



Case Study: Calculating and Reporting Biofuel Compliance Units under the Renewable Fuels Regulations

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Introduction

- North West Redwater Partnership (“NWR”) operates the Sturgeon Refinery near Redwater, Alberta.
- Production began in 2017.
- The refinery:
 - Features carbon capture technology for enhanced oil recovery and sequestration.
 - Has captured approximately 2,700,000 tonnes of CO₂ since 2020 for sequestration.





Legislative Regime

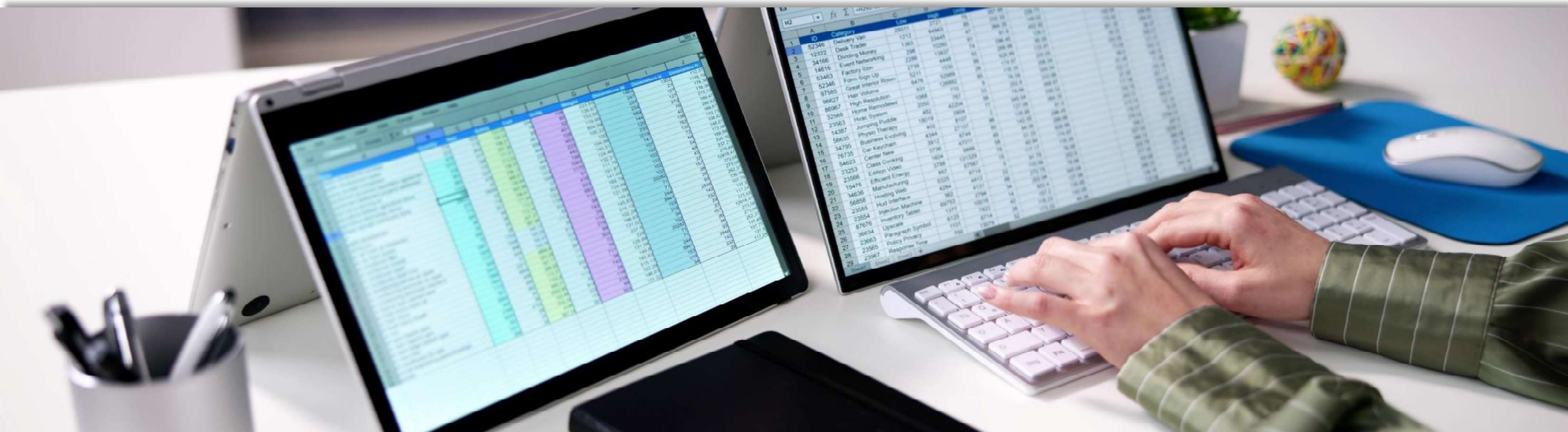
- Subject to:
 - *Canadian Environmental Protection Act*, 1999 (CEPA).
 - *Renewable Fuels Regulations* (RFR).
- NWR is a primary supplier of diesel fuel for the purposes of the RFR
- RFR section 5(2) requires that at least 2% of the total volume of a primary supplier's total distillate pool for diesel, over the course of a year, be renewable fuel
 - Renewable fuel includes ethanol and biodiesel
- The legislation is administered and enforced by Environment and Climate Change Canada ("ECCC").





Legislative Regime cont'd

- System of tradable compliance units can be utilized by primary supplier if it does not meet 2% renewable fuel blending requirements.
- Annual reporting to ECCC on:
 - Volumes of the total distillate pool.
 - Renewable fuel produced/blended.
 - Production, trading and purchasing of compliance units.
- RFR requires an annual third-party audit process to be completed to ensure the annual reporting is correct.





Facts of the Case

- In April 2019, NWRP submitted annual report for 2018 compliance period.
- Report stated 2% renewable fuel requirement had been satisfied.





Facts of the Case cont'd

- NWR's third-party auditor's report identified a discrepancy in the renewable diesel volumes metered and dispensed out of the Sturgeon Refinery vs. the volumes measured according to the Refinery's mass balance tracking system.
- NWR reported the results of the third-party audit to ECCC, as required by the RFR.
- NWR undertook a further audit.





Facts of the Case cont'd

- Discovered metering issue at the truck terminal operated by a third-party service provider.
 - Third party terminal metering was reading false pulses that resulted in recording renewable fuel volumes not actually dispensed.





Facts of the Case cont'd

- Eventually determined that NWRP was short 721,712 litres of blended renewable fuel requirement in 2018.
- No credits were purchased 2018 because NWR was unaware until the third-party audit report that it had not met the 2% renewable requirement.
- By the time NWR was aware of the compliance unit shortfall, it was too late to purchase compliance units necessary to make up the shortfall
- NWR had surplus credits after the 2018 compliance period; however, it was not an option under the legislation to apply those credits to the 2018 compliance period.
- NWR immediately reviewed its policies, procedures and training and took corrective actions and made enhancements to ensure compliance with the RFRs.



Facts of the Case cont'd

- ECCC investigated the non-compliance.
- NWRP fully cooperated with the investigation.
- Partners of NWRP were charged under CEPA section 272.1(1)(h) for incorrect information submitted in the 2018 compliance report as a result of the shortfall of 721,712 compliance units





Alternative Measures Agreement

- Crown and the Partners of NWR agreed to an alternative measures agreement under CEPA sections 295-309 (referred to as an Environmental Protection Alternative Measures Agreement or “EPAM”).
- An EPAM is a court diversion measure available in limited circumstances. EPAMs are relatively rare and most offences will not be eligible.
- There is a comprehensive set of statutory criteria in CEPA section 296 that set out eligibility for an EPAM, including:
 - It only applies to CEPA offences and only certain offences are eligible;
 - The company must accept responsibility for the act or omission that forms the basis of the offence;
 - The Crown and ECCC must be satisfied that an EPAM is appropriate considering:
 - The nature of the offence,
 - The circumstances surrounding its commission,
 - The objective to protect the environment, human life and health, and other societal interests,
 - The company’s compliance history,
 - Whether the offence is a repeated occurrence,
 - Any allegation that information is being or was concealed or that other attempts to subvert the requirements and purposes of CEPA have been made,
 - Whether remedial or preventive action has been taken by or on behalf of the company in relation to the offence.



Alternative Measures Agreement cont'd

- Elements of the Alternative Measures Agreement here include:
 - Total payment of \$280,428 to the Environmental Damages Fund, consisting of:
 - Payment of \$180,428 representing the value of 2018 compliance credit shortfall.
 - \$100,000 payment to the Environmental Damages Fund
 - The Environmental Damages Fund is a fund administered by ECCC to direct money received from fines, court orders, and voluntary payments to projects that will benefit Canada's natural environment.
 - This presentation and posting this slide deck on the CPANS website.
 - Further review of NWR's RFR compliance program, policies and procedures.
- Upon completion of all of the elements of the Alternative Measures Agreement, the Court will dismiss the charge





Lessons Learned – Root Cause

Metering inaccuracies at the third party terminal

- Regular meter proving was completed, but ended up not being sufficient to detect the pulse issue
- Third party industry expert in metering and vibration, concluded most likely cause was from vibrations
- Relays were installed to eliminate false pulses
- Additional piping support installed to reduce vibrations



Lessons Learned – Corrective Actions Taken

NWR's Compliance Program Policies & Procedures

- Improved NWR Reconciliation processes.
 - Process established for daily, monthly, & annual data reconciliation & validation.
 - NWR & third party blending data reviewed monthly and reconciled using third party meter flow, physical tank dip of renewable product tank, and Mass Balance
- Amended NWR Process to determine Distillate Compliance Unit (DCU) creation, trading and reconciliation.
 - Final confirmations of all DCU trades verified with customers
 - NWR Procedures and manual in place for personnel to understand the requirements
 - Director Finance & Commercial Manager review of all DCU data reporting



Lessons Learned – Corrective Actions Taken

NWR's Compliance Program Policies & Procedures (cont'd)

- Improved visibility re NWR's compliance program by including all necessary stakeholders
 - Regular meetings held with internal stakeholders to review distillate pool and distillate compliance units
 - Regular interface with third party terminal operator on reporting & operations
- Implemented Additional Training
 - a) Further review and understanding of Renewable Fuel Regulations
 - b) Implemented subscription to ECCC's Information Update Email
 - c) Attend ECCC Federal Fuel Regulations Information Sessions
 - d) Access and regularly review ECCC's Shared Google Drive



Questions

