

Administrative Penalty Director's Decision

Named Party: Terroco Industries Ltd. **BA Code:** (0PP6)

File No. 2023-079

Preliminary Penalty Assessment

Number of Contraventions Identified	Base Assessment Amount	Factor Variance(s)	
Contravention 1	\$140 000	(a) +\$1 000 (b) +\$1 000 (f) +\$500	
Contravention 2	\$3 500		
Contravention 3	\$2 500		
Contravention 4	\$1 500		
Contravention 5	\$3 500		
Total Contraventions: 5	Total Base Assessment: \$151 000	Total Variance:	+\$2 500¹

Preliminary Penalty Assessment: \$153 000

¹ Under section 3(2) of the *Administrative Penalty Regulation*, the AER may increase or decrease the amount of an administrative penalty after considering certain factors. However, per section 3(3) of the *Administrative Penalty Regulation*, the maximum amount cannot exceed \$5000 for each day or part of a day on which a contravention occurs or continues.

Given the above, the amount of the administrative penalty associated with contravention 1 cannot be increased over \$5000. The assessment of the factors and factor variance will remain as part of the Director's Decision as the evidence supports the increased amounts described in the factors table.

Director's Decision Summary

On May 16, 2025, I, Jon Keeler, Director, Field Operations, Oil Sands Mining, for the Alberta Energy Regulator (AER), spoke with Terry [Terrance] O'Connor (Mr. O'Connor), CEO and Chairman for Terroco Industries Ltd. (Terroco) to inform Mr. O'Connor of the Preliminary Administrative Penalty Assessment (PA). Mr. O'Connor agreed to meet in person on May 30, 2025, to discuss the investigation findings and PA. The PA was emailed to Mr. O'Connor on the morning of May 16, 2025.

On May 22, 2025, Mr. O'Connor's personal assistant requested a two-week extension by email, which the AER agreed to on the same day. Due to a delayed acknowledgement from Terroco about the meeting and scheduling conflicts, the AER emailed Terroco on May 27, giving Terroco the opportunity to bring forward new information or evidence in writing by June 16, with an offer to meet at a later date if Terroco requested. Terroco agreed to provide a written submission by June 16. On June 11, Terroco requested an extension to provide their written response by June 20. The AER accepted the proposed new submission date by email. On June 20, Terroco provided a written response to the AER and requested an in-person meeting at a later date. Supplemental information was also provided by Terroco on June 23 and 24 by email as requested by the AER to assist with clarity of their previous submission.

On July 23, 2025, I, Jon Keeler, along with AER subject matter experts met with Terroco representatives Mr. O'Connor, CEO and Chairman; John Amundson, President; Carol McFarlane, Investigator with Integrated Risk Investigations Security Solutions; and Sandra Laroque Mcleod, Executive Director with the Indigenous Reclamation Association.

The purpose of the meeting was to review the facts on which the PA was based, how the assessment was calculated, and provide an opportunity for Terroco to ask questions and to share with the AER any relevant information not previously submitted to be considered prior to making a final decision.

The PA identified the following contraventions and penalty assessment.

CONTRAVENTION 1

On August 17, 2023, at or near Stettler, in the Province of Alberta, the Alberta Energy Regulator became aware that on or about June 27, 2023, and continuing on 40 non-contiguous days until August 22, 2023, at the disposal facility located at 04-29-038-20W4M, Terroco Industries Ltd. did accept waste that they were not approved to receive, to wit: industrial sewage, contrary to section 8.150(3)(c) of the *Oil and Gas Conservation Rules*.

REDA General Regulation				
BASE PENALTY TABLE				
Seriousness of Contravention				
Extent of actual or potential loss or damage		Major	Moderate	Minor
	Major	5000	3500	2500
	Moderate	3500	2500	1500
	Minor to	2500	1500	1000
	None	1000	600	250

Seriousness of Contravention: Major

Adherence to the requirements of the *Oil and Gas Conservation Rules* is needed to regulate the successful management of energy resource activities for the protection of the environment, property, and human health. Essential to fulfilling this, is the requirement to operate within the limits of regulatory approvals and licences. The onus is on the operator of a facility to ensure all required approvals are in place and operational requirements are satisfied, as well as to understand the limitations of the disposal methods of the facility and communicate this to the waste generator, in accordance with section 8.150(3) of the *Oil and Gas Conservation Rules*. By accepting unapproved substances, in this case unapproved waste, effective regulatory oversight by the AER cannot occur.

The AER sets operational requirements for disposal facilities which are based upon the type of waste that can be accepted for disposal. When unapproved waste is received by a disposal facility, there is a potential for an increased risk of an adverse effect to the environment and human health, the full effects may not be known for some time as operational and environmental monitoring requirements are tied to the class of disposal well. Accordingly, the seriousness of the contravention is assessed as “Major”.

Extent of Actual or Potential Loss or Damage: Moderate

The AER requirements for the construction, operation and monitoring at disposal facilities are contingent on the type of waste which is authorized for acceptance. By receiving waste that is not authorized for the disposal facility, the risk for loss or damage to both the environment and human health is increased. The investigation did not demonstrate any actual loss or damage therefore, only an assessment of potential loss or damage can be made.

The investigation determined that Terroco received unapproved wastewater, classified as industrial sewage, from the [Redacted] plant contrary to the *Oil and Gas Conservation Rules*. The potential impacts from receiving unapproved waste, may not be realized until an unknown point of time in the future as different classes of disposal wells have different operational and monitoring requirements. One of the source wastewater sample analyses provided to the investigator confirmed the presence of polyfluoroalkyl substances (PFAS) which has been known to produce adverse environmental and health effects. Industrial sewage is also capable of causing an adverse effect to the environment and human health. Furthermore, industrial sewage is prohibited for disposal by subsurface injection as specified in *Directive 051*.

As the investigation did not confirm whether PFAS was in the 14 196 m³ of industrial sewage that was received by Terroco, but the receipt of it was unauthorized, and subsurface injection of industrial sewage is prohibited, the potential loss or damage is classified as “Moderate”.

Section 72 of the *Responsible Energy Development Act (REDA)* allows the AER to impose a daily administrative penalty amount “for each day or part of a day on which the contravention or non-compliance occurs or continues”. The AER finds it appropriate in this matter to apply a daily penalty to reflect each day that unapproved waste was received. In this case, Terroco received unapproved waste over the course of forty (40) non-contiguous days between June 27, 2023 and August 22, 2023. This results in

the imposition of a daily penalty amount for a total of forty (40) days or portions of days on which the contravention occurred or continued.

Base Assessment: \$3 500 x 40 days = \$140 000

CONTRAVENTION 2

On or about August 17, 2023, at or near Stettler, in the Province of Alberta, at the disposal facility located at 04-29-038-20W4M, Terroco Industries Ltd. used a single-walled aboveground storage tank without secondary containment, contrary to section 4.2(131) of *Directive 055: Storage Requirements for the Upstream Petroleum Industry*, and did thereby contravene section 8.030(2) of the *Oil and Gas Conservation Rules*.

REDA General Regulation				
BASE PENALTY TABLE				
Seriousness of Contravention				
Extent of actual or potential loss or damage		Major	Moderate	Minor
	Major	5000	3500	2500
	Moderate	3500	2500	1500
	Minor to None	2500	1500	1000
	None	1000	600	250

Seriousness of Contravention: Major

The intent of *Directive 055* requirements is to ensure materials produced, generated (including waste), or used by the upstream petroleum industry are stored and managed in such a way to prevent soil, groundwater, and surface water contamination. The storage practices specified in *Directive 055* are intended to ensure that the decontamination of upstream petroleum sites is easier, and the long-term costs are reduced.

Secondary containment is required to contain materials in the event of a release from the storage tank. Secondary containment is the prescribed mechanism through which environmental receptors are ultimately protected and adverse effects are prevented. Contamination from a release, such as unapproved wastewater in this case, due to a lack of secondary containment for the storage tank has the potential to adversely impact the environment and human health. Accordingly, the seriousness of the contravention is assessed as “Major”.

Extent of Actual or Potential Loss or Damage: Moderate

Operating aboveground storage tanks without secondary containment increases the risk for loss or damage to both the environment and human health. The investigation did not demonstrate any actual loss or damage therefore, only an assessment of potential loss or damage can be made.

The investigation determined that Terroco stored wastewater from the [Redacted] plant without secondary containment, contrary to *Directive 055* requirements. One of the source wastewater sample analyses provided to the investigator confirmed the presence of polyfluoroalkyl substances (PFAS) which has been known to produce adverse environmental and health effects. Industrial sewage is also capable of causing an adverse effect to the environment and human health. As the investigation determined improper storage

of potentially 14 196 m³ of wastewater occurred for an unknown duration, where wastewater storage and transfers were actively occurring, the potential loss or damage is classified as “Moderate”.

Base Assessment: \$3 500

CONTRAVENTION 3

On or about August 17, 2023, at or near Stettler, in the Province of Alberta, at the disposal facility located at 04-29-038-20W4M, Terroco Industries Ltd. used a single-walled aboveground storage tank without leak detection contrary to section 4.3(150) of *Directive 055: Storage Requirements for the Upstream*

Petroleum Industry, and did thereby contravene section 8.030(2) of the *Oil and Gas Conservation Rules*.

REDA General Regulation				
BASE PENALTY TABLE				
Seriousness of Contravention				
Extent of actual or potential loss or damage		Major	Moderate	Minor
	Major	5000	3500	2500
	Moderate	3500	2500	1500
	Minor to None	2500	1500	1000
	None	1000	600	250

Seriousness of Contravention: Moderate

The intent of *Directive 055* requirements is to ensure materials used by the upstream petroleum industry are stored and managed in such a way to prevent soil, groundwater, and surface water contamination. The storage practices specified in *Directive 055* are intended to ensure the decontamination of upstream petroleum sites is easier, and the long-term costs are reduced.

Leak detection is required to monitor the integrity of storage systems and verify whether any material has escaped by monitoring for leaks. Leaks from storage tanks may not always readily be visible. The leak detection system is to be designed for the early detection of any leakage so that corrective and remedial actions can be taken. *Directive 055* allows for leak detection to occur in various forms but states it is to be monitored at least monthly unless otherwise noted. As leak detection allows for the monitoring of storage systems before potential leaks become a larger issue, compounded by the lack of secondary containment for their tank, the seriousness of the contravention is assessed as “Moderate”.

Extent of Actual or Potential Loss or Damage: Moderate

Operating aboveground storage tanks without leak detection increases the risk for loss or damage to both the environment and human health. The investigation did not demonstrate any actual loss or damage therefore, only an assessment of potential loss or damage can be made.

The investigation determined that Terroco stored wastewater from the [Redacted] plant in their storage tank without leak detection, contrary to *Directive 055* requirements. One of the source wastewater sample analyses provided to the investigator confirmed the presence of polyfluoroalkyl substances (PFAS) which has been known to produce adverse environmental and health effects. Industrial sewage is also capable of causing an adverse effect to the environment and human health. As the investigation determined that potentially 14 196 m³ of wastewater was being stored in a storage tank without leak detection for an

unknown duration, where wastewater storage and transfers were actively occurring, the potential loss or damage is classified as “Moderate”.

Base Assessment: \$2 500

CONTRAVENTION 4

On or about August 17, 2023, at or near Stettler, in the Province of Alberta, at the disposal facility located at 04-29-038-20W4M, Terroco Industries Ltd. used a single-walled aboveground storage tank without a spill control device in use, contrary to section 5.1(176) of *Directive 055: Storage Requirements for the*

Upstream Petroleum Industry, and did thereby contravene section 8.030(2) of the *Oil and Gas Conservation Rules*.

REDA General Regulation				
BASE PENALTY TABLE				
Seriousness of Contravention				
Extent of actual or potential loss or damage		Major	Moderate	Minor
	Major	5000	3500	2500
	Moderate	3500	2500	1500
	Minor to None	2500	1500	1000
	None	1000	600	250

Seriousness of Contravention: Moderate

The intent of *Directive 055* requirements is to ensure materials used by the upstream petroleum industry are stored and managed in such a way to prevent soil, groundwater, and surface water contamination. The storage practices specified in *Directive 055* are intended to ensure the decontamination of upstream petroleum sites is easier, and the long-term costs are reduced.

Spill control devices are required at fluid transfer points when handling materials at fluid storage systems to recover spills and leaks and to prevent materials, such as wastewater in this case, from leaking or spilling into the environment. In the event of an uncontained release, contamination from leaking transfer points has the potential to adversely impact the environment and human health. As this requirement is for material transfer points rather than the entire storage system, the seriousness of the contravention is assessed as “Moderate”.

Extent of Actual or Potential Loss or Damage: Minor

Operating aboveground storage tanks without the use of a spill control device increases the risk for loss or damage to both the environment and human health. The investigation did not demonstrate any actual loss or damage therefore, only an assessment of potential loss or damage can be made.

The investigation determined that Terroco transferred potentially 14 196 m³ of wastewater without a spill control device, contrary to *Directive 055* requirements. One of the source wastewater sample analyses provided to the investigator confirmed the presence of polyfluoroalkyl substances (PFAS) which has been known to produce adverse environmental and health effects. Industrial sewage is also capable of causing an adverse effect to the environment and human health. However, as transfers between a truck and storage tank typically occur in the presence of an individual who would normally have the ability to notice and

respond to leaky transfer points, the potential loss or damage is classified as “Minor”.

Base Assessment: \$1 500

CONTRAVENTION 5

On or about August 17, 2023, at or near Stettler, in the Province of Alberta, at the disposal facility located at 04-29-038-20W4M, Terroco Industries Ltd. did not design the foundation for an aboveground storage tank, contrary to section 3.2(32) of *Directive 055: Storage Requirements for the Upstream Petroleum Industry*, and did thereby contravene section 8.030(2) of the *Oil and Gas Conservation Rules*.

REDA General Regulation				
BASE PENALTY TABLE				
Seriousness of Contravention				
Extent of actual or potential loss or damage				
		Major	Moderate	Minor
	Major	5000	3500	2500
	Moderate	3500	2500	1500
	Minor to	2500	1500	1000
	None	1000	600	250

Seriousness of Contravention: Major

The intent of *Directive 055* requirements is to ensure materials used by the upstream petroleum industry are stored and managed in such a way to prevent soil, groundwater, and surface water contamination. The storage practices specified in *Directive 055* are intended to ensure the decontamination of upstream petroleum sites is easier, and the long-term costs are reduced.

A designed foundation is required for aboveground storage tanks to minimize the risk of the storage tank suffering from differential settlement, subgrade movement and corrosion. By not implementing this requirement, the integrity of the aboveground storage tank is jeopardized and the tank is at an increased risk of failing. Contamination resulting from a release due to a tank foundation that has not been properly designed and prepared has the potential to cause an adverse effect to the environment and human health. Accordingly, the seriousness of the contravention is assessed as “Major”.

Extent of Actual or Potential Loss or Damage: Moderate

Operating an aboveground storage tank without a designed foundation increases the risk for loss or damage to both the environment and human health in the event of a release. The investigation did not demonstrate any actual loss or damage therefore, only an assessment of potential loss or damage can be made.

The investigation determined that Terroco stored potentially 14 196 m³ wastewater from the [Redacted] plant in a tank on a foundation that was not designed per *Directive 055* requirements. One of the source wastewater sample analyses provided to the investigator confirmed the presence of polyfluoroalkyl substances (PFAS) which has been known to produce adverse environmental and health effects. Industrial sewage is also capable of causing an adverse effect to the environment and human health. As the investigation determined the tank was in use for an unknown duration, at a facility where wastewater

transfers and storage were actively occurring, the potential loss or damage is classified as “Moderate”.

Base Assessment: \$3 500

Factors to be Considered to Vary the Assessment

- (a) the importance to the regulatory scheme of compliance with the provision that was contravened;
- (b) the degree of wilfulness or negligence, if any, on the part of any person responsible for the contravention;
- (c) any steps taken by a person responsible for the contravention to avoid or limit the extent of any actual loss or damage that resulted or any potential loss or damage that may reasonably be expected to result from the contravention;
- (d) any steps taken by a person responsible for the contravention to prevent its recurrence;
- (e) any previous contravention of a provision prescribed by section 8.1 by a person responsible for the contravention;
- (f) whether a person responsible for the contravention derived or is likely to derive any economic benefit from the contravention;
- (g) any other factor that, in the opinion of the Regulator, is relevant.

Factors Applicable to this Case

Factor from above	Amount Varied	Description/Comments
(a)	+\$1 000	The protection of the environment, property and human health is one of the key fundamentals of the AER regulatory scheme. Disregarding the requirements in the <i>Oil and Gas Conservation Rules</i> and <i>Directive 055</i> directly impacts the AER’s ability to provide for protection and oversight. Specifically, receiving unapproved waste and placing it in single-walled aboveground storage tanks without secondary containment, are of particular risk and importance to the regulatory scheme. Accordingly, \$500 is assessed to both Contravention 1 and Contravention 2.
(b)	+\$1 000	Terroco was previously educated on the regulatory requirements from noncompliances identified through the AER field inspection program. The investigation found that Terroco did not follow their own Standard Operating Procedures and also discovered bill of lading tickets which appear to have been altered to align with approved waste type for their facility. Accordingly, \$1 000 is assessed to Contravention 1 for receiving unapproved waste after already being educated and for not following their own Standard Operating Procedures.
(c)	Neutral	Factor not applied in this case.

(d)	Neutral	Factor not applied in this case.
(e)	Neutral	Factor not applied in this case.
(f)	+\$500	\$500 is applied to Contravention 1 as Terroco derived an economic benefit for accepting an unapproved waste at their disposal facility. This is not an assessment of the economic benefit amount; it is a recognition that an economic benefit was derived from Contravention 1.
(g)	Neutral	Factor not applied in this case.

Discussion

Written Submission

The written submission that Terroco provided by email to the AER on June 20, 2025, included three attachments which will be addressed in order. Additional information was emailed to the AER on June 23 and 24, 2025, at the request of the AER investigator seeking clarity on the three attachments. Information pertaining specifically to the economic benefit calculation will be addressed in the **ECONOMIC BENEFIT ASSESSMENT** section further below.

1. Terroco Response to the AER Assessment [Document 1]
2. Investigation Report [Document 2]
3. TVM (Time Value of Money) Calculation spreadsheet [Document 3]

Terroco Document 1

Document 1 was authored by both John Amundson and by Mr. O'Connor. Terroco did not deny or dispute that it committed the contraventions identified by the AER in the PA.

Terroco asserted that the AER inspector has a conflict of interest and that the investigation was influenced by "personal ties".

Terroco explained that [Redacted], who coordinated the shipping of waste, was aware of the class of well which Terroco operated. Terroco said that [Redacted] only contacted its employees rather than Mr. O'Connor himself, about receiving waste from [Redacted].

Terroco alleged one of their employees felt threatened by a statement made by an AER inspector during an interaction in August 2023.

Terroco provided a brief history of their disposal well at LSD 04-29-038-20W4M / 03-29-038-20W4M which they acquired from Gulf Oil Canada in the 1980's.

Terroco said they agree that "Terroco's disposal well does not permit Terroco to accept industrial sewage for disposal" and provided additional background information. Terroco agreed to accept the

unapproved waste after discussions with [Redacted] and an individual from a trucking company who was hauling waste for [Redacted]. The Terroco manager and supervisor wrongly interpreted [Redacted]'s willingness to deliver waste to Terroco to mean that the fluid was suitable for disposal in Terroco's disposal well. Terroco admitted that its manager and supervisor made a "significant error in judgement" to accept the word of [Redacted] which Terroco described as an "industry expert".

Terroco denied that they attempted to misidentify the waste received for disposal but would investigate whether others were attempting to mislead Terroco about the classification of the waste.

In closing, Mr. O'Connor identified that he is an Indigenous person that has not received government funds for the operation of any of his businesses. Mr. O'Connor requested a fair and just review of his submission with a reduction of the penalty to more accurately reflect Terroco's "shortcomings in judgment and due diligence that were exploited by others".

AER's response to Document 1

The AER takes the accusation of conflict of interest very seriously and has validated that no personal ties or conflict of interest exist with the named inspector. Furthermore, the AER investigator who developed this investigation file works independently of the AER inspector and the inspection program.

Regardless of what [Redacted] knows about Terroco's well class, Terroco, as the licensee, is ultimately responsible for understanding the type of waste received and how it is managed. The communication described is consistent with Terroco's information provided in Document 2 indicating that Terroco's staff manage day-to-day activities and contracts, rather than Mr. O'Connor.

Pertaining to the Terroco employee's perceived threat, the AER reviewed the details of the communication with the inspector and determined the intention of the statement was out of concern and not intended as a threat. This interaction did not affect the outcome of the AER investigation.

Although the well classifications may have changed over time between Class 1b and Class II, I find this to be a moot point as the evidence collected in the investigation still supports the contraventions.

Terroco is ultimately responsible for understanding the type of waste received and bears the responsibility to make the appropriate determination. The admission statements above confirm that Terroco acknowledges they are responsible for the type of waste they receive.

Whether Terroco attempted to misidentify the waste or not is not relevant to the investigation. Terroco already acknowledged within this document that Terroco is responsible for the waste it accepted.

Regarding Mr. O'Connor's request for a fair review of his submission and a reduction of the penalty, I, as the statutory decision maker, assure Terroco that the investigation and subsequent review of Terroco's submissions is comprehensive, unbiased, and fair. The final amount of the administrative penalty and economic benefit is determined by a thorough assessment of all information available to me under this

investigation, including the information provided by Terroco, and follows well established procedures to ensure a well-reasoned decision.

Terroco Document 2

Document 2 is largely a collection of interview summaries and information collected by Integrated Risk Investigations Security Solutions (IRISS) who were contacted by Terroco to provide a response to the AER. This document was signed by an IRISS Investigator and Manager. Terroco did not deny or dispute that they received waste that they were not approved to receive or dispose of, or use a tank that was not compliant with regulatory requirements, as identified in the PA.

Statements attributed to Mr. O'Connor include that day-to-day management of Terroco's Class II Stettler well are left up to his staff. He described some of the history of the disposal well and the nature of his personal and business relationships with [Redacted]'s contractor, and with some of the disposal and trucking companies involved. Mr. O'Connor said that he relies on his employees and providers of waste to know what the Terroco well is licensed to accept. Mr. O'Connor believed the [Redacted] company "had something to do with cattle" but assumed brine water was being disposed because [Redacted] knew the class of disposal well Terroco has. Mr. O'Connor expressed concern that the AER was only addressing letters to him [throughout the investigation] rather than staff at the Stettler facility and that the focus [of the investigation] was on him.

Document 2 includes an interview with the Stettler Branch Manager hired near the end of August 2023 who "acknowledged that there was no formalized training provided and stated he has no knowledge of any Standards of Practice for hiring and training for the position". The Stettler Facility Manager at the time of the contraventions "stated there was no formal training provided to him and that he had to learn as he went" and "it was his first time at disposal, and said he did not understand that part of the job well".

Document 2 reiterates the same assertions about a conflict of interest and a perceived threat from specified AER employees as in Document 1 above. The AER takes these assertions seriously and has already addressed these points above.

The Stettler Facility Manager asserted that the six aboveground 400 bbl tanks pictured in the PA were not in use and that the gauge boards used to mark the tank levels were tied up, falsely indicating they contained fluids. When the IRISS investigator showed the employee the AER inspector's photograph of the tank being emptied, he stated the storage tanks were not the tanks used to store fluid from [Redacted]. He believed the tank may have had wash water in it and is emptied when it is full, but that it is used on rare occasions.

The IRISS CONCLUSION OF INVESTIGATION section for contravention 1 suggests the onus to identify and manage the waste from [Redacted] is the responsibility of the consignor and its contractors, and that Terroco was trusting of others to ensure the [Redacted] waste met the requirements of Terroco's disposal licence.

The IRISS CONCLUSION OF INVESTIGATION section for contraventions 2, 3, 4 & 5 includes acknowledgements from Terroco employees that the 400 bbl single-walled tank in use was not inside the berm, did not have leak detection, and did not have a spill control device in use.

AER's response to Document 2

The AER has identified an error with the identification of the two AER employees named within the "PARTIES INVOLVED" section of Document 2 which requires correction. One employee named is an inspector, and the other is administrative field support. Neither individual named is an "AER investigator who led the investigation" as was stated. For clarity, the role of the AER inspector is separate and independent from that of the investigator who led the investigation.

The nature of many of Mr. O'Connor's comments is that he was not aware of any issue with receiving the waste at the time of the contraventions, nor was he personally making decisions about how [Redacted]'s wastewater was being disposed. I would like to point out that the PA identifies Terroco as the responsible party and does not name Mr. O'Connor as being personally responsible. AER investigators commonly communicate directly with the CEO of a licensee, allowing the licensee discretion for the proper internal dissemination of information requests and other materials. Whether or not Mr. O'Connor was personally aware of the day-to-day activities, contracts, discussions, receipt of the waste, classification of the waste, or the contraventions identified, does not detract from Terroco's responsibility as the licensee to comply with AER requirements.

Where Terroco's employees speak to a lack of training, the AER expects licensees to have the policies, procedures, and training in place to ensure they manage their facility in accordance with AER requirements and to demonstrate due diligence.

With respect to Terroco's reference to the six 400 bbl tanks, note that contraventions 2, 3, 4 and 5 focused on the one tank actively being emptied as witnessed and photographed by the AER inspector. As Terroco confirmed the tank was in use without the required systems in place, the total number of tanks in use is not relevant to the investigation's findings.

With respect to the conclusion made by IRISS, I acknowledge that many parties were involved in the management of the industrial sewage from [Redacted] but note that Terroco is responsible for meeting the terms and conditions of its licence. In addition, whether the 400 bbl tank contained wash water from Terroco's facility and not waste from [Redacted], Terroco's admitted use of the tank still did not meet regulatory requirements.

Terroco Document 3

This document will be addressed below in the **ECONOMIC BENEFIT ASSESSMENT** section below.

Due process meeting

At the July 23, 2025, in-person meeting, an AER investigator summarized the investigation's findings and an AER senior specialist summarized the PA calculation, including the base penalty and variance factors.

Terroco was given the opportunity to bring new information forward and ask questions about the AER's findings.

After meeting introductions were made, Mr. O'Connor read aloud a document which he brought titled "Oral Proclamation" and he provided the AER with 3 signed paper copies of this document. It goes on to state that as "Terrance" is a "Sovereign Indigenous Person", the AER has "no Jurisdiction to adjudicate this case", and that he trusts the AER will "drop all charges".

Terroco did not provide any new evidence during the meeting but did say there was a relatively small volume of "wash water" inside the tank referenced in contraventions 2, 3, 4 and 5 rather than industrial sewage from [Redacted]. For this reason, Terroco questioned the fairness of the "Moderate" assessment of Extent of Actual or Potential Loss or Damage for contravention 2.

Terroco said they received wastewater from [Redacted] but that they trust and rely on others to tell Terroco whether the waste water was okay for disposal. Terroco also said that senior management did not choose to take on this activity but did not deny that the contraventions occurred.

AER's response from the due process meeting

Having reviewed the Oral Proclamation in its entirety, I find that it is not relevant to the issue at hand – whether Terroco's actions warrant the assessment of an administrative penalty. It is important to note that the administrative penalty is not being assessed against Mr. O'Connor as an individual, but rather against the Terroco corporation. Terroco is a registered corporation in Alberta, and is considered a separate legal entity under the law distinct from its owners. Terroco has already availed itself of the legislative system in Alberta, it holds a BA code and has licensed wells, a facility, and a pipeline issued to it by the AER. To carry out its energy development activities in the province of Alberta, which Terroco has done for several decades, it was required to carry out its activities under the jurisdiction of the AER and comply with all applicable regulatory requirements. Acquiring and holding a license or approval for energy development in Alberta is a privilege, not a right. As such, there is no question that Terroco falls under the jurisdiction of the AER and the Oral Proclamation has no bearing on the issue at hand.

With respect to the assertion the 400 bbl tank contained wash water, the AER replied that this information does not change the outcomes of the investigation but the Loss or Damage assessment will be revisited for the contraventions if Terroco can provide evidence of the tank contents and volume.

Terroco's admission of accepting waste from [Redacted] supports the investigation findings. Terroco is responsible for complying with the terms of its licence and approval rather than relying on others to determine what waste is acceptable to receive.

Terroco was offered the opportunity to submit any additional information they wished to share in writing by end of day July 24, 2025, before the statutory decision maker makes a final decision. Terroco said they would provide more information, including details about the 400 bbl tank contents, and agreed to the timing for the additional written submission.

Terroco's supplemental written submission

Terroco provided an email to the AER on July 24, 2025, stating the contents of the 400 bbl tank was wash water but did not provide any documentary evidence to specify the source, volume or analysis of waste

water that was stored in the tank. The email implied that 12 or 13 m³ of wash water was in the tank on an unspecified date.

Terroco's email also stated that "the status declaration letter submitted on July 23, 2025, by Terrance O'Connor during our meeting is intended to constitute the primary evidence in this matter".

AER's response to Terroco's supplemental written submission

Due to Terroco's assertions about the source and the volume of the waste in the 400 bbl aboveground storage tank identified in the investigation, I have reviewed the Extent of Actual or Potential Loss or Damage assessment sections in the PA for contraventions 2, 3, 4 and 5. I find that the truck ticket provided to the AER inspector does not sufficiently demonstrate that [Redacted] waste was being stored in the tank as was stated in the PA for the Extent of Actual or Potential Loss or Damage assessment sections of these contraventions, and as also referenced in the application of "Factor a". Likewise, the volume of waste transferred through the 400 bbl tank may be substantially less than the volume that was received from [Redacted]. The reassessment will be addressed below in the Final Penalty Decision.

The AER has addressed Terroco's argument about AER's jurisdiction above.

Final Penalty Decision

I, Jon Keeler, Director, Field Operations, Oil Sands Mining, for the AER, have fully considered all of the information collected in the investigation, the written submissions Terroco provided to me on June 20, 2025, on July 24, 2025, and the verbal submission presented to me by Terroco in the July 23, 2025, meeting.

I am of the opinion that the contraventions above did occur and are supported by the evidence.

I find that there was a lack of due diligence for the following reasons.

Terroco failed to recognize that the waste coming from an agricultural-based industrial facility was incompatible with its licence conditions and its own SOP document provided to the investigator. Terroco said they do not have policies and procedures in place to test fluid they receive. The onus for screening the incoming waste was largely put on the consignor and trucking companies rather than Terroco, itself.

Terroco's site managers at the Stettler facility confirmed that there was a lack of formalized training, a lack of knowledge about the difference between the classes of disposal wells, and an inexperience with the disposal requirements.

Terroco did not follow their procedure for out of service tanks. Terroco said new hires are physically taken around to show what is expected rather than be provided with the procedure documents, making these documents largely ineffective.

In its written submissions and during the due process meeting, Terroco admitted that the contraventions occurred. Terroco consistently placed blame for the contraventions on either their own employees or on third parties who supplied the fluid.

I find it reasonable that the 400 bbl aboveground storage tank may have contained wash water in a significantly smaller volume than was identified in the PA. Regardless, a release of wash water from an aboveground storage tank which does not meet the requirements of *Directive 055* still has the potential to create an adverse effect on the environment and on human health. Accordingly, the final assessment of the Extent of Actual or Potential Loss or Damage will be reduced from “Moderate” to “Minor” for contraventions 2, 3 and 5. The Seriousness of the Contravention will remain unchanged for these contraventions, and the variance factors also remain unchanged.

I find the total base penalty amount and the applied variance factors in the PA are reasonable for contravention 1 and contravention 4, and they remain the same.

The final base assessments are calculated as follows.

Contravention Number	Seriousness of Contravention	Extent of Actual or Potential Loss or Damage	Final Base Assessment	Factor Variances	
1	Major	Moderate	\$140 000	(a) +\$1 000 (b) +\$1 000 (f) +\$500	
2	Major	Minor	\$2 500		
3	Moderate	Minor	\$1 500		
4	Moderate	Minor	\$1 500		
5	Major	Minor	\$2 500		
5 Total Contraventions	Total Base Assessment		\$148 000	Total Variance	\$2 500²

FINAL PENALTY ASSESSMENT: \$150 000

² Under section 3(2) of the *Administrative Penalty Regulation*, the AER may increase or decrease the amount of an administrative penalty after considering certain factors. However, per section 3(3) of the *Administrative Penalty Regulation*, the maximum amount cannot exceed \$5000 for each day or part of a day on which a contravention occurs or continues.

Given the above, the amount of the administrative penalty associated with contravention 1 cannot be increased over \$5000. The assessment of the factors and factor variance will remain as part of the Director’s Decision as the evidence supports the increased amounts described in the factors table.

ECONOMIC BENEFIT ASSESSMENT

Preliminary Economic Benefit Assessment

Disposal fees (Total Proceeds/ Revenue Received Economic Benefit)	\$162 562.00
Transportation charges (Wrongful/ Unlawful/ Illegal Profits Economic Benefit)	\$116 510.68
Interest accrued (Time Value of Money Economic Benefit)	\$21 688.50

Total Preliminary Economic Benefit Assessment: \$300 761.18

Director's Decision Summary

The PA identified the following contravention and related economic benefit assessment.

CONTRAVENTION 1

On August 17, 2023, at or near Stettler, in the Province of Alberta, the Alberta Energy Regulator became aware that on or about June 27, 2023, and continuing on 40 non-contiguous days until August 22, 2023, at the disposal facility located at 04-29-038-20W4M, Terroco Industries Ltd. did accept waste that they were not approved to receive, to wit: industrial sewage, contrary to section 8.150(3)(c) of the *Oil and Gas Conservation Rules*.

AER Investigation Findings

The investigation determined, and the evidence supports, that Terroco received an economic benefit through the receipt of unapproved waste over forty (40) non-contiguous days between June 27, 2023, and August 22, 2023 as described in CONTRAVENTION 1 above. The investigator identified three principles of economic benefit apply to this file:

1. Total proceeds/revenue received
2. Wrongful, unlawful, and illegal profits
3. Time value of money

1. Total proceeds/revenue received

The AER Economic Benefit Assessment Guide describes **total proceeds/revenue received** as a company's gross profit and defines it as "all money, or equivalents, or benefits deriving from a contravention, unadjusted for any claimed expenses or other adjustments."

The investigator determined that since Terroco was prohibited from accepting industrial sewage, all disposal fees paid by [Redacted] to Terroco for the disposal of the [Redacted] wastewater should be considered a total proceeds economic benefit.

By examining invoices received through an information request, the investigation has determined Terroco billed [Redacted] a total **\$162 562.00** in disposal fees (figure does not include GST).

2. Wrongful, unlawful, and illegal profits

The AER Economic Benefit Assessment Guide describes **wrongful, unlawful, and illegal profits** as a company's net profit and defines it as "in some transactional situations, the profits as a portion of total revenue/proceeds received may be the appropriate measure, adjusted, rather than the total proceeds."

In this file, Terroco generated a significant amount of revenue transporting the wastewater from [Redacted] facility to Terroco's disposal facility on the dates listed in Table 2 above. Since the underlying activity which generated this revenue, namely accepting industrial sewage for disposal, is a prohibited act, the investigator determined that the profits which arose from transporting the [Redacted] wastewater should be considered an economic benefit.

To calculate this economic benefit, the investigator has attempted to make a reasonable calculation for the difference between the rate Terroco charged [Redacted] for transportation and the average break-even costs of trucking within the oilfield fluid hauling industry.

As a starting point in making this calculation the investigation compared the costs of third-party contractors that Terroco hired to transport fluids from [Redacted] to Terroco's facility. By examining the Bills of Lading, the investigation discovered that in addition to Terroco's own fleet of trucks, eight other trucking firms hauled wastewater from [Redacted] to Terroco's facility. Through an information request the investigator determined that Terroco hired two of these trucking companies themselves, and the rest had been hired by [Redacted].

The two trucking companies which Terroco hired and then re-invoiced [Redacted] for were [Redacted] and [Redacted]. [Redacted] charged Terroco \$195.00/hr and [Redacted] billed Terroco \$175.00/hr. The investigation believes this shows that the starting point for reasonable break-even costs for trucking should be below the \$175.00-\$195.00 mark.

By examining Terroco's invoices to [Redacted], it was determined that for both companies' services, and for their own fleet of transport trucks, Terroco billed [Redacted] \$235.00/hr.

The investigator was able to speak with senior staff from seven of the eight trucking companies that hauled wastewater from [Redacted] to Terroco's facility. These seven companies were able to give the

investigator an estimate or a range for their individual break-even costs. When a company provided a range for their break-even costs, the investigation used the average of the range in its calculations.

Table 3: Summary of Estimated Break-even cost for oilfield fluid hauling

Company	Break even costs/ hr	Average
[Redacted]	\$185.00	\$185.00
[Redacted]	\$180.00-\$190.00	\$185.00
[Redacted]	\$180.00	\$180.00
[Redacted]	\$155.00-\$160.00	\$157.50
[Redacted]	\$180.00	\$180.00
[Redacted]	\$165.00	\$165.00
[Redacted]	\$150.00	\$150.00
Overall Average		\$171.79

Thus, the investigator found a reasonable average break-even cost for oilfield fluid hauling of the type conducted by Terroco in this file to be \$171.79/hr.

By examining the invoices which Terroco submitted to [Redacted], the investigator determined that for hauling wastewater from [Redacted] to Terroco's facility, Terroco billed [Redacted] for 1848.5 hours of transport time. This resulted in a total cost \$434 064.50 in transportation charges. This figure also does not include GST. The majority of this billing was for Terroco's own fleet of trucks with a small minority being billed for the subcontracted work by [Redacted] and [Redacted].

At break-even hourly rate of \$171.79, the break-even costs of 1848.5 hours is \$317 553.82 as follows.

$$\$171.79/\text{hr} \times 1848.5 \text{ hrs} = \$317\,553.82.$$

The illegal profits economic benefit is then calculated by taking the total invoiced transportation charges and subtracting the reasonable break-even costs for the same amount of transportation hours as follows.

$$\$434\,064.50 - \$317\,553.82 = \$116\,510.68$$

Therefore, Terroco received an economic benefit in illegal profit of **\$116 510.68** in respect to transportation charges.

3. Time Value of Money

The AER Economic Benefit Assessment Guide describes the principle of the **time value of money** as:

The "time value of money," also known as interest, of the economic benefit may also be assessed, and in most instances, it should be assessed, as this money can constitute very real economic benefit gains for regulated parties...In cases involving economic benefit, these funds are available to a regulated party either as an offset to its cost of capital or, where these funds are not needed as capital, to be reinvested in other profit-making activities.

By adding the Total Proceeds Economic Benefit (disposal charges) and Illegal Profits Economic Benefit (transportation charges), it is calculated that Terroco received a combined economic benefit of \$279 072.68 as follows.

$$\$162\,562.00 + \$116\,510.68 = \$279\,072.68$$

The last invoices from Terroco were in October 2023. Thus, from November 2023, until April 2025, inclusive, (18 months) Terroco has been in possession of this economic benefit.

In consulting with an AER Economist, and per the AER's internal Economic Benefit Assessment Guide, a conservative interest rate of 5 per cent is appropriate when calculating the time value of money. The interest accrued on \$279 072.68 at 5% over 18 months compounded monthly is \$21 688.50.³

Total Preliminary Economic Benefit:

\$162 562.00	- Disposal fees (Total Proceeds/ Revenue Received Economic Benefit)
\$116 510.68	- Transportation charges (Wrongful/ Unlawful/ Illegal Profits Economic Benefit)
<u>\$ 21 688.50</u>	- Interest accrued (Time Value of Money Economic Benefit)

\$300 761.18 - Total Preliminary Economic Benefit Assessment

Note In this economic benefit calculations, the investigator did not include any of the “miscellaneous” charges Terroco invoiced [Redacted]. These charges are quite varied (hydrovac services, tank rentals, pump rentals, provision of scavenger) and it could be reasonably argued that they are separate and disconnected from the contravention of accepting the prohibited waste. As such, no economic benefit recovery is recommended against these invoiced items.

Discussion

Written Submission

As noted above in the **Discussion** section for the penalty assessment, the components pertaining specifically to the economic benefit calculation within the written submission that Terroco provided to the AER on June 20, 2025, will be addressed here in order.

1. Terroco Response to the AER Assessment [Document 1]
2. Investigation Report [Document 2]
3. TVM (Time Value of Money) Calculation spreadsheet [Document 3]

³ Compound interest was calculated using the Ontario Securities Commission online calculator.
<https://www.getsmarteraboutmoney.ca/calculators/compound-interest-calculator/>

Terroco Document 1

Terroco requested a reduction for the disposal fees (revenue received) and transportation charges (illegal profits) portion of the economic benefit due to unpaid invoices from some of their contractors.

I have determined with respect to unpaid invoices, that an adjustment is warranted and both the revenue received and the illegal profits portion of the economic benefit calculation will be reduced accordingly.

Terroco argued the AER interest calculations were not accurate for TVM for multiple reasons including that some invoices were not paid, that some payments from a contractor were not received within 30 day terms, the 5% interest rate used by the AER is too high and calculates the interest higher than what they believe it should be, and that the actual benefit of funds received by Terroco is overstated and should be reduced due to the financial relationship between Terroco and Mr. O'Connor, its CEO.

I have determined with respect to the TVM portion of the economic benefit calculation, the adjustment for some unpaid invoices will affect the AER's calculations and the TVM portion will be reduced accordingly. With respect to payments that were not received within 30 days, I find that this matter may be pursued with the offending parties and will not be used for recalculation. As for the concerns raised about the rate of interest applied, the 5% interest rate used by the AER is a standard calculation rate per the AER's Economic Benefit Assessment Guide and will remain unchanged as it is considered a conservative rate. Lastly, the interest-free cash transfers between Terroco and Mr. O'Connor, its sole owner, does not eliminate the economic benefit from the total proceeds and TVM available to Terroco. The financial management decisions that a corporation such as Terroco chooses to make are independent from the AER's assessment and do not justify a TVM reduction.

Note that the end date for the TVM calculation is circumstantial. The end date could be calculated as when Terroco took action to come into compliance, or as late as the date of the Director's Decision, or somewhere in between. The first option does not apply as the contravention that occurred could not be resolved retroactively. However, I decided not to utilize the maximum length of time available in the TVM calculation. The end date of April 2025, was chosen as a reasonable date that aligned with the date on which Terroco was notified of the PA.

Terroco Document 2

This document was addressed above in the Discussion section for the penalty assessment.

Terroco Document 3

This document is a spreadsheet indicating the dates on which invoiced funds were received in an attempt to demonstrate to the AER that Terroco only benefitted from TVM over 23 days for a total of \$209.86, while using an interest rate of 5%. The AER investigator corresponded with John Amundson, Terroco's President, to clarify which invoices were unpaid. The remaining unpaid invoices were removed from the revised economic benefit calculations below.

Due Process Meeting

At the July 23, 2025, in-person meeting, an AER investigator summarized the economic benefit assessment. Terroco asked whether the TVM calculation in the PA will change due to their written submissions.

The investigator stated that the miscellaneous charges included in third party invoices and the unpaid invoices which Terroco identified, were not included in the draft calculation for the statutory decision maker to consider. The investigator also clarified that regardless of what business decisions Terroco decided on for how to employ the monies they received by committing the noted contraventions, the TVM economic benefit was relevant because these funds are available to a regulated party either as an offset to its cost of capital or, where these funds are not needed as capital, to be reinvested in other profit-making activities.

Final Decision on Economic Benefit

I, Jon Keeler, Director, Field Operations, Oil Sands Mining, for the AER, have fully considered all of the information collected in the investigation, the written submission Terroco provided to me on June 20, 2025, and the verbal submission presented to me by Terroco in the July 23, 2025, meeting.

Per the **Final Penalty Decision** section above, the finding that Terroco contravened section 8.150(3)(c) of the *Oil and Gas Conservation Rules*, over 40 non-contiguous days, by accepting waste they were not approved to have received, has been established.

In deciding on applying an amount for economic benefit consideration is given to:

1. The necessity in deterring similar contraventions for regulated parties operating in the same regulated sphere;
2. Will it remove the economic benefit that resulted from the contravention; and
3. Will it educate the regulated party to encourage future compliance (deterred from future contraventions and ensuring no economic incentive to avoid compliance).

In connection with the facts of the investigation, I find the application of economic benefit meets all of the above considerations.

I find that Terroco has derived an economic benefit directly or indirectly as a result of the contravention described above.

However, in consideration of Terroco's submissions pertaining to unpaid invoices, I have adjusted the economic benefit as follows.

ECONOMIC BENEFIT RECALCULATION	Preliminary Assessment	Reduction	Final Assessment
Disposal fees (Total Proceeds/ Revenue Received Economic Benefit)	\$162 562.00	\$420.00	\$162 142.00
Transportation charges (Wrongful/ Unlawful/ Illegal Profits Economic Benefit)	\$116 510.68	\$1 232.22	\$115 278.46
Interest accrued (Time Value of Money Economic Benefit)	\$21 688.50	\$128.47	\$21 560.03*
Total Amounts	\$300 761.18	\$1 780.69	\$298 980.49

*The interest accrued (TVM) was calculated at 5% over 18 months compounded monthly on \$277 420.46 from adding the revised amounts for disposal fees and transportation charges (\$162 142.00 + \$115 278.46 = \$277 420.46)

FINAL ECONOMIC BENEFIT ASSESSMENT: \$298 980.49

FINAL ADMINISTRATIVE PENALTY ASSESSMENT

[Final Penalty Assessment + Final Economic Benefit Assessment]: **\$448 980.49**

Date: August 12, 2025

< original signed by >

Director's Signature: _____

Jon Keeler, Director, Field Operations, Oil Sands Mining, AER