



AER Proceeding 417

ALBERTA ENERGY REGULATOR

(REGULATORY APPEAL OF APPLICATION NO. 31097955 AND PIPELINE LICENCE NO. 62559)

B E T W E E N :

PIERIDAE ALBERTA PRODUCTION LTD.

Applicant/Approval Holder

- and -

MICHAEL JUDD

Participant

- and -

ALBERTA ENERGY REGULATOR

Participant

AFFIDAVIT OF MICHAEL JUDD

(Pursuant to Section 44 of the *Alberta Energy Regulator Rules of Practice*, Alta Reg 99/2013)

I, Michael Judd, AFFIRM AND SAY THAT:

1. I reside in the Screwdriver Creek valley on the NE quarter of section 6, township 6, range 2, W5M, approximately 6 kilometers NW of the hamlet of Beaver Mines in the Province of Alberta, and I have resided at this location since 1974.
2. My occupation is a landscape artist. My studio is located at my residence.
3. I have personal knowledge of the matters set out in this affidavit, except to such matters based on information and belief.

4. I make this affidavit in support of my motion for disclosure and access to all information collected, received, assessed, compiled or produced by the Alberta Energy Regulator under Directive 067 - *Eligibility Requirements for Acquiring and Holding Energy Licences and Approvals*, in relation to Application No. 31097955 and Pipeline Licence No. 62559, or otherwise, in relation to a financial/capability assessment and compliance history of Pieridae Alberta Production Ltd. and its associated companies (hereinafter **Pieridae**), and its eligibility to acquire and hold a licence for energy development in Alberta.

5. I am informed by legal counsel, and I believe to be true, that the Alberta Energy Regulator issued a letter decision dated January 19, 2022 ruling that I may be directly and adversely affected by the Alberta Energy Regulator decision to approve Application No. 31097955 and issue Pipeline Licence No. 62559. A copy of a letter dated January 19, 2022, is attached as **Exhibit A**.

6. Since the initial public notice of the proposed sale and transfer of Waterton field assets by Shell Canada in 2019, I have expressed concerns to the Alberta Energy Regulator with the eligibility of Pieridae to acquire and hold a licence for energy development in Alberta.

7. I filed a Statement of Concern dated November 6, 2019, with the Alberta Energy Regulator under the *Responsible Energy Development Act*, SA 2012, c R-17.3 concerning the applications by Shell Canada for regulatory approval to transfer of all of the licences, approvals and other authorizations related to Foothills Assets, including the Waterton Field Assets, to Pieridae (hereinafter the **Foothills Asset Transfer**), and in the Statement of Concern I expressed concern about Pieridae's financial capability to meet its ongoing and end-of-life reclamation and remediation obligations and with respect to Pieridae's lack of experience operating sour gas production facilities and the implications for public safety. A copy of this Statement of Concern is attached as **Exhibit B**.

8. I am informed by legal counsel, and I believe to be true, that Pieridae's financial ability and capacity to meet the operating, reclamation, and remediation obligations of a licensee has been an ongoing relevant matter of concern in regulatory proceedings concerning the Foothills Asset Transfer.

9. On May 13, 2020, the Alberta Energy Regulator refused the applications by Shell Canada for approval of the Foothills Asset Transfer, citing numerous concerns with a proposal to split regulatory liability for remediation and reclamation obligations attached to the assets. A copy of a letter dated May 13, 2020, issued by the Alberta Energy Regulator to Shell Canada and Pieridae is attached as **Exhibit C**.

10. I am informed by legal counsel, and I believe to be true, that subsequent to the May 2020 decision by the Alberta Energy Regulator, discussions ensued amongst Shell Canada, Pieridae, and the Alberta Energy Regulator, about a re-submission of the Foothills Asset Transfer applications and moreover that the Alberta Energy Regulator would be undertaking a financial ability and capacity assessment on Pieridae. A copy of a letter dated November 2, 2020, issued by the Alberta Energy Regulator to Shell Canada and Pieridae is attached as **Exhibit D**.

11. I filed a Statement of Concern dated February 19, 2021, with the Alberta Energy Regulator under the *Responsible Energy Development Act*, SA 2012, c R-17.3 concerning the re-submission of applications by Shell Canada for regulatory approval of the Foothills Asset Transfer, and in the Statement of Concern I expressed concerns about Pieridae's financial capability to meet its ongoing and end-of-life reclamation and remediation obligations and with respect to Pieridae's lack of experience operating sour gas production facilities and the implications for public safety. In this Statement of Concern, I also expressed concerns about the fact that the public record maintained by the Alberta Energy Regulator for the Foothills Asset Transfer applications did not include full disclosure of the financial ability and capacity assessment on Pieridae. A copy of this Statement of Concern is attached as **Exhibit E**.

12. I am informed by legal counsel, and I believe to be true, that the Alberta Energy Regulator issued a Notice of Hearing on July 5, 2021 to consider the applications by Shell Canada for regulatory approval of the Foothills Asset Transfer, that Shell Canada subsequently requested an adjournment of this hearing on July 15, 2021 which was granted by the Alberta Energy Regulator on July 20, 2021, and that on January 31, 2022 Shell Canada withdrew its applications for regulatory approval of the Foothills Asset Transfer.

13. I am informed by legal counsel, and I believe to be true, that there is regulatory uncertainty arising from the fact that Pieridae owns the Foothills Assets, including the Waterton Field Assets, while Shell Canada remains the licensee.

14. I am informed by legal counsel, and I believe to be true, that the Record of Decision Maker produced by the Alberta Energy Regulator for the Regulatory Appeal (No. 1935549) of Application No. 31097955 and Pipeline Licence No. 62559 contains no information relevant to a financial/capability assessment and compliance history of Pieridae and its eligibility to acquire and hold a licence for energy development in Alberta.

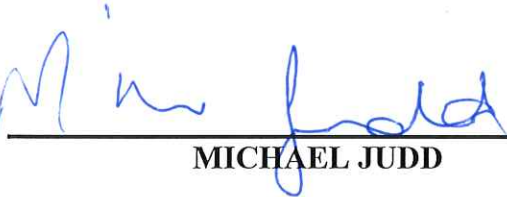
15. I am informed by legal counsel, and I believe to be true, that the Alberta Energy Regulator produces a Licensee Capability Assessment Profile on a person or company who seeks to acquire or hold a licence for energy development in Alberta, and this assessment profile appears to be based upon information collected, received, assessed, compiled or produced by the Alberta Energy Regulator under Directive 067 - *Eligibility Requirements for Acquiring and Holding Energy Licences and Approvals*, or otherwise. A copy of a sample Licensee Capability Assessment (with identifying information redacted) is attached as **Exhibit F**.

AFFIRMED BEFORE ME at Nanton,
Alberta, this 17th of October 2022.

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SHAUN FLUKER
Barrister & Solicitor



MICHAEL JUDD

SHAUN FLUKER
Barrister & Solicitor

EXHIBIT A

This is Exhibit "A" referred to in the

Affidavit of

Michael Judd

Sworn before me this 11th day

of October, A.D. 2022

.....
A Notary Public, A Commissioner for Oaths in and for Alberta



SHAUN FLUKER
Barrister & Solicitor

Via Email

January 19, 2022

Calgary Head Office
Suite 1000, 250 – 5 Street SW
Calgary, Alberta T2P 0R4
Canada

Public Interest Law Clinic

Pieridae Alberta Production Ltd.

www.aer.ca

**Attention: Drew Yewchuk, Counsel
Shaun Fluker, Counsel**

Attention: Thalia Aspeslet

Dear Sirs and Madam:

**RE: Request for Regulatory Appeal by Michael Judd
Pieridae Alberta Production Ltd. (Pieridae)
Application No.: 31097955; Licence No.: 62559
Location: NE 6-6-2-W5M
Regulatory Appeal No.: 1934303 (Regulatory Appeal)**

The Alberta Energy Regulator (AER) has considered Michael Judd's request under section 38 of the *Responsible Energy Development Act* (REDA) for a regulatory appeal of the AER's decision to approve the Licence. The AER has reviewed Mr. Judd's submissions and the submissions made by Pieridae.

For the reasons that follow, the AER grants the request for regulatory appeal.

Background

On February 19, 2021, Pieridae Alberta Production Ltd. (Pieridae) submitted an application to the Alberta Energy Regulator (AER), under Part 4 of the *Pipeline Act*, and in accordance with *Directive 056: Energy Development Applications and Schedules* (Directive 056), for a two-year licence to construct and operate a pipeline on private land from an existing wellsite located at 10-07-006-02W5M to an existing pipeline tie-in-point at 07-07-006-02W5M (Application No. 31097955). The proposed pipeline is approximately 0.64 km long with a maximum outside diameter of 168.3 mm and would transport sour natural gas with an H₂S concentration of 320 mol/kmol (32%). The maximum calculated EPZ for the project is 0.7 km, with the nearest resident approximately 0.6 km SE located at SW-08-006-02W5M.

On March 20, 2021, Michael Judd (Mr. Judd) filed a Statement of Concern (SOC) in relation to Pieridae's Application No. 31097955. Mr. Judd's SOC was registered by the AER as SOC No. 31920, and submitted concerns related to the pipeline's EPZ boundary, H₂S release, Flaring, Noise and Future Applications.

On August 16, 2021, the AER dispositioned SOC No. 31920, and Application No. 31097955 was approved and Pipeline Licence No. 62559 (Licence) was issued to Pieridae.

On September 12, 2021, Mr. Judd submitted a Request for Regulatory Appeal of the AER's decision to issue the Licence to Pieridae. The Request argued that the approval posed a risk to Mr. Judd's health and that there was the possibility that the pipeline would not be reclaimed if Pieridae became insolvent. Mr. Judd also asserted that the pipeline approval was granted in violation of his rights to procedural fairness. More specifically, Mr. Judd's safety concerns were as follows:

- “[His] land should have been included in the Emergency Protection Zone for the pipeline. When Shell applied for the same pipeline in 2018 (Application No. 159466) the EPZ was larger and included [his] home. Pieridae has re-calculated the size of the EPZ for their new application and reduced the size of the EPZ, without providing any explanation for why.”
- Further, if a sour gas release from the pipeline required an evacuation, Mr. Judd's only route of egress would pass through the EPZ. Thus, his only option would be to shelter in place.

On September 16, 2021, Regulatory Appeals issued correspondence to the parties requesting comments on the merits of Mr. Judd's RRA.

On September 29, 2021, Pieridae responded to the Request for Regulatory Appeal arguing that Mr. Judd's concerns could be viewed as vexatious and that they had already been considered by the AER when it issued its SOC disposition letter. Responding to Mr. Judd's claims that an explanation was not given for the reduction in the size of the EPZ, Pieridae noted that it had made multiple attempts to provide an explanation for the reduction of the EPZ to Mr. Judd and his representative.

Addressing Mr. Judd's safety concerns, Pieridae noted that “...in the unlikely event of an emergency that Mr. Judd is affected, sheltering in place is an approved protection measure for residents...”.

On October 14, 2021, Mr. Judd's counsel reiterated that he has never been provided with an explanation for the reduced size of the EPZ, noting that Pieridae had only communicated the following to Mr. Judd's representative:

- “The only difference is that the EPZ has been reduced from a 1.58 km radius and now it is 0.70 km.”
- “The EPZ was calculated with the refined inputs from detailed engineering completed since last application. These inputs include the lined pipeline specification and well site emergency shutdown trip setpoint.”

It was argued that, to deny Mr. Judd a regulatory hearing would mean that Mr. Judd would not even be given an explanation as to why the EPZ changed, a change which directly impacts his personal safety and indirectly impacts his procedural rights.

Reasons for Decision

The applicable provision of *REDA* regarding regulatory appeals, section 38, states:

38(1) An eligible person may request a regulatory appeal of an appealable decision by filing a request for regulatory appeal with the Regulator in accordance with the rules. [emphasis added]

The term “eligible person” is defined in section 36(b)(ii) of *REDA* to include:

a person who is directly and adversely affected by a decision [made under an energy resource enactment]...

The term “appealable decision” is defined in section 36(a)(iv) of *REDA* to include:

a decision of the Regulator that was made under an energy resource enactment, if that decision was made without a hearing...

Section 38(1) creates a three-part test for a regulatory appeal. First, the requester must be an eligible person as defined in section 36(b) of *REDA*. Second, the decision from which the requester seeks regulatory appeal must be an “appealable decision” as defined in section 36(a) of *REDA*. Third, the request must have been filed in accordance with the *Alberta Energy Regulator Rules of Practice (Rules)*.

Appealable Decision

The granting of the pipeline license is an appealable decision, as the licence was issued under the *Pipeline Act* – an energy resource enactment – without a hearing.

In Accordance with The Rules

The request for regulatory appeal was filed in accordance with the time requirements under the rules.

Eligible Person

For Mr. Judd to be eligible for a regulatory appeal, he must demonstrate that he may be directly and adversely affected by the AER’s decision to issue the approvals. The AER is satisfied that Mr. Judd has demonstrated that he may be directly and adversely affected by the decision to issue the approval for application 31097955.

In reaching this conclusion, the AER was guided by the Court of Appeal’s decision in *Kelly v Alberta (Energy Resources Conservation Board)*, 2011 ABCA 325. In this decision, the Court examined whether a landowner who falls outside of the EPZ (EPZ was 2.11 km and the landowners resided 6.5 km and 5.4

km from the well site) could still be directly and adversely affected. The Court concluded that the landowners were directly and adversely affected. The Court found that the "...the very fact that a plan is required which contemplates evacuation in some circumstances must demonstrate that there is some lurking risk. It is the lurking risk which is "adverse", not the evacuation plan itself." Thus, in Mr. Judd's circumstance, where there exists the possibility that he may have to shelter-in-place – as his residence is approximately 1.02 km from the project location, and the EPZ is 0.7 km – there is a "lurking risk" sufficient to make a finding of directly and adversely affected.

The Court also went on to state that:

... At some point the Board must decide whether the magnitude of the risk is such that the applicant has become "directly and adversely affected". But the applicant need not demonstrate that the perceived risk is a certainty, or even likely. Nor need the applicant prove an adverse effect greater than that suffered by the general public, nor that any adverse effect would be life-threatening. Those in the tertiary evacuation area may not have an absolute right to standing in all cases, but they have a strong *prima facie* case for standing. The right to intervene in the Act is designed to allow those with legitimate concerns to have input into the licensing of oil and gas wells that will have a recognizable impact on their rights, while screening out those who have only a generic interest in resource development (but no "right" that is engaged), and true "busybodies". [emphasis added]

In Mr. Judd's unique case, the fact that he would have to shelter-in-place should an emergency come to pass, highlights that he has more than a generic interest in resource development.

Peridae argues that sheltering in place is an approved protection measure for residents under Directive 071. However, "sheltering indoors" under Directive 071 is intended to be a temporary protection measure and it may be that evacuation would ultimately be required for Mr. Judd. As indicated by Mr. Judd, his evacuation route passes through the EPZ which may put him in harm's way in the event of a release.

In Directive 071, Section 3.1 Emergency Planning Zone, it is stated that the EPZ must ensure that the actual size and shape of the final EPZ reflect the following:

- site-specific features of the area,
- information gathered during the public involvement program, and
- factors such as population density, topography, and access/egress routes, which may affect timely implementation of emergency response procedures in the EPZ. [emphasis added]

To ensure that Mr. Judd's lack of egress was considered, the final EPZ should have been modified to include Mr. Judd's residence.

Further, Section 4.3 Table 3 also indicates that permanent and part-time residents, including those residing on dead-end roads beyond the EPZ where occupants are required to egress through the EPZ, are required to be notified and consulted.

All the foregoing factors indicate that Mr. Judd may be directly and adversely affected and accordingly, is an eligible person for the purpose of appeal.

Mr. Judd's Request is not Vexatious

Pieridae submitted that Mr. Judd's request could be viewed as vexatious, noting that:

- Shell had applied for the project as far back as 2017;
- Mr. Judd appealed the project in 2018, only for the project to be withdrawn in 2020; and
- Pieridae reapplied in 2021 with an extensive Public Involvement program, technical review and audit.

Mr. Judd responded to Pieridae's assertion that his claim was vexatious by noting that there is no basis in law for finding that Mr. Judd's request was vexatious. Mr. Judd noted that he was not re-litigating Shell's project, as Shell's previous regulatory appeal was cancelled.

Under section 39(4)(a) of *REDA*, the AER has discretion to dismiss all or part of a request for regulatory appeal if it considers the request to be frivolous, vexatious, or without merit. The AER treats these as high standards for the party alleging the deficiency to meet.

The AER is satisfied that Mr. Judd's request is not vexatious. While Mr. Judd submitted a wide range of issues, Mr. Judd's safety concerns about potentially having to shelter--in-place and the fact that his only route of egress is covered by the pipeline's EPZ, raise an arguable issue that supports the granting of the request for regulatory appeal.

Conclusion

In conclusion, the AER grants the request for regulatory appeal as it relates to the AER's approval of Application No. 31097955. Accordingly, the AER will request the Chief Hearing Commissioner to appoint a panel of hearing commissioners to conduct a hearing.

Sincerely,



Sean Sexton
Vice President, Law

inquiries 1-855-297-8311
24-hour
emergency 1-800-222-6514



Elizabeth Grilo
Senior Advisor, Regulatory



Gary Neilson
Senior Advisor, Crown Liaison

EXHIBIT B


This is Exhibit "B" referred to in the

Affidavit of

Michael Judd

Sworn before me this 11th day

of October A.D. 2022


A Notary Public, A Commissioner for Oaths in and for Alberta

SHAUN FLUKER
Lawyer & Solicitor

Alberta Energy Regulator
Shell Canada Limited - Pieridae Energy License Transfer in the Waterton Field
Statement of Concern of Michael Judd
Applications 1925403, 1925399, 1925400, 1925404, 1925405, 1925406

ALBERTA ENERGY REGULATOR
Statement of Concern of Michael Judd
Re: Proposed Transfer of Shell Canada Limited's Licenses in the Waterton Field to
Pieridae Energy.
November 6, 2019

INTRODUCTION

Shell Canada Limited has applied to transfer their licenses to operate all of Shell's midstream and upstream assets in the southern Alberta Foothills area – including the Waterton Field, the Jumpingpound field, and the Caroline Field to Pieridae Energy. The potential transfer from a subsidiary of one of the world's largest companies to a 'pea-sized' energy company¹ massively increases the possibility that a bankruptcy or insolvency situation will slow or completely prevent the multi-billion dollar environmental cleanup of the Waterton Field that will ultimately, and possibly imminently, be required. I am directly and adversely affected by the risks created by the proposed transfer and feel the proposed transfer requires a hearing.

THE IMPACT OF THE TRANSFER, AND MY OBJECTIONS TO THE TRANSFER

I reside in the Screwdriver Creek Valley at NE 6-6-2-W5M. I have lived at this location since 1974, before Shell arrived to this region. I have been found directly and adversely affected by a number of projects in the Waterton field, most recently a planned level 3 gas pipeline carrying gas exceeding 10 mol/kmol of hydrogen sulphide (H₂S): Pipeline License PL23800-99 in May 2019.

In the region where I live, failures in the Waterton Field would risk releasing a fatal dose of H₂S. My residence is located within a number of emergency protection zones for Waterton field wells and pipelines. Attached is a map recently generated by Shell showing the Emergency Protection Zones in which I either reside or would have to pass through in an evacuation scenario. The only access road to and from my residence is the Seven Gates Road, which leads down Screwdriver Creek valley and through the Emergency Protection Zones that would be impassable in the event of many potential blowout situations.

The Waterton Field, as partially shown on the attached map, contains a massive amount of infrastructure, including roads, pipelines, wells, compressors and other installations that will need to be abandoned and remediated at great cost. The full environmental liabilities for the system likely run into the billions of dollars. Sufficient security to ensure this cleanup is necessary, and there is a serious possibility the field is not going to be profitable for much longer, and that cleanup and remediation will be required in the near future. The gas reserves in the Waterton Field have already been heavily exploited by Shell, and the global economy is unlikely to see large increases in the price of gas during the remaining life of the Waterton Field.

¹ Ken Schaefer, "A Pea-sized Company with a Huge Natural Gas Vision" July 17, 2019, Oil and Gas Investment Bulletin

Alberta Energy Regulator
Shell Canada Limited - Pieridae Energy License Transfer in the Waterton Field
Statement of Concern of Michael Judd
Applications 1925403, 1925399, 1925400, 1925404, 1925405, 1925406

Shell Canada Limited intends Pieridae Energy to assume the licenses all of Shell's midstream and upstream assets in the southern Alberta Foothills area – including the Waterton Field, the Jumpingpound field, and the Caroline Field. All three are hazardous sour gas fields with massive environmental liabilities. I am concerned Pieridae Energy will not be able to cover the abandonment and reclamation costs for all of these fields. I suggest all the proposed license transfers for the fields should be combined for a single hearing.

I am directly affected by the health risks of the existing and unreclaimed installations, and I have a direct interest in the natural beauty of the area surrounding my land being restored at the closure of the Waterton Field. I am aware of the growing problem of orphaned oil and gas equipment in Alberta, and I am concerned the transfer of the Waterton Field licenses to a small operator is the first step towards my home being surrounded by dangerous orphaned oil and gas equipment that may never be reclaimed.

DESIRED OUTCOME

My initial desired outcome is for the AER to hold a public hearing to calculate and consider the full extent of abandonment and reclamation costs associated with the assets to be transferred, determine if Pieridae possesses sufficient security, and whether it is in the public interest to transfer the licenses in question without special terms and conditions for the reclamation liability.

My desired outcome from the hearing is that the AER not transfer of any licenses for the Waterton Field, the Jumpingpound field, and the Caroline Fields to Pieridae Energy unless Shell either posts full security or remains liable for the full abandonment and reclamation of the pipelines, wells, and equipment in the likely event the much smaller Pieridae Energy fails to fulfill their environmental obligations and enters receivership.

Contact Details of Michael Judd

Michael Judd
Box 2316 Pincher Creek, AB
T0K 1W0
Phone: (403) 627-2949

EXHIBIT C

This is Exhibit "C" referred to in the
Affidavit of

Michael Judd

Sworn before me this 11th day

of October, A.D. 2022


A Notary Public, A Commissioner for Oaths in and for Alberta

SHAUN FLUKER
Barrister & Solicitor

May 13, 2020

By e-mail only

Korin Lemay
Shell Canada Limited
E-mail: korin.lemay@shell.com

Yvonne McLeod
Pieridae Alberta Production Ltd
E-mail: Yvonne.McLeod@pieridaenergy.com

Calgary Head Office
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www.aer.ca

Shell Canada Limited Transfer of Ownership Including the Waterton Sour Gas Plant EPEA Application No 021-258 and Jumping Pound Sour Gas Plant EPEA Application No. 015-11587

Dear Ms. Lemay and Ms. McLeod,

On December 4, 2019 and December 10, 2019, Shell Canada Limited (Shell) jointly with Pieridae Alberta Production Ltd. (Pieridae) submitted applications pursuant to the *Environmental Protection and Enhancement Act* (EPEA) in relation to its sour gas processing plants located at the Waterton Gas Plant (02-20-04-3-W4M) (Waterton) and the Jumping Pound Gas Plant (13-13-25-05W5M) (Jumping Pound) (respectively the sites). The EPEA Applications were submitted under section 70 of the EPEA, and request (a) an amendment to the existing EPEA approvals 258-03-00 and 11587-02-00 (b) a transfer of the amended approvals to Pieridae, and (c) the issuance of a new EPEA approval to Shell for the operation and maintenance of the Containment and Monitoring System (CMS) currently present and operating at the two sites. Shell has indicated that the purpose for the above applications is to allow it to retain liability and responsibility for certain operational and remedial aspects of the sites in relation to historical Sulfinol™ contamination, and to allow Pieridae to retain other operational rights as well as regulatory responsibility for all other closure, remediation, and reclamation activities.

Shell and Pieridae also submitted related applications under the *Public Lands Act*, *Water Act*, *Pipeline Act*, and pursuant to the *Oil and Gas Conservation Act* (OGCA) and *Oil and Gas Conservation Rules* (OGCR) to transfer to Pieridae, the associated *Water Act* licences and approvals, public land dispositions, landfills, schemes, large facility licences, EPEA approvals, and wells, facility and pipeline licenses in the

Waterton, Jumping Pound and Caroline areas. The parties requested that all of the above applications be considered and decided together. The applications are identified in Appendix A¹.

For the reasons that follow, the AER has decided to refuse the above applications.

The EPEA applications for the Waterton and Jumping Pound gas plants propose to split existing approvals at the sites in order to facilitate the separation of regulatory liability for historic Sulfinol™ and certain other substances (which would be Shell's responsibility) from all other remediation and reclamation liability (which would be Pieridae's responsibility).

The initial flaw with this approach is that the scope and extent of the contamination at the site is not well known and is not well described in the applications. To date, the contamination at the sites has not been fully understood. Based on the AER's review of the most recent Site Specific Liability Assessments (SSLAs) for the sites, there are significant gaps in the information that Shell possesses about the contamination and associated liabilities at the sites. Without up to date and accurate information about the state of sites, it is not clear how 'Sulfinol™ contamination² associated with the historical operation' of the sites, for which Shell wishes to keep the liability, will be distinguished from other contamination from ongoing operation that would, if the transfer is approved, be assumed by Pieridae (including presumably from 'non-historical' Sulfinol™). Operationally, it is unclear how Shell will be able to identify, and subsequently remediate only historic Sulfinol™, and how all other substances on the same site, including subsequent Sulfinol™ contamination, will be identified and remediated by Pieridae.

Hence, the parties are requesting that the AER move away from a situation of regulatory certainty regarding operational and closure obligations for the sites (where Shell is the person responsible for all pollution and ultimately for reclamation of the sites), and approve a far less certain situation, where the

¹ Shell also submitted similar and corresponding applications for the issuance of new and amended licences under the *Oil and Gas Conservation Act* (OGCA) and Directive 056. The AER refused those applications on February 28, 2020. In addition, Shell submitted corresponding applications to extend the expiry date and stack top temperature on its Jumping Pound sour gas plant EPEA approval, which was set to expire on May 31, 2020. As these EPEA applications did not hinge on the approval of the transfer or split liability applications and met all other applicable requirements, the AER approved these applications on February 28, 2020. These applications are not the subject of this decision and are therefore not identified in Appendix A.

² In its applications, Shell defines the contamination for which it would be responsible as 'environmental liability associated with sulfinol, by itself or in combination with hydrocarbons and chloride in soils or groundwater in and around the Facility resulting from historic operation of the Facility.'

parties will have separate and partial regulatory obligations regarding different aspects of operations, remediation, monitoring and reclamation of the sites. The scope of each parties' obligations and how they would be fulfilled if there were separate approvals is uncertain given the present lack of information about the scope and nature of contamination and substances at the site.

Moreover, the proposed EPEA approvals are contrary to fundamental principles and provisions in EPEA. Shell is the polluter and person responsible for Sulfinol™ as well as other substances at the sites³. It is also an operator under the reclamation provisions of EPEA, and is therefore required to conserve and reclaim the sites⁴. The EPEA applications appear to request that the AER, by way of approval, override or at least significantly dilute Shell's obligations under EPEA in order to mirror or give effect to a business arrangement between two parties. For example, Shell has indicated that through its proposed EPEA approval, it will retain only liability for the ongoing remediation and reclamation of historic Sulfinol™ contamination (as defined in its application), but that decommissioning, remediation and reclamation of the sour gas processing plant will be Pieridae's obligation. However, since its proposed approval would overlap the entirety of both sites (not just the area where Shell operates the CMS), Shell would remain obligated to reclaim the lands under the relevant provisions of EPEA, which does not discriminate or allocate reclamation duties by substance. Therefore, the approval requested on its face appears contrary to the reclamation requirements in the EPEA.

The type of split liability proposed in the EPEA applications is also contrary to the concept of joint and several liability that is an underlying principle in the enforcement of obligations amongst operators and persons responsible under different provisions of EPEA. Issuing such approvals would likely create regulatory uncertainty as to the enforcement of EPEA obligations. For example, when the AER issues enforcement and environmental protection orders that name more than one person, all persons named in the order are jointly responsible for carrying out the terms of the order and are jointly and severally liable for payment of the costs of doing so⁵. From an enforcement perspective, it would be undesirable to have a situation where there could be two potentially competing instruments – approvals and subsequent orders

³ Section 2(i) of the EPEA expressly recognizes the principle that polluters are to pay for the costs of their actions; Shell is also the person responsible under the EPEA for sulfinol and any other substance that is in, on or under the sites (section 2(tt) and section 107(c)).

⁴ Section 137(1) of the EPEA; Shell is an operator pursuant to section 134(b) of EPEA.

⁵ Section 210 & 215 of the EPEA.

under EPEA – which have inconsistent obligations regarding who is responsible for remediation of substances and reclamation of the lands.

A similar consideration is that an approval containing only obligations without corresponding benefits (i.e. the right to produce and process gas) would disincentivize compliance with approval terms and other existing duties. Based on what is proposed in the applications, Shell would only have obligations with the issuance of the new EPEA approvals with respect to existing Sulfinol™ contamination, without any tangible corresponding benefits. This could effectively reduce the number of meaningful enforcement tools available to the AER. For example, if the AER were to issue an enforcement order under section 215 of EPEA requiring the cancellation or suspension of Shell's approval, or directing Shell to cease activities under its approval (i.e. remediation and/or monitoring), there would be little or no consequence for Shell, since it is not benefitting from corresponding processing and production activities and deriving no obvious benefit in carrying out the activities under its approvals. Also, in the event of a cancellation of its approval, it would be difficult for the AER to require Shell to remediate historic Sulfinol™ contamination on the rest of the site given Pieridae's overlapping approved and ongoing production and processing operations.

The AER is of the view that it cannot, by way of approval, carve up and re-distribute fundamental regulatory obligations in a manner that is contrary to or inconsistent with EPEA. It would also be irresponsible for the AER to create a situation where the parties might rely on the terms and scope of their approvals to try to avoid responsibilities under the EPEA and any future orders issued thereunder.

The proposed approval would also be contrary to the AER's mandate under section 2(1)(a) of the *Responsible Energy Development Act* (REDA). That section of the REDA provides that the mandate of the AER is

- (a) to provide for the efficient, safe, orderly and environmentally responsible development of energy resources in Alberta through the Regulator's regulatory activities,

It is not efficient or orderly for the AER to administer two approvals setting out separate partial regulatory obligations when one single approval already exists and covers all operational and reclamation aspects for each site. Nor is it orderly or efficient to split EPEA rights and obligations amongst separate operators for the same site and activity. As described above, subdividing one aspect of an approved EPEA activity, namely reclamation, for the same site between two operators creates administrative uncertainty and may also diminish the AER's ability to enforce reclamation responsibilities under EPEA. This could impact the AER's ability to provide for environmentally responsible development mandated by section 2(1)(a) of the REDA.

Further, Shell is currently the sole licensee under its OGCA licences at the sites, and the AER previously decided that it could not issue separate OGCA licences for the CMS related facilities and the other facilities on the site. It would be inconsistent with section 2(a) of REDA to have separate or ‘split’ approvals for the same activity under the specified enactments (i.e. the EPEA), but single approvals for the same facilities, operations and sites under the energy resource enactments (i.e. the OGCA).

Given the contradictions with the REDA and the EPEA, and the regulatory, operational, compliance and enforcement difficulties that would result, the AER has decided to refuse the EPEA applications. Trying to manage and enforce different reclamation obligations amongst different approval holders would be inefficient, disorderly and extremely burdensome. This would unnecessarily complicate the administration of licences and approvals down the road and could create challenges in the enforcement of obligations under EPEA and the various approvals.

The AER notes that the legislative scheme established by the OGCA contemplates that the licensee and the operator can be different persons⁶. Based on the information provided by Shell on the commercial arrangement between the parties, Pieridae is the operator at the sites. This current arrangement between Shell and Pieridae accords with the AER’s regulatory framework.

Given that the applications were submitted as a bundle with the EPEA and other OGCA applications which have now been refused, and were contingent on the ability to distinguish historical Sulfinol™ contamination liability from future liability as contemplated in these other applications, the AER refuses to consent to the transfers and assignments listed in Appendix 1. This refusal is without prejudice to Shell and Pieridae’s right to submit further applications independently of the refused EPEA and OGCA applications requesting the split of liability and associated obligations between the parties.

Under the REDA an eligible person may file a request for a regulatory appeal on an appealable decision. Eligible persons and appealable decisions are defined in section 36 of the REDA and section 3.1 of the *Responsible Energy Development Act General Regulation*. If you wish to file a request for regulatory appeal, you must submit your request in the form and manner and within the timeframe required by the

⁶ A licensee means the holder of a licence according to the records of the AER (section 1(1)(cc) of the OGCA). Section 1(1) (kk) of the OGCA also defines the term operator, and includes a person who is not the licensee.

AER. You can find filing requirements and forms on the AER website www.aer.ca under Applications & Notices: Appeals.

Sincerely,

Lane Peterson

Lane Peterson
Director, Oil & Gas Surface Regulatory Applications
Alberta Energy Regulator

cc: Jodie Didow, Shell Canada Ltd.
Deanna Cattrel, Shell Canada Ltd.
Bola Talabi, Interim Vice President, Regulatory Applications
Steve Thomas, Director Regulatory Applications
Trevor Gosselin, Director Regulatory Applications
Sean Sexton, Law Branch

Enclosure: Appendix A

Appendix A - Table of Applications

Application no.	Location (Section, Township, Range, West of the <i>n</i> th Meridian)
1925373	033-04W5M; 034-04W5M; 034-05W5M; 035-05W5M; 035-06W5M; 036-06W5M
1925399	16-034-03W5M; 01-033-05W5M; 02-035-05W5M; 21-033-06W5M; 01-036-06W5M; 17-034-03W5M; 15-033-05W5M; 05-035-05W5M; 31-033-06W5M; 35-033-07W5M; 34-031-04W5M; 01-034-05W5M; 10-035-05W5M; 03-034-06W5M; 35-031-04W5M; 19-034-05W5M; 15-035-05W5M; 05-034-06W5M; 20-033-04W5M; 22-034-05W5M; 16-035-05W5M; 34-034-06W5M; 32-033-04W5M; 24-034-05W5M; 19-035-05W5M; 35-034-06W5M; 06-034-04W5M; 29-034-05W5M; 28-035-05W5M; 02-035-06W5M; 18-034-04W5M; 33-034-05W5M; 30-035-05W5M; 13-035-06W5M; 30-034-04W5M; 35-034-05W5M; 32-035-05W5M; 34-035-06W5M
1925400	29-034-06W5M; 24-032-10W5M; 22-033-10W5M; 13-034-11W5M; 28-035-12W5M; 35-034-06W5M; 25-032-10W5M; 28-033-10W5M; 27-034-11W5M; 32-035-12W5M; 28-034-07W5M; 35-032-10W5M; 29-033-10W5M; 34-034-11W5M; 06-036-12W5M; 15-034-08W5M; 36-032-10W5M; 32-033-10W5M; 03-035-11W5M; 17-036-12W5M; 12-031-09W5M; 01-033-10W5M; 05-034-10W5M; 05-035-11W5M; 10-037-12W5M; 07-032-09W5M; 02-033-10W5M; 06-034-10W5M; 07-035-11W5M; 36-035-13W5M; 18-032-09W5M; 11-033-10W5M; 07-034-10W5M; 09-035-11W5M; 12-036-13W5M; 19-032-09W5M; 12-033-10W5M; 32-036-10W5M; 11-035-11W5M; 15-036-13W5M; 30-032-09W5M; 14-033-10W5M; 34-036-10W5M; 12-035-11W5M; 25-036-13W5M; 06-033-09W5M; 15-033-10W5M; 02-037-10W5M; 17-035-11W5M; 01-038-13W5M; 25-034-09W5M; 16-033-10W5M; 05-037-10W5M; 18-035-11W5M; 10-037-14W5M; 10-035-09W5M; 20-033-10W5M; 07-037-10W5M; 35-035-11W5M; 16-037-14W5M; 32-035-09W5M; 21-033-10W5M; 12-034-11W5M; 02-036-11W5M; 11-038-15W5M
1925403	07-006-02W5M
1925404	35-034-06W5M

Application no.	Location (Section, Township, Range, West of the <i>n</i> th Meridian)
1925405	31-022-03W5M; 30-024-05W5M; 25-022-06W5M; 33-024-06W5M; 22-025-06W5M; 06-023-03W5M; 13-025-05W5M; 27-022-06W5M; 34-024-06W5M; 23-025-06W5M; 04-021-04W5M; 14-025-05W5M; 28-022-06W5M; 35-024-06W5M; 25-025-06W5M; 05-021-04W5M; 23-025-05W5M; 29-022-06W5M; 36-024-06W5M; 27-025-06W5M; 34-023-04W5M; 24-025-05W5M; 32-022-06W5M; 01-025-06W5M; 28-025-06W5M; 03-024-04W5M; 26-025-05W5M; 33-022-06W5M; 02-025-06W5M; 29-025-06W5M; 04-024-04W5M; 34-025-05W5M; 02-023-06W5M; 03-025-06W5M; 32-025-06W5M; 29-024-04W5M; 35-025-05W5M; 03-023-06W5M; 04-025-06W5M; 33-025-06W5M; 31-024-04W5M; 03-026-05W5M; 05-023-06W5M; 09-025-06W5M; 05-026-06W5M; 06-025-04W5M; 09-026-05W5M; 06-023-06W5M; 10-025-06W5M; 07-026-06W5M; 07-025-04W5M; 10-026-05W5M; 31-023-06W5M; 11-025-06W5M; 18-026-06W5M; 15-025-04W5M; 15-026-05W5M; 09-024-06W5M; 13-025-06W5M; 19-026-06W5M; 25-021-05W5M; 16-026-05W5M; 11-024-06W5M; 14-025-06W5M; 30-026-06W5M; 35-021-05W5M; 21-026-05W5M; 13-024-06W5M; 15-025-06W5M; 24-026-07W5M; 02-022-05W5M; 28-026-05W5M; 24-024-06W5M; 16-025-06W5M; 04-022-05W5M; 15-022-06W5M; 25-024-06W5M; 20-025-06W5M; 19-024-05W5M; 22-022-06W5M; 27-024-06W5M; 21-025-06W5M
1925406	01-005-02W4M; 01-004-01W5M; 24-004-01W5M; 09-005-02W5M; 05-007-02W5M; 15-004-29W4M; 02-004-01W5M; 28-004-01W5M; 10-005-02W5M; 07-007-02W5M; 08-003-30W4M; 04-004-01W5M; 30-004-01W5M; 11-005-02W5M; 08-007-02W5M; 09-003-30W4M; 05-004-01W5M; 31-004-01W5M; 15-005-02W5M; 19-007-02W5M; 22-003-30W4M; 08-004-01W5M; 32-004-01W5M; 17-005-02W5M; 24-007-02W5M; 28-003-30W4M; 09-004-01W5M; 33-004-01W5M; 28-005-02W5M; 01-006-03W5M; 33-003-30W4M; 10-004-01W5M; 06-005-01W5M; 29-005-02W5M; 03-006-03W5M; 04-004-30W4M; 11-004-01W5M; 04-006-01W5M; 33-005-02W5M; 08-006-03W5M; 08-004-30W4M; 12-004-01W5M; 05-006-01W5M; 04-006-02W5M; 09-006-03W5M; 20-004-30W4M; 13-004-01W5M; 24-004-02W5M; 05-006-02W5M; 10-006-03W5M; 21-004-30W4M; 15-004-01W5M; 25-004-02W5M; 07-006-02W5M; 12-006-03W5M; 12-003-01W5M; 16-004-01W5M; 26-004-02W5M; 16-006-02W5M; 17-006-03W5M; 23-003-01W5M; 17-004-01W5M; 34-004-02W5M; 17-006-02W5M; 20-006-03W5M; 25-003-01W5M; 18-004-01W5M; 35-004-02W5M; 20-006-02W5M; 24-007-03W5M; 34-003-01W5M; 20-004-01W5M; 01-005-02W5M; 21-006-02W5M; 16-007-04W5M; 35-003-01W5M; 21-004-01W5M; 02-005-02W5M; 29-006-02W5M; 32-013-04W5M; 36-003-01W5M; 22-004-01W5M; 03-005-02W5M; 32-006-02W5M
1925943	02-20-004-30W4M; 01-24-004-01W5M
1925945	06-21-004-30W4M
1925946	SW-21-004-30W4M
1925948	SW-21-004-30W4M

Application no.	Location (Section, Township, Range, West of the <i>n</i>th Meridian)
1925960	20-004-30W4M
1926071	13-025-05W5M
1926086	06-13-025-06W5M
1926110	13-13-025-05W5M; 05-24-025-05W5M
A10100925	18-034-04W5M; 13-035-06W5M; 35-033-07W5M; 10-035-05W5M; 33-034-05W5M; 16-035-05W5M; 28-034-07W5M; 19-034-07W5M; 33-034-06W5M; 25-034-07W5M; 29-034-06W5M; 26-034-07W5M; 31-033-06W5M; 25-034-05W5M; 33-033-06W5M; 11-035-06W5M; 02-035-06W5M; 01-035-06W5M; 04-034-06W5M; 05-034-06W5M; 28-033-06W5M; 32-033-06W5M; 06-034-06W5M; 36-033-07W5M; 34-034-05W5M; 07-034-04W5M; 12-034-05W5M; 13-034-05W5M; 29-033-04W5M; 11-033-05W5M; 14-033-05W5M; 15-033-05W5M; 23-034-06W5M; 27-034-06W5M; 34-034-06W5M; 35-034-06W5M; 24-034-06W5M; 36-034-06W5M; 28-032-04W5M; 12-035-06W5M
A10100926	34-034-06W5M; 35-034-06W5M
A10100927	15-033-10W5M; 22-033-10W5M; 07-034-10W5M; 12-034-11W5M; 13-034-11W5M; 10-037-12W5M; 15-037-12W5M; 05-037-10W5M; 32-036-10W5M; 33-036-10W5M; 32-033-08W5M; 02-037-10W5M; 03-037-10W5M; 01-036-11W5M; 02-036-11W5M; 06-036-10W5M; 35-035-11W5M; 06-034-10W5M; 08-036-12W5M; 01-033-10W5M; 02-033-10W5M; 35-032-10W5M; 36-032-10W5M; 11-033-10W5M; 12-033-10W5M; 03-035-11W5M; 10-035-11W5M; 11-035-11W5M; 16-034-08W5M; 17-034-08W5M; 18-034-08W5M; 19-034-08W5M; 25-034-09W5M; 30-034-08W5M; 15-035-09W5M; 17-032-09W5M; 02-035-09W5M; 11-035-09W5M; 34-034-09W5M; 04-032-09W5M; 05-032-09W5M; 08-032-09W5M; 33-031-09W5M; 34-031-09W5M; 03-034-09W5M; 04-034-09W5M; 10-034-09W5M; 11-034-09W5M; 01-034-11W5M; 22-034-11W5M; 27-034-11W5M; 34-034-11W5M; 19-036-13W5M; 20-036-13W5M; 23-036-14W5M; 24-036-14W5M; 29-036-13W5M; 01-036-13W5M; 02-036-13W5M; 36-035-13W5M; 19-032-09W5M; 24-032-10W5M; 25-032-10W5M; 05-034-10W5M; 08-034-10W5M; 29-033-10W5M; 32-033-10W5M; 10-033-10W5M; 16-033-10W5M; 20-033-10W5M; 21-033-10W5M; 17-035-11W5M; 28-033-10W5M; 16-037-14W5M; 20-037-14W5M; 21-037-14W5M; 29-037-14W5M; 30-032-09W5M; 12-036-13W5M; 18-034-10W5M; 01-038-15W5M; 02-038-15W5M; 11-038-15W5M; 10-037-14W5M; 15-037-14W5M; 31-033-10W5M; 09-035-11W5M; 15-035-11W5M; 16-035-11W5M; 28-032-09W5M; 04-037-10W5M; 28-034-11W5M;

Application no.	Location (Section, Township, Range, West of the <i>n</i> th Meridian)
	29-034-11W5M; 33-034-11W5M; 25-036-14W5M; 36-036-14W5M; 34-036-10W5M; 35-036-10W5M; 05-036-12W5M; 05-033-09W5M; 06-033-09W5M; 31-032-09W5M; 32-032-09W5M; 06-037-10W5M; 07-037-10W5M; 11-036-11W5M; 30-033-10W5M; 36-033-11W5M; 18-032-09W5M; 20-032-09W5M; 14-033-10W5M; 12-031-09W5M; 02-034-11W5M; 10-034-11W5M; 11-034-11W5M; 15-034-11W5M; 07-032-09W5M; 26-032-10W5M; 32-035-12W5M; 01-038-13W5M; 06-038-12W5M; 07-038-12W5M; 08-038-12W5M; 12-038-13W5M; 17-038-12W5M; 20-038-12W5M; 21-038-12W5M; 15-036-13W5M; 06-036-12W5M; 13-034-08W5M; 24-034-08W5M; 15-034-08W5M; 01-036-10W5M; 11-036-10W5M; 17-036-12W5M; 21-035-10W5M; 09-034-08W5M; 10-034-08W5M; 14-034-08W5M; 19-034-07W5M; 20-034-07W5M; 23-034-07W5M; 24-034-07W5M; 25-034-07W5M; 26-034-07W5M; 27-034-07W5M; 28-034-06W5M; 28-034-07W5M; 29-034-06W5M; 29-034-07W5M; 30-034-06W5M; 33-034-06W5M; 34-034-06W5M; 35-034-06W5M; 05-034-09W5M; 07-033-09W5M; 14-034-09W5M; 17-033-09W5M; 18-033-09W5M; 20-033-09W5M; 23-034-09W5M; 24-034-09W5M; 29-033-09W5M; 31-033-09W5M; 32-033-09W5M; 35-034-09W5M; 36-034-09W5M; 06-036-09W5M; 10-035-09W5M; 12-036-10W5M; 14-036-10W5M; 16-035-09W5M; 20-035-09W5M; 21-035-09W5M; 23-036-10W5M; 26-036-10W5M; 29-035-09W5M; 31-035-09W5M; 32-035-09W5M; 03-033-10W5M; 26-034-11W5M; 35-034-11W5M; 02-036-10W5M; 12-035-11W5M; 13-035-11W5M; 18-035-10W5M; 19-035-10W5M; 20-035-10W5M; 27-035-10W5M; 28-035-10W5M; 34-035-10W5M; 35-035-10W5M; 05-035-11W5M; 06-035-11W5M; 07-035-11W5M; 18-035-11W5M; 13-035-12W5M; 14-035-12W5M; 22-035-12W5M; 23-035-12W5M; 27-035-12W5M; 28-035-12W5M; 29-035-12W5M; 18-036-12W5M; 19-036-12W5M; 24-036-13W5M; 25-036-13W5M; 26-036-13W5M; 27-036-13W5M; 28-036-13W5M; 34-036-13W5M; 02-037-14W5M; 11-037-14W5M; 35-036-14W5M

Application no.	Location (Section, Township, Range, West of the <i>n</i>th Meridian)
A10100929	20-006-03W5M; 29-006-03W5M; 11-004-01W5M; 12-004-01W5M; 01-004-01W5M; 12-004-01W5M; 32-003-30W4M; 36-003-01W5M; 10-006-03W5M; 11-006-03W5M; 12-006-03W5M; 20-006-02W5M; 17-006-02W5M; 21-004-01W5M; 28-004-01W5M; 16-006-03W5M; 17-006-03W5M; 20-006-03W5M; 20-004-01W5M; 02-005-02W5M; 31-004-01W5M; 05-014-04W5M; 32-013-04W5M; 03-006-03W5M; 09-006-03W5M; 15-006-03W5M; 28-003-30W4M; 02-004-01W5M; 34-003-01W5M; 35-003-01W5M; 23-003-01W5M; 24-003-01W5M; 25-003-01W5M; 09-004-01W5M; 10-004-01W5M; 15-004-01W5M; 08-003-30W4M; 09-003-30W4M; 12-003-01W5M; 16-007-04W5M; 29-006-03W5M; 30-006-03W5M; 01-006-03W5M; 11-004-01W5M; 16-004-01W5M; 03-005-02W5M; 11-005-02W5M; 29-004-01W5M; 30-004-01W5M; 17-004-01W5M; 19-004-01W5M; 24-004-02W5M; 25-004-02W5M; 26-004-02W5M; 08-006-03W5M; 01-005-02W5M; 36-004-02W5M; 11-005-01W5M; 23-004-01W5M; 35-004-02W5M; 32-004-01W5M; 04-004-01W5M; 22-004-01W5M; 26-003-01W5M; 14-006-03W5M; 33-004-01W5M; 08-005-02W5M; 25-004-01W5M; 13-004-01W5M; 15-005-02W5M; 29-005-02W5M; 05-004-01W5M; 15-003-30W4M; 14-004-01W5M; 16-003-30W4M; 18-004-01W5M; 34-004-02W5M; 24-004-01W5M; 27-004-01W5M; 17-005-02W5M; 16-006-02W5M; 29-006-02W5M; 02-005-01W5M; 13-006-02W5M; 18-006-01W5M; 27-005-01W5M; 17-007-02W5M
A10100930	12-023-06W5M; 13-023-06W5M; 14-023-06W5M; 15-023-06W5M; 16-023-06W5M; 17-023-06W5M; 05-023-06W5M; 13-024-06W5M; 24-024-06W5M; 24-022-06W5M; 27-022-06W5M; 34-024-06W5M; 05-021-04W5M; 33-024-06W5M; 02-023-06W5M; 03-023-06W5M; 07-023-05W5M; 11-023-06W5M; 11-025-06W5M; 35-021-05W5M; 02-022-05W5M; 04-023-06W5M; 29-022-06W5M; 32-022-06W5M; 14-025-06W5M; 25-022-06W5M; 27-024-06W5M; 28-022-06W5M; 33-022-06W5M; 06-023-06W5M; 34-021-05W5M; 35-024-06W5M; 04-025-06W5M; 16-025-06W5M; 10-022-06W5M; 31-023-06W5M; 22-022-06W5M; 16-026-05W5M; 03-024-04W5M; 04-024-04W5M; 05-026-06W5M; 10-023-06W5M; 20-023-06W5M; 21-023-06W5M; 29-023-06W5M; 32-023-06W5M; 05-024-06W5M; 08-024-06W5M; 09-024-06W5M; 10-024-06W5M; 11-024-06W5M; 14-024-06W5M; 36-024-06W5M; 25-024-06W5M; 15-022-06W5M; 03-022-05W5M; 04-021-04W5M; 04-022-05W5M; 07-021-04W5M; 18-021-04W5M; 19-021-04W5M; 24-021-05W5M; 25-021-05W5M; 26-021-05W5M; 01-022-06W5M; 02-022-06W5M; 05-022-05W5M; 06-022-05W5M; 11-022-06W5M
A10101091	11-004-01W5M; 12-004-01W5M; 17-004-01W5M; 20-004-01W5M; 02-005-02W5M
A10101092	04-022-05W5M
A10101093	23-034-06W5M; 02-035-06W5M; 12-035-06W5M
A10101094	19-032-09W5M; 28-032-09W5M; 15-034-11W5M
00000258-021	004-30W4M to 004-01W5M

Application no.	Location (Section, Township, Range, West of the <i>n</i>th Meridian)
00001711-004	05-12-033-10W5M
00011323-015	12-035-034-06W5M
00011668-004	13-22-022-06W5M
00020514-002	16-23-03-01W5M
00020515-003	NW-09-03-30W4M; SW-09-03-30W4M
00027142-003	SE-15-033-05W5M
00030404-002	11-09-03-30W4M
00386786-002	SW-12-033-10W5M
00403327-003	16-17-035-11W5M
00403668-002	NW-18-034-04W5M
00413351-002	04-35-021-05W5M
00413352-002	13-22-022-06W5M
00413432-002	03-13-025-06W5M
00458763-001	SE-24-004-01W5M; 20-004-30W5M; 21-004-30W5M; NE-13-004-01W5M; NE-17-004-30W4M; NW-16-004-30W4M
00458837-001	NW-13-025-05W5M; SW-24-025-05W5M; SE-23-025-05W5M
00011587-015	NW-13-025-05W5M; SW-24-025-05W5M; SE-23-025-05W5M
00039499-003	NE-17-004-30W4M; SW-15-004-30W4M
00040795-002	SW-24-025-05W5M
00383322-002	SW-15-004-30W4M

EXHIBIT D

This is Exhibit " D " referred to in the

Affidavit of

Michael Judd.....

Sworn before me this 11th..... day

of October.....A.D. 2022


.....
A Notary Public, A Commissioner for Oaths in and for Alberta

SHAUN FLUKE
Barrister & Solicitor

November 2, 2020

Greg Krauss
Compliance Lead, Legacy Rights and Obligation
Shell Canada Limited
400 – 4 Avenue SW,
Calgary, Alberta

Yvonne McLeod
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Pieridae Alberta Production Ltd,
3100, 308 4 Avenue SW
Calgary, Alberta T2P 0H7

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Email: Yvonne.McLeod@pieridaeenergy.com

Financial Ability/Capacity Assessment

Dear Greg and Yvonne,

On Monday October 26, 2020, Shell Canada Limited met with AER to discuss the administrative process to re-submit the Foothills Asset Transfer applications. The applications will include a Financial Ability/Capacity Assessment of both Shell Canada Limited and Pieridae Alberta Production Ltd. (the Applicants).

To support the assessment, at a minimum, the Applicants will be required to submit the information detailed on Appendix 1. It is my understanding that the Applicants may have concerns about some or all of this information being placed on the public record.

The Applicants may submit a request for confidentiality identifying the specific information or document for which confidentiality is sought. Requests for confidentiality must be submitted in writing before filing the document and must address the criteria set out in section 49(3) of the *Alberta Energy Regulator Rules of Practice* (Rules), namely:

A request for confidentiality **must**

- be in writing,
- briefly describe

- the nature of the information in the document that is the subject of the request, and
- the reasons for the request, including the specific harm that might result if the document were placed on the public record, and
- indicate whether all or only a part of the document is the subject of the request.

The Applicants may also wish to address the confidentiality tests that the AER must consider as specified in section 49(4) of the Rules, as follows:

- If disclosure of the information could reasonably be expected to reveal personal information that has been consistently treated as confidential by the person the information is about, and
- the AER considers that the person's interest in confidentiality outweighs the public interest in disclosing the information on the public record of the proceeding.

OR

- If the information is commercial, financial, scientific or technical in nature and the AER is of the opinion that disclosure of the information on the public record of the proceeding could reasonably be expected (i) to cause significant harm to the competitive position of a party, or (ii) to result in undue financial loss or gain to any person or organization.

Please submit a request to the AER that complies with the statutory requirements in section 49(3) keeping in mind the criteria in section 49(4).



Sincerely,

Jan Rempel,
Manager, Regulatory Applications

cc: Bola Talabi, Vice President, Regulatory Applications
Trevor Gosselin, Director Regulatory Applications
Lane Peterson, Director Regulatory Applications
Steve Thomas, Director Regulatory Applications
Sean Sexton, Law Branch

Enclosure: (1)

Appendix 1: Information to Support Financial/Capacity Assessment

Information Required:	Reasoning:
<ul style="list-style-type: none"> Current Financial Statements 	<ul style="list-style-type: none"> To determine base-line financial capacity and magnitude of change for each applicant
<ul style="list-style-type: none"> Assets & Liabilities in transaction 	<ul style="list-style-type: none"> To assess pro-forma
<ul style="list-style-type: none"> A summary schedule of commitments, contingencies & guarantees including and key terms in purchase & sale agreement that may have a material effect 	<ul style="list-style-type: none"> To determine the level of on-going commitments that may affect meeting end of life obligations To gauge any potential subordination of obligations to AER
<ul style="list-style-type: none"> ARO Schedule and Costs 	<ul style="list-style-type: none"> To determine reasonableness in relation to pro-forma
<ul style="list-style-type: none"> Reserves Information disposition (NI 51-101 compliant) 	<ul style="list-style-type: none"> To confirm assets, production and associated ARO to be transferred
<ul style="list-style-type: none"> A schedule of all subsidiary, partnership, or joint venture relationships 	<ul style="list-style-type: none"> To gauge any potential subordination of obligations to AER
<ul style="list-style-type: none"> Confirmation of staff resources and capacity related to transaction 	<ul style="list-style-type: none"> To validate level of acumen to support operations and sustainment costs
<ul style="list-style-type: none"> Site Specific Liability Assessments that meet the requirements of Directive 001 accepted by AER 	<ul style="list-style-type: none"> To validate liability estimates and determine what if any security may be allocated (and to whom).

EXHIBIT E

This is Exhibit " E " referred to in the
Affidavit of
Michael Judd
Sworn before me this 11th day
of October A.D. 2022

A Notary Public, A Commissioner for Oaths in and for Alberta

SHAUN FLUKE
Barrister & Solicitor

IN THE MATTER OF THE PROPOSED TRANSFER
of Shell Canada Limited's Foothills Assets to Pieridae Energy,
Applications No. 1931841 etc., 1931842 etc., 1931843 etc.

STATEMENT OF CONCERN OF MICHAEL JUDD

February 19, 2021

Hayduke & Associates Ltd.
2708 17th Street NW
Calgary, AB. T2M 3S4
Phone: 250-877-8678
Email: sawyer@hayduke.ca
Agent for Michael Judd

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1.0 INTRODUCTION

1. Royal Dutch Shell, which owns Shell Canada Limited (hereafter “Shell”), is one of the largest integrated oil and gas companies in the World, and in Canada, with 2019 global net annual revenues of approximately \$352 Billion dollars¹.
2. Shell has operated the Foothills Assets for the past 70 years. However, the Foothills Assets are currently mature or over mature and production has declined with overall production currently below 70 percent of the original production. Some fields, such as the Caroline field, are currently below 10 percent of the original production levels.

¹ <https://reports.shell.com/annual-report/2019/servicepages/download-centre.php>

3. Additionally, Shell has accrued significant environmental and reclamation liabilities for the Foothills Assets, including sour gas plants, hundreds of sour gas wells, thousands of kilometers of pipelines, various surface facilities, and thousands of hectares of surface reclamation liabilities (well sites, road allowances, pipeline R.O.W.s etc.) and significant groundwater contamination at both the Waterton and Jumping Pound sour gas plants.
4. While Shell has not made public the total reclamation and remediation liability for the Foothills Assets, Michael Judd (hereafter “Mr. Judd”) (conservatively estimates the total environmental and reclamation liability at over \$3.1 Billion dollars².
5. In October 2019 Shell completed the sale of the Foothills Assets, to Pieridae Alberta Production Ltd. (hereafter “Pieridae”), a wholly owned subsidiary of Calgary-based Pieridae Energy, subject to conditions including obtaining the approval of the Alberta Energy Regulator (hereafter “the AER”) to transfer the assets.
6. The regulatory approvals attached to the Foothills Assets which must be transferred from Shell to Pieridae are issued under a host of energy and environmental legislation in Alberta, including the *Environmental Protection and Enhancement Act*, RSA 2000. C E-12 (EPEA).
7. In November 2019 Mr. Judd filed a Statement of Concern in relation to the transfer of the Foothills Assets to Pieridae. Mr. Judd’s concerns were similar to those made by numerous members of the public, land owners and other oil and gas producers who also submitted Statements of Concern to the AER raising concerns about Pieridae’s financial capability to meet its reclamation and remediation obligations and with respect to Pieridae’s lack of experience operating sour gas production facilities and the implications for public safety.
8. On May 13, 2020 the AER denied Shell’s application for the transfer of regulatory approvals associated with the Foothills Assets to Pieridae³.

² All currencies are in Canadian dollars unless otherwise noted.

9. The key finding by the AER in its decision to deny the initial transfer application was the proposal by Shell to split regulatory liability for remediation and reclamation of the Foothills Assets between itself and Pieridae. Shell proposed it would retain liability for historic Sulfinol and related contamination, and Pieridae would assume liability for all other remediation and reclamation of the sites
10. More specifically, the issue of the liability for the Sulfinol groundwater contamination at both the Waterton and Jumping Pound gas plants (hereafter “the Groundwater Contamination”) was central to the 2020 AER decision to deny Shell’s original transfer application.
11. In January 2021 Shell re-applied to the AER for approval to transfer the regulatory approvals associated with the Foothills Assets to Pieridae. Shell’s Applications included No. 1931841 etc., No. 1931842 etc., and No.1931843 etc. (hereafter “the Applications”)⁴.

2.0 PROCEDURAL FAIRNESS CONCERNS

12. On February 8, 2021 Mr. Judd’s agent, Hayduke and Associates Ltd. (hereafter Hayduke”), provided the AER with a letter expressing the concern that the failure of Shell and the AER to fully disclose the content of the Applications on the public record constitutes a breach of Mr. Judd’s legal right to procedural fairness or natural justice in relation to this proceeding.
13. The Supreme Court of Canada has consistently ruled that the common law doctrine of procedural fairness applies to an administrative decision which affects an individual. As the Court initially stated in *Cardinal v. Director of Kent Institution*, 1985 CanLII 23 (SCC), [1985] 2 SCR 643 at paragraph 14: “This Court has affirmed that there is, as a general common law principle, a duty of procedural fairness lying on every public authority making an administrative decision which is not of a legislative nature and

³ AER May 13, 2020 decision letter to Shell and Pieridae

⁴ For purposes of the current Application, Shell has bundled the Applications into three bundles, one for each of the Waterton, Jumping Pound and Caroline fields.

which affects the rights, privileges or interests of an individual: *Nicholson v. Haldimand-Norfolk Regional Board of Commissioners of Police*, 1978 CanLII 24 (SCC), [1979] 1 S.C.R. 311; *Martineau v. Matsqui Institution Disciplinary Board (No. 2)*, 1979 CanLII 184 (SCC), [1980] 1 S.C.R. 602; *Attorney General of Canada v. Inuit Tapirisat of Canada*, 1980 CanLII 21 (SCC), [1980] 2 S.C.R. 735.

14. Mr. Judd is of the understanding that Shell and Pieridae has or should have filed materials relevant to the financial ability/capacity assessment, as requested by the AER by way of correspondence dated November 2, 2020⁵, including current financial statements for both companies and site specific liability assessments for the assets subject to the transfer application (hereafter “the Capacity Assessment Documents”).
15. Mr. Judd has filed correspondence⁶ with the AER and Shell on several occasions during the 30-day statement of concern period in this matter, indicating his concern that the public record does not constitute full disclosure of the Capacity Assessments Documents and requesting that he be provided with that disclosure and that the time period for filing of statement of concerns in this matter be extended to allow appropriate time for him to consider the Capacity Assessments Documents. Each of these requests has been denied, and the issue of inadequate disclosure remains unaddressed.
16. Mr. Judd submits that his ability to fully demonstrate how he may be directly and adversely affected by the Applications has been prejudiced by the fact that the public record does not include full disclosure of the Capacity Assessment Documents.
17. Mr. Judd further submits that since one of his concerns with the Applications is the lack of financial capacity of Pieridae to fully reclaim and remediate ongoing and end-of-life liabilities associated with the Foothills Assets (and in particular the assets located in the Waterton Field), the fact that the public record does not include full disclosure of the Capacity Assessment Documents renders it impossible for Mr. Judd to fully

⁵ Attached as Exhibit A to this Statement of Concern.

⁶ See correspondence from Hayduke to the AER dated January 26, February 1, February 5, a second letter on February 5, and February 8, all 2021, All attached as Exhibits B through F (respectively) to this Statement of Concern.

analyze and consider the Application in relation to his concerns and makes it more likely that the AER will find Mr. Judd's statement of concern to be frivolous or too vague.

18. In summary, the failure by the AER to provide full disclosure of the Capacity Assessment Documents to Mr. Judd, or alternatively direct Shell and Pieridae to disclose same to Mr. Judd, constitutes a breach of Mr. Judd's legal right to procedural fairness in these proceedings.
19. Mr. Judd has completed this statement of concern to the best of his ability, notwithstanding the lack of disclosure of the Capacity Assessment Documents, but this is not to be read or understood as his acquiescence to this breach his legal rights to procedural fairness. This statement of concern has been filed solely to preserve Mr. Judd's legal rights under the *Responsible Energy Development Act*, SA 2012, c R-17.3 and the *Alberta Energy Regulator Rules of Practice*, Alta Reg 99/2013.

3.0 SHELL'S REVISED APPLICATION

20. In its 2019 application, Shell proposed that it retain liability for the remediation and reclamation of Groundwater Contamination at the Waterton and Jumping Pound sour gas plants and that Pieridae would acquire and become responsible for all other reclamation and abandonment costs associated with the Foothills Assets.
21. The AER ruled that the proposal for Shell to retain liability for the Groundwater Contamination was inconsistent with the AER's governing legislation and policies and that the proposed splitting of liability would have created a situation where the operation of the contaminated gas plants by Pieridae would be decoupled from the AER's ability to issue enforcement orders with respect to the Groundwater Contamination to the gas plant owner, in that case, Pieridae. As a result the AER denied Shell's application.
22. More specifically, the AER determined that this proposal was not in the public interest for the following reasons:

- a. The scope and extent of contamination at the sites is not well-known or adequately described in the application. Accordingly, it is difficult to comprehend how the clean-up of Sulfinol by Shell would actually be delineated from the clean-up of all other contaminants by Pieridae. The scope of liability for each of the companies was too uncertain under this proposal;
 - b. The application failed to comply with the polluter-pays principle recognized in section 2(i) of EPEA. Under this legislation, Shell is legally responsible for the remediation and reclamation contamination at these sites and this proposal essentially asks the AER to either relieve Shell of this obligation or significantly dilute its responsibility;
 - c. The application did not comply with the requirements of EPEA in that the legislation does not contemplate a split in remediation and reclamation responsibilities by substance on the same site;
 - d. The application did not comply with the requirement of EPEA that clean-up liability is joint and several amongst operators and all other persons assigned responsibility under the legislation. In lay terms, a joint and several obligation means that the AER can enforce remediation and reclamation obligations against any one or more of those persons. The application proposed to circumvent this enforcement capability by splitting these obligations; and
 - e. The application would diminish the effectiveness of the AER enforcement regime against Shell and Pieridae. As the holder of approvals that are merely in relation to remediation and reclamation liability of historic Sulphinol, Shell would be immune from sanctions that suspend or cease other producing approvals as an incentive to comply with an enforcement order on the Sulphinol. Related to this, an enforcement order against Shell on the clean-up of Sulfinol would adversely impact Pieridae's ability to continue to produce under the overlapping approvals.
23. To address the issues raised by the AER, Shell has modified its approach in the current Applications with respect to the issue of the Groundwater Contamination at the both the Waterton and Jumping Pound sour gas plants.

24. In the current Applications Shell has proposed to transfer ownership of all of the Foothills Assets, including the liability for the groundwater contamination, to Pieridae and to contractually indemnify Pieridae from costs associated with past, present, and future Groundwater Contamination.
25. The full indemnification provisions have not been made public and are therefore not part of the public record in these Applications, the disclosure only sets out excerpts of a revised purchase and sale agreement made between Shell and Pieridae.
26. The available information on the contractual indemnification demonstrates several limitations which make it uncertain whether the indemnification fully addresses the concerns outlined by the AER in its May 2020 decision.
27. Shell's indemnity is capped maximum aggregate liability of fifty million dollars (\$50,000,000).
28. In the event that Pieridae subsequently becomes insolvent or bankrupt, it is uncertain whether a Trustee would, or could, seek to enforce Shell's contractual liability to Pieridae with respect to the Groundwater Contamination. The AER, as a party with no privity of contract, will have no contractual power to require the Trustee to claim on that indemnity.
29. Shell has reserved itself the power to disclaim its liability, depending on actions taken by Pieridae or its Trustee, again making it further uncertain whether Shell will ever be required to perform that contractual commitment should Pieridae default on its reclamation and abandonment obligations by way of insolvency or bankruptcy.
30. The proposed indemnification terms raise significant concerns over whether the indemnity is enforceable or will be exercised.
31. Shell's new proposal fails to address all of the public interest concerns raised by the AER in its decision to reject the first application; concerns which arise from the basic fact that it proposes to transfer reclamation and remediation liabilities to a transferee

who is unable, on its own, to satisfy the financial ability/capacity assessment for the Foothills Assets.

4.0 SHELL'S FOOTHILLS ASSETS

32. Shell's Foothills Assets include the Waterton, Jumping Pound and the Caroline gas plants, all processing sour gas, and numerous sour gas wells, accessory facilities, pipelines and surface dispositions (well pads, pipeline R.O.W, road and powerline allowances).
33. The Applications list 282 sour gas well licences, 80 facility licences, 76 pipeline licences and 564 surface dispositions on public lands. There are likely additional surface dispositions on private lands that Shell has not identified in the Applications.
34. Mr. Judd estimates the total surface area of the Foothills Assets is likely in excess of 7,000 hectares (excluding private lands).
35. Shell has operated its Foothills Assets since 1957 and has experienced many H²S leaks from wells, facilities and pipelines and has been issued at least five non-compliance orders and seven incident reports by the AER in the past 5 years alone.
36. Since the commencement of operations at the Waterton, Jumping Pound and Caroline sour gas plants, Shell's raw gas production has declined by ~ 77 percent from ~800 mmcf/day to 184 mmcf/day of raw natural gas⁷.
37. The gas reserves in the Waterton Field have already been heavily exploited by Shell, and the global economy is unlikely to see large increases in the price of gas during the remaining life of the Waterton Field.
38. Shell has publically announced that the Waterton sour gas plant is facing a likely decline in production and possible closure in the next five to ten years⁸.

⁷ <https://pieridaenergy.com/mod/file/UploadFile/b3967a0e938dc2a6340e258630febd5a.pdf>, PDF Page 6

39. Shell is currently contributing ~ 22 percent of the total property taxes collected in the MD of Pincher Creek, where the Waterton gas plant is located, effectively meaning that Shell contributes \$1 out of every \$5 in property taxes collected by the MD of Pincher Creek⁹.
40. Table 1 below summarizes the total municipal property taxes collected from Shell in 2017 by Municipal Governments that the Foothills Assets fall within¹⁰.

Table 1 – Municipal Taxes Paid by Shell in 2017

Municipal Jurisdiction	Taxes Paid by Shell in 2017
Clearwater County	\$2,896,699.20
Kananaskis Improvement District	\$228,844.31
Mountain View County	\$132,490.43
Municipal District of Bighorn	\$391,410.03
Municipal District of Pincher Creek	\$2,788,086.19
Municipal District of Rockyview	\$717,241.68
Stoney Tribal Administration	\$188,669.70
Alexis Nakota Sioux Nation	\$350,000.00
Total	\$7,693,441.54

5.0 ABANDONMENT AND RECLAMATION LIABILITY

41. Neither Shell nor Pieridae have filed the Site Specific Liability Assessments that are required by AER Directive 001 and indicated as mandatory in the AER's November 2, 2020 letter to Shell and Pieridae¹¹.
42. The Foothills Assets include over 1,002 unique licences that are regulated by the AER and/or Alberta Environment.
43. AER Directive 001 states, with respect to the scope of a liability assessment:

⁸ Nichols Applied Management Inc. 2018. Socio-Economic Impact Assessment of the Shell Waterton Complex. Edmonton, Alberta. 52 pages

⁹ Nichols Applied Management Inc.. 2018. Socio-Economic Impact Assessment of the Shell Waterton Complex. Nichols Applied Management Inc. Edmonton, Alberta. 52 pages: PDF Page 33

¹⁰ www.shell.ca > estma-shell-canada-energy-english-2017

¹¹ Attached as Exhibit A to this Statement of Concern

“In estimating suspension, discontinuation or abandonment costs, an evaluation of the development licenced or approved by the ERCB, as well as the infrastructure and supporting equipment included in that authorization, must be conducted.”

And

“In estimating reclamation costs, all land or water directly affected by the construction, operation, or abandonment of the development licenced or approved by the ERCB must be assessed. Licensees should be aware that all facilities, infrastructure and equipment included in an ERCB licence or approval require a reclamation certificate. This includes access roads, remote drilling waste sumps, land treatment areas, borrow pits, earthen structures, warehouses, campsites, lay-down areas, storage areas, bone yards, and air strips. For sites not eligible for a reclamation certificate, a plan to complete an equivalent degree of remediation and reclamation is required in order to estimate the associated costs.”¹²

44. Without the required Site Specific Liability Assessments that Shell and/or Pieridae have not filed, it is impossible for Mr. Judd or the AER to accurately assess the reclamation liabilities associated with the Foothills Assets.
45. In the absence of the required Site Specific Liability Assessments, Mr. Judd has estimated the liability costs for the Foothills Assets, including costs associated with groundwater contamination or other non-standard liabilities, to be in excess of approximately \$3.1 Billion.
46. In contrast, in its Q3 unaudited interim financial statements Pieridae list its decommissioning obligations as only \$205.2 Million. Mr. Judd submits that this number is many orders of magnitude lower than the actual future abandonment and reclamation costs will be for the Foothills Assets. Mr. Judd submits that Pieridae and/or Shell appear to have grossly under-estimated the decommissioning obligations for the Foothills Assets.
47. Shell has documented extensive groundwater contamination associated with both the Waterton and Jumping Pound sour gas plants in its Applications but has not provided any estimate of the cost to fully remediate the identified ground water contamination issues.

¹² AER Directive 001, PDF page 5

48. Based on Shell's filed evidence it is likely that groundwater contamination is entering surface waters of Jumpingpound Creek, a major tributary to the Bow River, and the source of downstream drinking water, for example, in the Town of Cochrane and the City of Calgary. The total financial, environmental and public health costs associated with the potential contamination of the drinking water for large downstream municipalities are unknown.
49. Mr. Judd is concerned Pieridae does not have the financial resources to be able to cover the abandonment and reclamation costs for the Foothills Assets and that should Pieridae suffer financial hardship or be placed into receivership, these liabilities will fall to the provincial and federal taxpayers as orphaned wells/facilities.
50. Mr. Judd submits that there is a serious possibility the field is not going to be profitable for much longer, or it may not be profitable now, and that cleanup and remediation will be required in the near future. Mr. Judd further submits that Pieridae must be required to submit sufficient financial security to ensure that the Foothills Assets are abandoned and reclaimed and that the liabilities are not transferred to taxpayers.
51. Mr. Judd submits that given the extreme sour gas associated with the Foothills Assets, that to not, or improperly, reclaim and abandon these assets would constitute a significant risk to his, and the public's, safety.

6.0 PUBLIC SAFETY AND COMMUNITY ENGAGEMENT

52. Mr. Judd is directly and adversely affected by the health risks of the existing, proposed and un-reclaimed sour gas installations. Mr. Judd is aware of the growing problem of orphaned oil and gas equipment in Alberta, and he is concerned that the transfer of the Foothills Assets to a small operator is the first step towards his home being surrounded by dangerous orphaned oil and gas equipment that may never be properly reclaimed.
53. Mr. Judd submits that Pieridae does not have the management experience or financial resources to effectively manage the public safety and emergency response systems that Shell developed and put in place over the past 70 years.

54. Furthermore, Mr. Judd is concerned that notwithstanding Pieridae's claims to the contrary, the level and quality of public consultation and community engagement has deteriorated since Pieridae became the operator of the Foothills Assets.
55. By way of example, Mr. Judd notes that Pieridae has recently announced that it will be reapplying for a sour gas pipeline that Shell had originally applied for but subsequently withdrew the application. Interestingly, Pieridae has publicly circulated emergency response maps for the proposed project that show a significantly reduced emergency protection zone (EPZ) that conveniently places several local residences, including Mr. Judd's, outside the EPZ. In spite of specific requests for Pieridae to provide a technical explanation about how the EPZ calculations would have been reduced on the exact project as Shell had previously proposed, Mr. Judd still has not received an answer.

7.0 PIERIDAE'S FINANCIAL CAPABILITIES

56. As of today's date Pieridae has not filed with the AER its annual report or financial statements for 2020.
57. Pieridae has only operated the Shell Foothill Assets since late 2019, so all of the relevant financial information publicly filed by Pieridae are unaudited quarterly interim financial statements that show consistent substantial losses. Pieridae could have complemented that formal reporting with cash flow statements. But their management reports instead use the non-IFRS¹³ measure of "Net Operating Income," as they have also done in Schedule 7 of Shell's application. Mr. Judd notes that these management presentations do not account for the considerable cash position negative effects of their very high interest term loan.
58. Mr. Judd submits that, as part of this application process, Pieridae should be required to submit and disclose audited financial statements for the 2020 year. Any supplementary cash flow based management reporting submitted to the Regulator should conform to IFRS standards, and should include the First Quarter of 2021.

¹³ International Financial Reporting Standards

59. Also as of today's date, neither Shell nor Pieridae have filed the required Financial Ability/Capacity Assessment that the AER requested of both Shell and Pieridae¹⁴.
60. The following are based on Pieridae's publicly disclosed 2020 third quarter interim unaudited financial statements:
- a. In Q3 Pieridae claims total assets of ~\$584 Million and total liabilities of \$534 Million. Pieridae has included a claimed ~\$478 Million in assets for the Foothills Assets as if the transfer of ownership has occurred when it has not.
 - b. Pieridae claims ~\$214 Million in term debt, much of it through Third Eye Capital, at an effective interest rate of 22.73 percent interest¹⁵.
 - c. Mr. Judd submits that a 22.73 percent effective interest rate is a tangible indication that the financial markets consider Pieridae a significant risk.
 - d. In Q3 Pieridae claims total revenues of ~\$197 Million, total expenses of \$252 Million for a Net Loss of \$55 Million.
61. To put the foregoing into context, Pieridae is listed on the TSX and its shares have declined in value from \$5.50 CDN two years ago to a low of \$0.12 CDN a few months ago. Pieridae is currently trading at approximately \$0.51 CDN. At current share price Pieridae's total shareholders' equity is less than ~\$82 Million.
62. An additional risk factor is that North American natural gas markets are in a period of significant disruption. The so-called shale boom, both in Canada and in the USA, has resulted in dramatic increases in natural gas supply, distortion in the supply demand balance, and historically low natural gas prices. Current gas prices have improved slightly and are currently ~\$2.58 per gigajoule.

¹⁴ AER letter to Shell Canada Limited and Pieridae Alberta Production Ltd. dated November 2, 2020
Attached as Exhibit A to this Statement of Concern

¹⁵ Pieridae 2019 Annual Report, Financial Statements, last Paragraph of Note 5, PDF page 24

63. Low natural gas prices will continue to negatively affect the financial viability of small, under capitalized companies like Pieridae.
64. In light of all of the above, Mr. Judd respectfully submit that there is significant risk that Pieridae does not, and will not, have the financial resources or experience to successfully complete its LNG export project or to safely and responsibly operate the Foothills Assets.
65. Mr. Judd also believes that if the proposed Shell transfer of licenses to Pieridae is approved by the Alberta Energy Regulator and Pieridae subsequently fails financially, that the liability for an estimated \$3 Billion (plus) in current and future environmental and reclamation liability will become the financial responsibility of both provincial and federal taxpayers.

8.0 PIERIDAE'S GOLDBORO LNG PROJECT

66. Pieridae has proposed to construct an LNG export facility in Nova Scotia. In order to successfully construct and operate that proposed LNG facility Pieridae will require a gas supply, new pipeline capacity connecting Alberta to Nova Scotia, the construction of the LNG facility and European markets for the proposed LNG.
67. Constructing a 10-megatonne greenfield LNG plant of the size that Pieridae has proposed in a remote location would require approximately \$15 Billion in capital expenditures for necessary components, including site preparation, pipeline supply, liquefaction, LNG storage and marine loading facilities¹⁶.
68. Pieridae's stated reason for wanting to acquire the Foothills Assets is to provide a gas supply for its LNG export scheme. However, the Foothills Assets are only producing 184 mmcf/day of natural gas whereas Pieridae's LNG export scheme requires a minimum 800 mmcf/day of natural gas, a 77 percent shortfall in gas supply.

¹⁶ <https://www.oxfordenergy.org/publications/lng-plant-cost-reduction-2014-18/>

69. In order to achieve its minimum required gas supply, Pieridae has stated that it intends to pursue aggressive upstream drilling of over 500 deep drilling targets to make up the current shortfall in gas supply. However this will require significant capital, ~\$14.7 Million per well or ~\$7.4 Billion in total¹⁷. Drilling these sour gas wells also comes with significant regulatory and geological risks.
70. Pieridae does have gas export licences, GL-313 and GL-314, issued on May 26, 2016 by the then National Energy Board (now Canadian Energy Regulator) but these export licences expire if the exports have not commenced by May 26, 2026, a little over five (5) years hence¹⁸. Judd submits there is significant risk that Pieridae will not have commenced exports by the sunset date imposed by the Canadian Energy Regulator.
71. Pieridae does have an export sales agreement with Uniper, a German gas utility, but that contract is conditional on Pieridae making a Final Investment Decision by mid-2021.
72. Pieridae has reported that it has a conceptual loan agreement with the German Government for \$4.5 Billion USD but as of today that loan has not been committed and is contingent on Pieridae providing non-fracked natural gas and that Pieridae satisfy the German Government that investing in the Goldboro LNG plants is a secure investment for the German people.
73. To succeed in its Goldboro LNG scheme Pieridae must also overcome mounting international and European environmental and geo-political forces that are opposed to Germany importing natural gas (LNG).
74. Mr. Judd submits that there is a significant risk that the German Government will not offer the loan to Pieridae.
75. Pieridae has not completed engineering design and costing on the proposed LNG facility, a requirement before making a Final Investment Decision. Pieridae has missed

¹⁷ <https://www.pfac.ca/resources/studies-and-reports/well-cost-study-overview/>

¹⁸ <https://apps.cer-rec.gc.ca/REGDOCS/Item/Filing/A77176>

three previous contractual deadlines to make a Final Investment Decision and Mr. Judd respectfully submits that it is likely they will miss the current deadline.

76. Pieridae has not publically disclosed the capital cost required to have a third party construct and operate the natural gas pipeline required to connect its western Canada gas supply to Nova Scotia but Judd expects those costs to be significant.

9.0 PIERIDAE'S TOTAL CAPITAL REQUIREMENTS

77. Table 2 below provides a simplified and conservative estimate of Pieridae's approximate capital requirements, assuming it owns and operates the Foothills Assets and that it proceeds with design, construction of its Goldboro LNG project over the next five years.

Table 2 – Estimated Pieridae Capital Requirements¹⁹

Construction of the Goldboro LNG plant	Construction of Pipeline Access to Goldboro	Abandonment & Reclamation Costs for the Foothills Assets	Drilling 500+ Deep Foothills Sour Gas Wells	Total Capital Requirements
\$15,000,000,000	\$3,000,000,000	\$3,000,000,000	\$7,500,000,000	\$28,500,000,000

78. Mr. Judd submits that given Pieridae's current financial vulnerability, when considered with Pieridae needing to raise in excess of ~\$28 Billion in capital, suggest that the likelihood of Pieridae failing to successfully design, fund, construct and profitably operate its proposed Goldboro LNG export scheme is high.

10.0 IMPACTS ON MUNICIPAL TAXES

79. Shell is a significant municipal property tax payer throughout the area of the Foothills Assets. Judd respectfully submits that if Pieridae fails financially it would likely default

¹⁹ Very preliminary estimates that are subject to revision upwards.

on its tax obligations to the municipal governments and First Nations resulting in a significant shortfall in tax revenues to those municipal and/or First Nation governments which would result in shortfalls in revenue and ratepayers would have to make up by paying higher taxes.

11.0 DIRECTLY AND ADVERSELY AFFECTED

80. Mr. Judd is directly and adversely affected by the risks created by the proposed transfer of regulatory approvals for the Shell Foothills Assets to Pieridae.
81. Mr. Judd resides in the Screwdriver Creek Valley at NE 6-6-2-W5M and has lived at this location since 1974, before Shell arrived to the Carbondale region, a sub-region of the Waterton gas field. Mr. Judd has been found directly and adversely affected by a number of previous Shell projects in the Waterton Field, most recently a proposed Shell level 3 gas pipeline carrying gas exceeding 10 mol/kmol of hydrogen sulphide (H²S).
82. In the region where Mr. Judd lives, facility failures in the Waterton Field would risk releasing a fatal dose of H²S.
83. Mr. Judd's residence is located within a number of emergency protection zones assigned to wells, pipelines and related facilities in the Waterton field, all of which are included within the Foothills Assets which are the subject of these Applications.
84. The only access road to and from Mr. Judd's residence is the Seven Gates Road, which leads down Screwdriver Creek Valley and through the emergency protection zones that would be impassable in the event of an H²S release which threatens the health and safety of Mr. Judd.
85. During Shell's more than 70 years of operating sour gas wells, pipelines and facilities throughout the Foothills Assets, there have been a number of serious incidents where uncontrolled releases of H²S has resulting in extreme risks to public safety and serious environmental consequences.

86. Mr. Judd has been evacuated from his residence on at least three (3) occasions as a result of failures of sour gas pipelines under Shell's control and management.
87. In *Kelly v. Alberta (Energy Resources Conservation Board)*, 2011 ABCA 325 at paragraph 26, the Alberta Court of Appeal stated as a matter of law that a person who resides within the evacuation area (ie the emergency protection zone) of H²S facilities has a 'strong prima facie' case for standing to require a hearing on an application.
88. In *Kelly v. Alberta (Energy Resources Conservation Board)*, 2011 ABCA 325 at paragraph 24, the Alberta Court of Appeal also held that the 'lurking risk' associated with sour gas facilities constitutes an adverse impact which triggers the right to a hearing.
89. The grounds upon which the AER denied the first application for the transfer of the Foothills Assets, the subsequent requirement that Shell and Pieridae submit the Capacity Assessment Documents as part of the current Applications, and Pieridae's publicly available financial statements, demonstrate that there is significant 'lurking risk' in the capacity and ability of Pieridae to fully remediate and reclaim facilities which are located in very close vicinity to Mr. Judd's residence, as well as facilities located on public lands in the area which Mr. Judd regularly visits. Accordingly, the transfer proposed in the Applications constitutes a direct and adverse impact on Mr. Judd.
90. As someone whose residence is surrounded by wells, pipelines, and other facilities which form part of the Foothills Assets, Mr. Judd is directly affected by the quality of public consultation and community engagement implemented by the operator of the Foothills Assets. As was noted above in this Statement, in its short time as operator of the Foothills Assets, Pieridae has already attempted to unilaterally reduce the radius of an emergency protection zone for a proposed sour gas pipeline without explanation, a reduction which would remove Mr. Judd's residence from the evacuation zone. This unfortunate conduct by Pieridae further demonstrates the health and safety risks to Mr. Judd in the proposed transfer of Foothills Assets, as well as the likely prospect that the quality of public consultation and community engagement with Mr. Judd will deteriorate under the direction of Pieridae. Accordingly, the transfer proposed in the Applications constitutes a direct and adverse impact on Mr. Judd.

91. Mr. Judd, as a resident of Alberta, is directly and adversely affected by a proposal by Shell to sell a major asset, the Foothills Assets, with declining commercial value and significant ongoing and end-of-life liabilities, at a time where Alberta's regulatory framework for addressing the problem of declining assets and growing liabilities in the oil and gas sector is widely acknowledged as deficient in addressing this problem.
92. Mr. Judd is a municipal taxpayer in the Municipal District of Pincher Creek (hereafter "the MD of Pincher Creek") and therefor is directly and adversely affected by any action that would potentially impact the ability to the MD of Pincher Creek to collect taxes and/or provide services Mr. Judd relies on. Additionally, Mr. Judd is directly affected by any shortfall in taxation revenues to the MD of Pincher Creek that would result in changes to the mill rate which would subsequently increase his municipal tax burden. Mr. Judd would be directly and adversely affected if the owner or licence holder of the Foothills Assets is unable to pay their municipal taxes.
93. Mr. Judd is a provincial taxpayer in the Province of Alberta (hereafter "Alberta") and therefor directly and adversely affected by any action that would potentially impact the ability of Alberta to collect taxes and/or provide services which he relies on. Mr. Judd will be directly affected by any shortfall in taxation revenues to Alberta that could subsequently increase his provincial tax burden.
94. Judd is a federal taxpayer in Canada and therefor potentially directly and adversely affected by any action that would potentially impact the ability of Canada to collect taxes and or provide services which he relies on. Additionally, Mr. Judd will be directly affected by any shortfall in taxation revenues to Canada that could subsequently increase his federal tax burden.
95. Mr. Judd is concerned that Shell, like other Alberta-based oil and gas company have done, is seeking to sell the Waterton, Jumping Pound and the Caroline sour gas fields (hereafter the "Foothills Assets") at a time where its commercial value has declined below some break-even point and is selling the Foothills Assets to avoid a significant liability cost if it retains ownership and remains financially liable for the significant reclamation and abandonment costs.

12.0 DESIRED OUTCOME

96. Mr. Judd submits that Shell has failed to demonstrate it has addressed the concerns raised by the AER in its decision to reject the first application for this transfer in May 2020, and accordingly is requesting that the AER make a determination that Shell has not met its burden of proof that granting the Applications is, in whole or in part, in the public interest.
97. Additionally, Mr. Judd is requesting that the AER make a determination that approving the Applications, in whole or in part, is not in the public interest having regard to:
- a. Pieridae's lack of experience and its financial situation;
 - b. Increased risks to public safety;
 - c. Reclamation and remediation liabilities that likely would be transferred to the public should Pieridae fail financially and become insolvent;
 - d. Tax liabilities to municipal, provincial and federal governments that may be transferred to the public should Pieridae fail financially and become insolvent; and
 - e. Shell's failure to demonstrate it has addressed the public interest concerns raised by the AER in its decision to reject the first application for this transfer.
98. In the alternative, Mr. Judd respectfully submit that the AER set these Applications down for a full public hearing, in which Mr. Judd is granted standing as a participant with full hearing entitlements including the ability to submit evidence, make argument, and question Shell and Pieridae on the content of the Applications, and which would consider the following:
- a. The full extent of abandonment and reclamation costs associated with the Foothills Assets in order to determine the level of risk created by a transfer of ownership to Pieridae;

- b. What special terms and conditions should be attached to the transfer in order to protect the Public Interest from the considerable abandonment and reclamation liabilities;
 - c. To determine if the Shell-Pieridae Purchase and Sale Agreement provides sufficient protection of the Public Interest with respect to the environmental liability associated with the past, present and future groundwater contamination associated with the Foothills Assets;
 - d. To determine if Pieridae has adequate business experience and financial resources to meet its anticipated present and future abandonment and reclamation liabilities; and
 - e. To determine if Pieridae has adequate business experience and financial resources to meet its present and future responsibilities to operate the Foothills Assets in compliance with all regulatory requirements and with respect to protecting Public Safety.
99. Mr. Judd requests that the AER deny the Applications for the transfer of regulatory approvals for the Foothills Assets.
100. If the AER decides to approve the Applications with or without a hearing, Mr. Judd submits that the AER should require Shell or Pieridae to post full financial security for all reclamation and remediation costs associated with the Foothills Assets, together with public disclosure of a full accounting of how the financial security is sufficient to meet the reclamation and remediation costs and other liabilities associated with the full abandonment and reclamation of the pipelines, wells, groundwater contamination, facilities and surface dispositions.

13.0 CONTACT DETAILS

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Submitted on February 19th, 2021 on behalf of Michael Judd

Respectfully
HAYDUKE & ASSOCIATES LTD.



Micheal Sawyer, MEDES.

Cc:Greg Krauss, Compliance Lead, Legacy Rights and Obligation, Shell Canada Limited
Yvonne McLeod, President, Pieridae Alberta Production Ltd.

EXHIBIT F


This is Exhibit "F" referred to in the

Affidavit of

Michael Judd

Sworn before me this 11th day

of October A.D. 2022


A Notary Public, A Commissioner for Oaths In and for Alberta

SHAUN FLUKER
Barrister & Solicitor



Licensee Capability Assessment

Report Date [REDACTED], 2022

Special Notification Going Concern Uncertainty	Peer Group Producer - Junior - Gas	Eligibility Facility, Well or Pipeline
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Company Name [REDACTED]

Licensee Assessment Profile

Risk Group		Performance Group			
Financial Distress High	Liability Magnitude High	Resources Lifespan Tier 3	Operations Tier 2	Closure Tier 1	Administration Tier 3

Risk Group Assessment

Financial Distress Parameters			Net Profit Margin (3-Year Average)		Current Ratio		Debt To Equity		Interest Coverage Ratio		Cash Flow From Operations To Debt		
Weighting			30%		30%		10%		20%		10%		
Year	Financial statement date	Period (months)	Value	Risk level	Value	Risk level	Value	Risk level	Value	Risk level	Value	Risk level	Total risk level
2022	2022-03-31	3	-68%	High	33.2%	High	0.00	High	-197.35	High	Null	High	High
2021	2021-12-31	12	-75%	High	38.6%	High	0.00	High	-115.11	High	Null	Low	High
2020	2020-12-31	12	-85%	High	27.7%	High	-0.03	High	-318.48	High	38%	Low	High
2019	2019-12-31	12	-47%	High	49.3%	High	-0.04	High	43.32	Low	80%	Low	Medium
2018	2018-12-31	12	-1744%	High	88.3%	Medium	0.00	High	-30.15	High	Null	High	High
2017	2017-12-31	12	-2569%	High	112.1%	Low	0.00	High	Null	Low	Null	High	Medium

Current Estimated Magnitude of Liability				Year	Liability estimate date	Liability estimate	Risk level
\$268,499,134 as of 2022-07-02				2022	2022-03-07	\$268,929,459	High
				2021	2021-12-06	\$269,343,659	High
				2020	2020-12-05	\$240,310,068	High
				2019	2019-12-07	\$252,582,301	High
				2018	2018-12-01	\$303,767,722	High
				2017	2017-12-02	\$58,951,779	Medium

Performance Group Assessment

Factor Name	Factor Tier	Factor Percentile	Parameter Name	Parameter Weight	Parameter Value	Peer Comparison Percentile	Peer Comparison Tier
Resources lifespan	Tier 3	3%	Production Trend	25%	-0.1004	23%	Tier 3
			Inactive Well Ratio	25%	60.41 %	23%	Tier 3
			Marginal Well Ratio	25%	73.44 %	21%	Tier 3
			Inactive Facility Ratio	15%	59.38 %	17%	Tier 3
			Crossover Timeline	10%	Far	100%	Tier 1
Operations	Tier 2	43%	Directive 013 Noncompliance Rate	25%	16.67 %	71%	Tier 2
			Inspection Noncompliance Follow-Up Rate	10%	41.72 %	35%	Tier 2
			Inspection Noncompliance Rate	15%	2.48 %	21%	Tier 3
			Pipeline Incident Rate	25%	0.0168	55%	Tier 2
			Release & Spill Rate	25%	0.0025	50%	Tier 2
Closure	Tier 1	87%	Closure Spend Rate	20%	2.66 %	52%	Tier 2
			Inactive Liability Trend	20%	-0.0594	83%	Tier 1
			Abandonment Rate, Produced Well	10%	14.50 %	77%	Tier 1
			Abandonment Rate, Non-produced Well	5%	18.41 %	48%	Tier 2
			Reclamation Rate, Produced Well	10%	1.11 %	11%	Tier 3
			Reclamation Rate, Non-produced Well	5%	6.03 %	50%	Tier 2
			Facility Abandonment Rate	10%	0.00 %	0%	Tier 3
			Facility Reclamation Rate	10%	0.71 %	25%	Tier 3
Administration	Tier 3	0%	Orphan Fund Levy Compliance	33%	All Paid	100%	Tier 1
			Administration Fund Levy Compliance	33%	All Paid	100%	Tier 1
			Mineral Lease Expiries	33%	0.0531	0%	Tier 3

Confidential; Security Classification: Protected B – Available to specified groups or roles