations that were made to it.”

emergency exit routes, and any other measures necessary to protect the public.

8. Condition 4.4.1 The approval holder shall only process feedstock as described in Table A and Table B of the Directive.
9. Condition 4.1.33 The approval holder shall submit a proposal for a Fugitive Emissions Monitoring Program to the Director a minimum of one (1) month prior to the acceptance of any feedstock at the Facility to be finalized on commencement of operation.

The Board recommends the remainder of the Approval be confirmed as issued.

[968] Under section 100(2) of EPEA,<sup>694</sup> copies of this report and recommendations and any decision by the Minister are to be provided to:

1. Mr. Gavin Fitch, K.C., McLennan Ross LLP, on behalf of Ms. Brenda Prestie and Mr. Barry Prestie; Mr. Norman Denny; Mr. Steven James and Ms. Benita Estes;
2. Mr. David Dalton and Ms. Amanda Dalton;
3. Mr. Anthony Burden, Field Law LLP, on behalf of the Town of High River;
4. Mr. Alan Harvie, Norton Rose Fulbright LLP, on behalf of Rimrock Renewables Ltd.,
5. Ms. Erika Gerlock and Ms. Teresa Ritter, Environmental Law Section, Alberta Justice and Solicitor General, on behalf of Mr. Craig Knauss, Director, Regulatory Assurance Division, South, Alberta Environment and Protected Areas.

[969] As several of the Appellants indicated they would be seeking costs, a process for the costs application will be established after the Minister makes her decision in this appeal.

Dated on April X, 2024, at Edmonton, Alberta.

“original signed by”

Angela Aalbers

Panel Chair

<sup>694</sup>

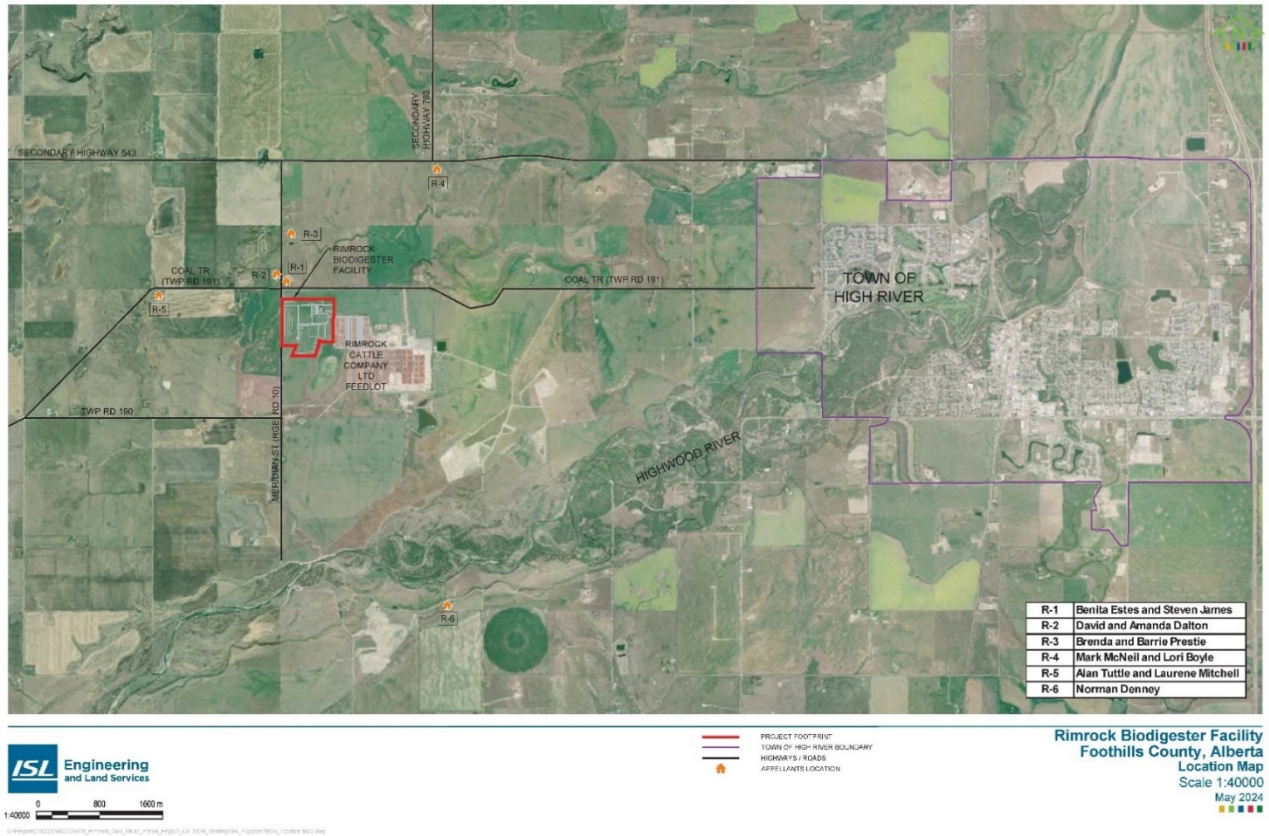
Section 100(2) of EPEA states:

“The Minister shall immediately give notice of any decision made under this section to the Board and the Board shall, immediately on receipt of notice of the decision, give notice of the decision to all persons who submitted notices of appeal or made representations or written submissions to the Board and to all other persons who the Board considers should receive notice of the decision.”

“original signed by”  
Jo-Ann Riddel  
Board Member

“original signed by”  
Kyle Fawcett  
Board Member

## Appendix A: Rimrock Biodigester Location Map



## Appendix B: Summary of Submissions from the Intervenors

Note: the Intervenors' submissions have been summarized as presented, regardless of whether those concerns are within the jurisdiction of the Board, i.e., diminished property values and increased traffic are not within the jurisdiction of the Board.

Intervenor	Concerns
Allen Brander	<ul style="list-style-type: none"> <li>• Odours;</li> <li>• Digestate Pond: birds, gases;</li> <li>• Flaring and particulates;</li> <li>• Traffic and road maintenance costs; and</li> <li>• Lack of scientific data.</li> </ul>
Allison Silversen	<ul style="list-style-type: none"> <li>• Industrial operation being located on agricultural land;</li> <li>• Water allocation from a supply suffering drought conditions and potential water contamination;</li> <li>• Lack of safety facilities, staff and expertise;</li> <li>• Air pollution, smog and haze;</li> <li>• Methane and noxious gases flaring;</li> <li>• Impacts to property value;</li> <li>• Location of the facility vis a vis a marginalized population (elderly retirees);</li> <li>• Increased traffic along Highway 2A;</li> <li>• Noise pollution; and</li> <li>• Lack of transparency and public involvement.</li> </ul>
Amy Marcotte	<ul style="list-style-type: none"> <li>• Odours effecting health and migraines.</li> </ul>
Angel Ulriksen and Jarret Ulriksen	<ul style="list-style-type: none"> <li>• Odours;</li> <li>• Digestate pond;</li> <li>• Flare stacks; and</li> <li>• Emissions.</li> </ul>
Beryl Ostrom	<ul style="list-style-type: none"> <li>• Concerns with the CFO and current air quality;</li> <li>• Odours especially NH<sub>3</sub>;</li> <li>• Lack of emergency response plan (i.e. gas emission);</li> <li>• Water contamination; and</li> <li>• Traffic and road maintenance.</li> </ul>
Brenda Emmerson	<ul style="list-style-type: none"> <li>• Odours and air pollution;</li> <li>• Traffic and noise pollution; and</li> <li>• Safety concerns with the proposed Facility.</li> </ul>
Brenda Morgan	<ul style="list-style-type: none"> <li>• Water quantity and water quality, contamination;</li> <li>• Odours; and</li> <li>• Proximity of the Facility to residences.</li> </ul>



Intervenor	Concerns
Brent Schlenker	<ul style="list-style-type: none"> <li>• Proximity of the facility to High River;</li> <li>• Odours;</li> <li>• Adequacy of the size of the storage building for the manure;</li> <li>• Air pollution generated by the Facility and the anerobic digestion process;</li> <li>• Bacterial pathogens in the digestate and feedstock, and associated pollution; additional amounts of feedstock being trucked to the Facility;</li> <li>• Safety concerns in the event of an emergency;</li> <li>• Proposed the use of a different type of Facility, a “Shac Manure Digester;”</li> <li>• Concerned about “greenwashing” and that the project would cause more environmental harm than good; and</li> <li>• Quantity of water being used and potential for contamination.</li> </ul>
Candi Galbraith	<ul style="list-style-type: none"> <li>• Odours from the CFO;</li> <li>• Health risks associated with the facility;</li> <li>• Air quality concerns; Emissions, NOX, SO2, and CO; particulates;</li> <li>• Emergency flaring; and</li> <li>• Water usage.</li> </ul>
Carrie Derish and David Derish	<ul style="list-style-type: none"> <li>• Odours; increasing possibly from the windrows; odours and emissions predicted to exceed at fence line;</li> <li>• Air quality concerns; particulates from the windrows;</li> <li>• Concerns about facility being self-governed;</li> <li>• Fugitive emissions from flare gas stacks, digestate pond (NH3, hydrogen sulphide);</li> <li>• Backtracking from promise to reduce odours by 42%;</li> <li>• Zoning issue agricultural land – industrial use;</li> <li>• Concerns about the pond: insects, emissions, algae;</li> <li>• Proper regulator?</li> <li>• Lack of safety plan re: fire or explosion; and</li> <li>• Loss in property value.</li> </ul>
Charles Leuw	<ul style="list-style-type: none"> <li>• Experience in developing power facilities at CFOs in Australia;</li> <li>• Emissions; lagoon not being covered; emissions being judged separately from the CFO; air quality and associated health concerns;</li> <li>• Concerned about high failure rate for facilities;</li> <li>• Concerns about self-monitoring and regulation of the facility; experience and previous operation history at CFO;</li> <li>• Concerns of cash flow for project to remain viable; and</li> <li>• Violation of AB Bill of Rights re: “enjoyment of property”.</li> </ul>
Constance Hollick	<ul style="list-style-type: none"> <li>• Air quality concerns;</li> <li>• Concerned the Facility will worsen the air quality; and</li> <li>• Odour.</li> </ul>

Intervenor	Concerns
Darlene Gushulak and Julian Gushulak	<ul style="list-style-type: none"> <li>• Concerned about the Pond and digestate piles contributions towards air quality;</li> <li>• Trucks: traffic and air quality;</li> <li>• Emissions from flare stack; and</li> <li>• Odour.</li> </ul>
David Nordlii	<ul style="list-style-type: none"> <li>• Odours; and</li> <li>• Long term sustainability of the project.</li> </ul>
Deborah Hollick	<ul style="list-style-type: none"> <li>• Air quality concerns; odours; particulates; and</li> <li>• Enjoyment of property and property values impacted.</li> </ul>
Diane Dobson and John Dobson	<ul style="list-style-type: none"> <li>• Lack of proper notice; only provided within 2 km; virtual meeting where questions could only be emailed in;</li> <li>• Size of the digestate pond and depth; impact to wildlife; lack of cover;</li> <li>• Safety of flare stack and noise; lack of emergency services;</li> <li>• Traffic and road maintenance;</li> <li>• Land use;</li> <li>• Water quality and quantity concerns; contamination; and</li> <li>• Lack of regulatory oversight.</li> </ul>
Don Hoeft and Jean Hoeft	<ul style="list-style-type: none"> <li>• Air quality; odours; emissions and health concerns;</li> <li>• Water quantity and quality;</li> <li>• Digestate pond; and</li> <li>• Property values being impacted.</li> </ul>
David Ayres and Eva Ayres	<ul style="list-style-type: none"> <li>• Odours; air quality; gas flares; particulates;</li> <li>• Digestate pond: size, insects; leaking and contaminating water (they are reliant on a well);</li> <li>• Traffic from the trucks and noise;</li> <li>• Water quantity and quality;</li> <li>• Safety concerns if there is a fire or gas leak;</li> <li>• Impacts to property values; and</li> <li>• Residents of Foothills County.</li> </ul>
Fraser Gray and Audrey Gray	<ul style="list-style-type: none"> <li>• Air quality; existing odours and worsening;</li> <li>• Size of digestate pond;</li> <li>• Quantity of water used for Facility; and</li> <li>• Impact on property values.</li> </ul>
Gerard Mercier	<ul style="list-style-type: none"> <li>• Air quality;</li> <li>• Odour;</li> <li>• Lack of reporting re: airshed and watershed in the Approval to the regulator or public;</li> <li>• Lack of conditions re: breaches; and</li> <li>• Impacts to quality of life.</li> </ul>

Intervenor	Concerns
Ingrid Baier and Theodore Baier	<ul style="list-style-type: none"> <li>• Odour;</li> <li>• Air quality: emissions; particulates; bacteria;</li> <li>• Impact to mental and physical health from air quality and odour issues;</li> <li>• Light pollution and impacts to human and wildlife health;</li> <li>• Truck traffic; noise; safety issues; emissions;</li> <li>• Filth flies attracted to digestate; vectors for disease;</li> <li>• Lack of emergency planning; and</li> <li>• Impact to property values.</li> </ul>
Irene Kerr	<ul style="list-style-type: none"> <li>• Odour;</li> <li>• Impact to mental and physical health;</li> <li>• Proximity to Highwood River (2 km);</li> <li>• Water quantity; amount used by Facility given the location of the Facility in an area prone to drought; the area being in the South Saskatchewan River Basin and not open to new water licences;</li> <li>• Digestate pond: impacts to wildlife; odours;</li> <li>• Accidents; resources and emergency planning;</li> <li>• Destruction of view caused by flare stacks;</li> <li>• Traffic concerns; and</li> <li>• Impact to property values.</li> </ul>
Judi Kemp	<ul style="list-style-type: none"> <li>• Odour; Facility worsening the odour; health effects: headaches, nausea, burning nose;</li> <li>• Quantity of water used by the Facility; 330,000 m<sup>3</sup>;</li> <li>• Quality of water; contamination;</li> <li>• Proximity to the Town of High River; and</li> <li>• Impact to property values.</li> </ul>
Judy Mace and John Mace	<ul style="list-style-type: none"> <li>• Odour;</li> <li>• Proximity to residences;</li> <li>• Digestate pond worsening odour;</li> <li>• Risks to health; and</li> <li>• Impact to property values.</li> </ul>
Julia Venton and Allan Venton	<ul style="list-style-type: none"> <li>• Odour; Air quality: emissions from trucks and the Facility; Potential for particulates and gases from the Facility to impact health;</li> <li>• Proximity to the Town of High River;</li> <li>• Digestate pond: may attract flies, mosquitoes, and other insects; potential to contaminate water; may impact birds; may bring disease into the Town; and</li> <li>• Trucks destroying roads.</li> </ul>

Intervenor	Concerns
Cassidy Kollyer	<ul style="list-style-type: none"> <li>• Odour; travels to Okotoks; potential to increase;</li> <li>• Health effects;</li> <li>• Water: amount used; potential to contaminate groundwater;</li> <li>• Emergency planning; containment of waste;</li> <li>• Impact to wildlife;</li> <li>• Light pollution;</li> <li>• Noise pollution; and</li> <li>• Increased traffic.</li> </ul>
Marnee Chubak	<ul style="list-style-type: none"> <li>• Air quality; and</li> <li>• Health effects.</li> </ul>
Melanie Collinson	<ul style="list-style-type: none"> <li>• Odour concerns; in particular the anaerobic decay of the bottom layers of urine-soaked manure, wood chips, and straw on the rolled concrete surfaces of the CFO;</li> <li>• Water quantity;</li> <li>• Safety concerns;</li> <li>• Impact to wildlife;</li> <li>• Noise pollution; and</li> <li>• Traffic and road maintenance.</li> </ul>
Melinda Proctor and Vernon Proctor	<ul style="list-style-type: none"> <li>• Odour;</li> <li>• Size of digestate pond;</li> <li>• Quantity of water used by the Facility; 330,000 m<sup>3</sup>;</li> <li>• Health concerns; and</li> <li>• Impacts to nearby properties (inhabitable and unsaleable).</li> </ul>
Michele Vidricaire	<ul style="list-style-type: none"> <li>• Odours;</li> <li>• Air and water quality; reducing recreation opportunities;</li> <li>• Impact to water quantity; and</li> <li>• Impacts to property values.</li> </ul>
Michelle Credico and David Stonham	<ul style="list-style-type: none"> <li>• Odours; concerns that the Facility will worsen them;</li> <li>• Increase in insect activity and disease from digestate pond;</li> <li>• Digestate pond impacting migrating birds;</li> <li>• Lack of emergency response plan;</li> <li>• Proximity of the Facility to their residence;</li> <li>• Water quality: concerns about digestate leaking and contaminating their well;</li> <li>• Impact to property values;</li> <li>• Increased traffic: noise, garbage, safety concerns; and</li> <li>• Zoning issues.</li> </ul>
Irene Pilhal and Cliff Edwards	<ul style="list-style-type: none"> <li>• Odour;</li> <li>• Air quality: digestate pond emissions;</li> <li>• Water quality: digestate pond leaks;</li> <li>• Lack of a safety plan; and</li> <li>• Impact to property values.</li> </ul>

Intervenor	Concerns
Randall Worthington	<ul style="list-style-type: none"> <li>• Interferes with his right to enjoy his property;</li> <li>• Odour;</li> <li>• Increased traffic for feedstock; emissions from traffic; waste left by the traffic;</li> <li>• Flood risk for the plant and digestate pond;</li> <li>• Proximity to the Highwood River (2 km from river);</li> <li>• Reporting requirements – self-reporting;</li> <li>• Impacts to wildlife;</li> <li>• Noise; and</li> <li>• Negatively impacts property values.</li> </ul>
Riseah Prock	<ul style="list-style-type: none"> <li>• Odour;</li> <li>• Health concerns: effects to lungs and skin;</li> <li>• Impacts to garden: won't grow as well;</li> <li>• Air Quality: emissions: methane, sulphur dioxide, manure dust, and other noxious chemicals;</li> <li>• Water Quality: water pollution; and</li> <li>• Land use concerns.</li> </ul>
Rosemarie Walter and Peter Walter	<ul style="list-style-type: none"> <li>• Odour;</li> <li>• Air quality: particulates; and</li> <li>• Impact to property values.</li> </ul>
Stephen Washington and Jennifer Washington	<ul style="list-style-type: none"> <li>• Odour;</li> <li>• Noise pollution: increased traffic and noise; industrial operations; construction;</li> <li>• Air pollution: particulate matter; emissions;</li> <li>• Risks to water; and</li> <li>• Lack of experience by Approval Holder.</li> </ul>
Sarah Lee	<ul style="list-style-type: none"> <li>• Odour;</li> <li>• Impacts to health and quality of life;</li> <li>• Air quality; concerned Facility will worsen;</li> <li>• Water quality; concerns about contamination of the groundwater and river;</li> <li>• Impacts to wildlife; and</li> <li>• Safety risks associated with the Facility.</li> </ul>

Intervenor	Concerns
Scott Allan and Julie Allan	<ul style="list-style-type: none"> <li>• Odours;</li> <li>• Impacts to birds and wildlife;</li> <li>• Impacts to the river; Amount of water being used for the Facility and impacts to residents;</li> <li>• Air quality and emissions from the digestate pond, staging areas, manure, and other parts of the Facility; particulates, H<sub>2</sub>S, NH<sub>3</sub>, volatile organic compounds;</li> <li>• Regulatory gaps; should be regulated by Alberta Energy Regulator;</li> <li>• Safety and risk of flare stack explosions; lack of safety plan; require on site management 365 days a years – 24 hours a day;</li> <li>• Health impacts;</li> <li>• Impact to land use planning within 5 km of the Facility; industrial use on agricultural land; and</li> <li>• Concerns about long term sustainability and reclamation risk.</li> </ul>
Suzanne Fournie	<ul style="list-style-type: none"> <li>• Odour;</li> <li>• Air Quality; health effects;</li> <li>• Increased traffic from trucks;</li> <li>• Impacts to wildlife;</li> <li>• Safety of Facility and Approval Holder's lack of experience; and</li> <li>• Zoning issue – industrial facility in agricultural area.</li> </ul>
Frank Noble	<ul style="list-style-type: none"> <li>• Odour;</li> <li>• Emissions and health risks;</li> <li>• Contamination to water caused by a leak;</li> <li>• Increase in traffic from the trucks; and</li> <li>• Decrease in property values.</li> </ul>
Tom Keeler and Judith Keeler	<ul style="list-style-type: none"> <li>• Misleading nature of the public notice (Foothills Waste Management Facility vs Rimrock Project to produce biogas);</li> <li>• Air quality: emissions; particulates; flaring;</li> <li>• Water quantity and quality: contaminate the Highwood River; quantity used for Facility;</li> <li>• Increased traffic and road maintenance;</li> <li>• Noise and light pollution;</li> <li>• Safety and explosion risk; and</li> <li>• Reduced property values.</li> </ul>

## **Appendix C: Summary of Presentations of the Representative Intervenors**

### **1. Mr. David and Ms. Eva Ayers**

[1] Mr. Dave Ayers and Mrs. Eva Ayers (“the Ayers”) live in the County approximately 1 km west of the CFO and the proposed Facility’s location.

[2] The Ayers stated when the CFO expanded to 35,000 cattle the odour had a “strong putrid character to it” and the flies surrounding their house “that the manure and cattle generate were very alarming and problematic.” They feel that an open digestate pond will further increase the flies, odour, and could cause a problem for their water source in the event the Pond leaks.

[3] The Ayers stated the number of trucks will increase on the roads near them causing more traffic noise and odours.

[4] The Ayers are concerned the amount of water the Facility will be taking from the Highwood River could cause a water shortage for them, their neighbors and the surrounding community.

[5] The Ayers stated that the Facility will create light pollution, and the flaring stack will be both a visible eye sore and a source of potential pollution through the spreading of chemicals.

[6] The Ayers have safety concerns with the gas plant at the Facility due to potential risk for fire, explosion, and gas leakage that could create “health impacts caused by the associated pathogens, and methane gas.”

[7] The Ayers stated they “have always loved the peacefulness of living in a rural location” and they want to be able to live in the current location “without being exposed to all the health impacts and risks that this facility will bring.”

[8] The Ayers stated they have been told by realtors their property “has already lost value by hundreds of thousands of dollars due to the proposed project.”

**2. Ms. Ingrid and Mr. Ted Baier**

[9] Mr. Theordore Baier and Mrs. Ingrid Baier (“the Baiers”) are retired ranchers who live on an acreage that is approximately 2½ km northeast of the CFO and the proposed Facility’s location.

[10] The Baiers stated their quality of life has already been negatively impacted by the CFO and assert that the Facility will make conditions worse by increasing traffic and creating more road noise, increasing light and odour pollution, increasing the health risks to their family through contaminants in the air, ground and water, and devaluing their property.

[11] The Baiers estimated the Facility will add another 19 trucks per hour to a roadway that is already well used by the CFO hauling cattle and cattle-feed. They stated that currently the constant truck noise and their use of engine retarder brakes is an “auditory blight on our so-called ‘agricultural’ rural landscape.”

[12] Mr. Baier has health concerns, and they stated his symptoms can be aggravated by environmental factors. The Baiers are concerned about the increase in toxins they feel the Facility will spread. They stated they are concerned about potential respiratory disease being caused from particulates in the air that will be spread by the Facility as well as potential water contamination.

[13] The Baiers stated when manure is being moved around on the CFO, the stench permeates local communities for miles and that 2 of their family members get “serious headaches” from the odor. They further stated the nighttime light pollution “from Rimrock’s gargantuan spotlights” causes further health risks to their family, wildlife and the environment.

[14] The Baiers stated when they bought their property in 2017, they saw very few filth flies for the first 3 years however in 2020 the fly population significantly increased and “made it unpleasant to be outside.” The Baiers further stated “filth flies are known mechanical vectors of pathogens that cause 65+ human diseases.” They feel that the open digestate pond at the Facility will increase the problem of filth flies and mosquitoes.



[15] The Baiers note the lack of emergency planning at the Facility and stated they “have concerns about North America’s largest biodigester being engineered and its construction overseen by a company that has never built one before.”

[16] The Baiers stated their property was private and tranquil until the CFO was put in place and feel that the addition of the Facility will only add to the stressful conditions that surround their property and further lower its resale value.

**3. Mr. Charles Leuw**

[17] Mr. Charles Leuw (“Mr. Leuw”) is a resident of the Town with experience in developing power facilities at CFOs and biodigesters in Australia. He opposes the Facility because he feels that the Approval is “putting profit over the community.” As a resident of the Town, living 6 km the CFO Mr. Leuw stated, “we cannot open our windows at night, cannot hang our washing outside to dry and cannot sit outside and enjoy a nice summer evening with friends.”

[18] Mr. Charles Leuw stated the Approval contained insufficient terms and conditions. Mr. Leuw wanted all pond/lagoons to be fully covered and sealed against all emissions and he stated that if that was not possible, then all wastewater including liquid manure discharge, needed to be properly controlled to prevent ground water contamination through another means like a slurry pipeline. His preferred outcome was to have a completely enclosed aerobic biodigester.

[19] Mr. Leuw stated the Facility is a test facility due to its use of beef manure for fuel which has not been done in Alberta before, and the Approval Holder’s own admission that it has not built a project like this before. In Mr. Leuw’s opinion, the Town should not be a test case.

[20] Mr. Leuw asserted that the Approval currently in place allowed the Approval Holder to self-regulate and permitted ad-hoc reporting requirements that the Approval Holder responded to by using the Approval Holder’s own consultants, such as Horizon Compliance.

[21] Mr. Leuw stated the Facility and CFO were being governed by different entities, which causes conflicting regulations and objectives. He noted that this caused a “lack of coherent

cross-jurisdiction” and recommended the project be under the direction and control of the Alberta Energy Regulator.

[22] Mr. Leuw stated that Approval Holder’s projection of reducing the odours from the CFO by 45 percent meant that 55 percent of the odours will remain.

[23] Mr. Leuw noted the CFO and the Facility had common ownership and control, and that the two entities were reliant on each other for their operations. He stated this meant the EAB must “acknowledge and accept established laws that relate to entities that have cross-ownership and reporting” and went onto to assert “the facilities are also related.”

[24] Mr. Leuw stated the Facility was built on tax financing and green-washing initiatives, and he noted there was no contingency plan in place for the Facility.

[25] Mr. Leuw stated that the Approval for the Facility does not consider the entire community and concluded that if the EAB approves the Facility it will nullify the enforcement of environmental laws and jeopardize public health.

[26] Mr. Leuw stated that if the Facility is approved it would violate the *Canadian Environmental Protection Act* that states every Canadian has a basic human right to a healthy environment, which includes the right to clean air and pointed to the absurdity argument claim that “you cannot take a position ignoring the totality, without arriving at an illogical conclusion.”

#### **4. Mr. Brent Schlenker**

[27] Mr. Brent Schlenker (“Mr. Schlenker”) lives in the Town. He is concerned that the location for the Facility is a poor choice because of the potential health risks it poses to surrounding neighbours; the large amount of fresh water it will take from the Highwood River and the potential for water contamination; the increase in odors and air pollution; the increase of bacteria pathogens; the detrimental impact the Facility will have on the environment; and safety concerns in the event of an emergency.

[28] In a letter to the EAB dated October 13, 2023, Mr. Schlenker wrote that the current CFO will be a much bigger issue when the Facility is operational due to “outside bulk manure piles that will be disturbed regularly to feed the biodigesters with feedstock for the Biogas operation.” He stated that when the manure is stockpiled it is less odorous than when it gets disturbed and releases methane.

[29] Mr. Schlenker also stated that the Pond would pose a health risk to neighbors because digestate is made up of bacteria pathogens (such as *E. coli*) that will be released to the air through aeration in Cell No.1. He went on to say there is potential for *E. coli* to accumulate in the Pond as it has been found to be a primary pathogen of anaerobic digestate, as well as ammonia to be released from the Pond which will “impact air quality and the health of residents.”

[30] Mr. Schlenker remarked there would be *E. coli* seepage from the RCC floors into the surrounding area of the Facility and the pens at the CFO.

[31] Mr. Schlenker talked about the lack of due diligence the Approval Holder had done for the Facility and stated there is a lack of regulation surrounding beef biodigesters. He further stated CFO’s manure is “better utilized as compost rather than for biogas production.”

[32] Mr. Schlenker felt the environmental impacts of the Facility were not being adequately scrutinized and noted that “biogas in combination with air can form an explosive gas mixture.” Mr. Schlenker expressed concern that the Approval Holder did not have an emergency plan to deal with the risk of fire and explosion and the potential of “serious implications for the safety of people as well as livestock in the feedlot.”

[33] Mr. Schlenker stated this is a test project because the Facility will be the largest biodigester in North America.

## **5. Mr. Randall Worthington**

[34] Mr. Randall Worthington (“Mr. Worthington”) lives in the Town approximately 6 km east of the CFO and the proposed location of the Facility.

[35] In a letter to the EAB dated October 24, 2024, Mr. Worthington wrote that he, along with all the residents in High River, was not included in the Approval Holder's mailout of its original notice of intent to construct and operate the Facility. He asserted that "by not letting me, a citizen of High River know of its intent, [the Approval Holder] denied me the right to be treated in a fair and practical manner." And that he "was not given the same right as the original SOC filers, the right to voice my concern."

[36] Mr. Worthington stated the Facility will have a negative impact on his right to use and enjoy his property due to the increase in odours and particulate contamination, the increase in noise from more traffic, and the probable loss in property value.

[37] Mr. Worthington described the odours from the CFO as vile and rank and he stated, "I can no longer go for walks or sit in my yard because of the stench." Mr. Worthington has over 40 years of experience in property assessment, and he asserted that "my property will diminish in direct proportion to the unmitigated stench."

[38] Mr. Worthington is concerned that with the construction of the Facility contaminants will be spread through the vent stacks.

[39] Mr. Worthington stated that the traffic from Highway 543 is already "horrendous" and that the Facility will increase the amount of traffic and road noise. He also noted that odors will increase from the Facility trucks that are hauling manure and organic waste.

[40] Mr. Worthington asserts that the Facility will have a negative impact on local wildlife in the area. He noted there are endangered animals and fish species at risk within the Highwood River Basin. Over the years that he has travelled on Coal Trail for the purpose of animal and bird watching and he has noticed a decline in the number of animals since Rimrock Cattle Company Ltd. took over the CFO. Mr. Worthington stated that the Approval Holder's assessment that no wildlife exists in that corridor is not supported by documentation.

## Appendix D: Net Cumulative Reduction in Regional Odours

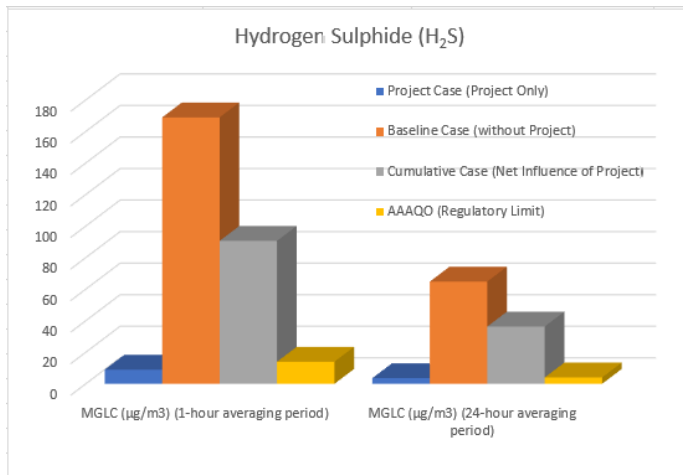


Illustration 1-2: Net Reduction in Cumulative Odour Emissions (H<sub>2</sub>S)<sup>695</sup>

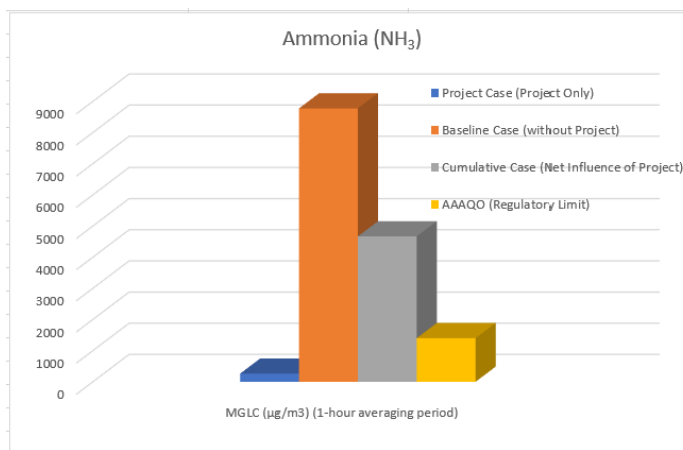


Illustration 1-3: Net Reduction in Cumulative Odour Emissions (NH<sub>3</sub>)<sup>696</sup>

<sup>695</sup> Response to SIR NO. 2, 2023 Updated AQA, at page 12, Director's Record at Tab 28.

<sup>696</sup> Response to SIR NO. 2, 2023 Updated AQA, at page 13, Director's Record at Tab 28.



*Office of the Minister*

**Ministerial Order  
12/2025**

*Environmental Protection and Enhancement Act*  
R.S.A. 2000, c. E-12

**Order Respecting Environmental Appeals Board  
Appeal Nos. 23-119-121 & 124-125**

I, Rebecca Schulz, Minister of Environment and Protected Areas, pursuant to section 100 of the *Environmental Protection and Enhancement Act*, make the order in the attached Appendix, being an Order Respecting Environmental Appeals Board Appeal Nos. 23-119-121, & 124-125.

Dated at the City of Edmonton, in the Province of Alberta, this 15<sup>th</sup> day of may, 2025.

A handwritten signature in blue ink, appearing to read 'Rebecca Schulz', written over a horizontal line.

Rebecca Schulz  
Minister

## APPENDIX

### Order Respecting Environmental Appeals Board Appeal Nos. 23-119-121 & 124-125

With respect to the decision of the Director, Regulatory Assurance Division South, Alberta Environment and Protected Areas, EPEA Approval No. 484778-00-00 (the "Approval") under the *Environmental Protection and Enhancement Act* to Rimrock Renewables Ltd., I, Rebecca Schulz, Minister of Environment and Protected Areas, order that the Approval is confirmed subject to the following:

1. The Approval is varied as follows:

(a) The following is added after section 3.2.6:

3.2.7 The approval holder shall construct the odour abatement system required in 3.2.5 to include, at a minimum, all the following:

- a. a wet chemical scrubber as described in the application;
- b. two (2) carbon filters, each with an adequate capacity to treat the air effluent streams from the facility and allow for one standby carbon filter at any time; and
- c. sampling facilities to monitor the carbon media absorption capacity.

3.2.8 The approval holder shall construct a meteorological station for the site at a location on the site approved by the Director in accordance with condition 3.2.9 and in accordance with the Air Monitoring Directive, Alberta Environment and Parks, 2016, as amended, to continuously monitor and record at minimum, all of the following:

- a. wind speed;
- b. wind direction; and
- c. ambient temperature.

3.2.9 Prior to constructing the meteorological station for the site, the approval holder will determine the most effective location for placement of the meteorological station and will acquire the Director's approval of the proposed location for the meteorological station in writing.

3.2.10 Additionally, the approval holder shall provide the results of the monitoring data of the meteorological station contemplated by condition 3.2.8 to the following parties on October 31 and March 30 of each year:

- a. the Director;
- b. the Natural Resources Conservation Board;
- c. the Rimrock Cattle Company Ltd.; and
- d. the publicly accessible website referred to in condition 3.2.11.

3.2.11 The approval holder shall make all monitoring data from the Facility available on a publicly accessible website. The data shall be posted on a daily basis.

3.2.12 The approval holder shall prepare an Emergency Response Plan for the Director to review and accept prior to the acceptance of any feedstock at the Facility.

3.2.13 The Emergency Response Plan must be developed in consultation with Foothills County and the Town of High River, and must include public input regarding emergency measures to ensure the protection of surrounding residents, including how to notify surrounding residents of emergencies, emergency exit routes, and any other measures necessary to protect the public.

- (b) Condition 4.4.1 is deleted and replaced with “The approval holder shall only process feedstock as described in Table A and Table B of the Directive.”
- (c) Condition 4.1.33 is deleted and replaced with “The approval holder shall submit a proposal for a Fugitive Emissions Monitoring Program to the Director a minimum of one (1) month prior to the acceptance of any feedstock at the Facility to be finalized on commencement of operation.”

- 2. All other conditions in the Approval are confirmed as issued.