Tire Performance Verification Audit Procedure

**Consultation Session Two** 

February 25, 2019





### **Webinar Interface**



RPRA Resource Productivity & Recovery Authority To ask a question at any time during the presentation or for technical assistance, type your question in the text box and press 'Enter.'

### Agenda

- 1. Summary of the Audit Procedure
- 2. Performance Metrics
- 3. Step by Step Audit Procedure
- 4. Validation Appendices
- 5. Sampling Methodology
- 6. Questions
- 7. Next Steps





### **Process for developing the audit procedure**





#### **Summary of the Draft Audit Procedure**

- Purpose of the Audit Procedure
- Audit Procedure Specific Definitions
- Audit Procedure: Step by step for each performance metric.
- Appendix A: Validating Tires
- Appendix B: Validating Calculated Weight of Tires
- Appendix C: Validating Transfers Between Parties
- Appendix D: Validating Outbound Shipments
- Appendix E: Validating Actual Use of Material
- Appendix F: Validating Mass Balance Calculation
- Appendix G: Manual and Automated System Controls
- Appendix H: References

Read the document here: <a href="https://rpra.ca/consultations/current-consultations/development-of-tire-audit-procedures/">https://rpra.ca/consultations/current-consultations/development-of-tire-audit-procedures/</a>

### **Performance Metrics**

Draft Procedure – Page 2 to 3

- 1. The number and calculated weight of tires, for each tire type, that were reused.
- 2. The number and calculated weight of tires, for each tire type, that were retreaded.
- 3. The weight of processed materials, by material type, that resulted from the processing of tires.
- 4. A list of types of products and packaging that were made with the processed materials referred to in paragraph 3, by material type.
- 5. The number and calculated weight of tires and the weight of processed materials, by material type, that were:
  - Land disposed;
  - Incinerated;
  - Used as a fuel or a fuel supplement; or
  - Stored, stockpiled or otherwise deposited on land.
- 6. A statement confirming whether the producer met the resource recovery standard of 85%.



### Audit Procedure: Step by step for each performance metric

Draft Procedure – Page 4 to 8

The specific steps that the Auditor would take to validate each performance metric:

- Data analytics of all transactions
- Sample testing of transactions
- Review of supporting documentation for transfer between collection sites, haulers, processors / retreaders, and end markets / RPMs
- Review of contracts and agreements between producers, PRO's, processors, and end markets / RPMs, specifically focused on allocation of material
- Review of processor mass balances
- Recalculations of reported numbers for each performance metric

#### **Key Questions**

• Are we missing any steps?



# Validation Appendices



### **Validating Tires**

Draft Procedure Appendix A – Page 9

Validity criteria for collection performance reporting under the audit procedures:

- a) It meets the Tires Regulation definition of a tire
- b) It was used in Ontario
- c) It was collected in Ontario
- d) It was transported by a registered hauler (a list of registered collection facilities, haulers, retreaders and processors are posted on the <u>RPRA website</u>)



### Validating Calculated Weight of Tires

Draft Procedure Appendix B – Page 10

#### **Actual Weight**

- Ensuring that scale tickets are automatically printed from the scale reading and that scale tickets include time, date, weight, and are legible and not manually altered.
- Ensuring that the processor has an annual scale calibration report provided by an independent, qualified inspector.

#### Weight Based on Conversion Factors

- Ensuring the conversion factors for used tires have been applied.
- Ensuring the conversion factor calculation is accurate.



### **Validating Transfers Between Parties**

Draft Procedure Appendix C – Page 11 to 14

For this validation, auditors would be looking at the available supporting documentation for each transfer between parties in the chain of material processing, e.g. collection facility to hauler, hauler to processor, processor to end market.

- Supporting documentation could be hard copy or electronic.
- If actual weight is available it should be included along with weigh scale ticket evidence.
- Supporting documentation should be signed by both parties.

- How does your organization record and store transactions and supporting documentation?
- Do the records and supporting documentation meet the expectations set out in Appendix C of the draft procedure?
- Would this information be readily available and accessible to your (or other PRO's) auditors?
- Are there any additional transfers you would like to see included?

### **Validating Outbound Shipments**

Draft Procedure Appendix D – Page 15 to 16

Auditors are required to validate whether transfers from processors to secondary processors, RPMs and end markets are valid, accurate and complete. Example evidence they would be requested to obtain include:

- Sales/purchase invoice
- Shipping invoice / bill of lading
- Evidence of payment received in GL
- Evidence of payment received in bank (statement)

- What do PROs currently require from the processors they contract with?
- Are these documents readily accessible to auditors?
- Is evidence retained for all transfers (e.g. land disposal, incineration or whole tires) to a processor or retreader?

### Validating Actual Use of Material (Resource Recovery)

Draft Procedure Appendix E – Page 17

Assessing the validity of RPMs and end markets is a critical component of the audit procedure. The procedures are designed to give reasonable assurance that sales of materials to RPMs and end markets are for appropriate uses under the regulation.

Procedures include: contacting the company, checking company's website or visiting the company.

Additionally, does the cost of the material or transportation to the RPM or end market logically suggest that it would be used for the manner in which it is intended?

- What processes or controls do processors already have in place to validate RPMs and end markets?
- Do PROs require this type of evidence when they contract with a processor or pay for processed material?



### **Validating Mass Balance Calculation**

Draft Procedure Appendix F – Page 18 to 19

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Opening Tires Inventory Balance

Inbound Tires

Outbound Material (Processed and Non-Processed)

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Closing Material Balance (Processed and Non-Processed)

- The audit procedure assumes that all processors complete mass balance calculations on at least an annual basis.
- It is important that the mass balance does not include weight of material that should not be included as part of processing performance.
- The appendix addresses specific considerations for rims, semi-processed material received by secondary processors and buffings (from retreading).

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• In all cases, the inbound and outbound weight of non-eligible material should be removed from the mass balance.

### Validating Mass Balance Calculation Cont.

Draft Procedure Appendix F – Page 18 to 19

- Is the formula correct? Is there a better visual representation of the calculation?
- Does the treatment of rims, semi-processed material received by secondary processors and buffings (from retreading) seem appropriate?
- Are processors accurately recording residual, e.g. water, waste, dirt? What percentage of total weight is made up from residual?
- Are there other materials or weight of materials that processors remove when calculating their performance under the regulations?



### **Manual and Automated System Controls**

Draft Procedure Appendix G – Page 20

Auditors can test manual and automated controls to obtain greater assurance that the results of their testing would be replicated across the entire population of transactions.

Examples included:

- Automated trigger alerts for submitted inbound and outbound shipment volumes outside of reasonable boundaries (e.g. greater than a standard semi-truck could reasonably carry).
- Automated trigger alerts for submitted inbound volumes where actual weight, based on scale ticket, is outside of reasonable variance boundaries when compared to estimated weight, based on number of tires multiplied by pre-defined weights.

- Are there other controls built into the software used by PROs to record transactions?
- Are there manual controls in place at PROs or processors that would have supporting evidence?

# Sampling Methodology





### **Sampling Methodology**

- The basis of the procedure is to validate whether producers, or PROs acting on behalf of producers, are operating in compliance with regulation.
- ISAE 3000 validates and reports on compliance with specified criteria such as completeness, accuracy and validity of transactions.
- Attribute sampling is the most appropriate audit methodology to efficiently validate compliance:
  - tests a sample of a population to validate whether the attribute is consistent in a population
  - e.g. the reported volumes of reused tires are accurate, complete, and valid
- In the event of a fail (e.g. reported retreaded tires are not accurate), this result will likely be reported in the audit opinion as a qualification "except for the area(s) that failed, the evaluation criteria were achieved..."
- The key to a clean audit opinion in one sentence is:

Consistent processes, consistently accurate recording of all valid transactions such that as a sample will provide validation of such an assertion.



### **Example of Sample Size Ranges – Attribute Sampling**

#### 99% Confidence Level

Population	Sample size required	Deviations
10,000	164	2
5000	163	2
1000	152	2
500	141	2
250	125	2
100	70	1
50	47	1
10	10	1

If no more than X deviations are observed in a sample of size X, you can be at least 99% confident that the population deviation rate is not more than 5%.

Assumptions: 1% Expected Deviation Rate, 5% Tolerable Deviation Rate.



### **Example of Sample Size Ranges – Attribute Sampling**

#### **95% Confidence Level**

Population	Sample size required	Deviations
10,000	93	1
5000	92	1
1000	88	1
500	84	1
250	78	1
100	58	1
50	43	1
10	10	0

If no more than X deviations are observed in a sample of size X, you can be at least 95% confident that the population deviation rate is not more than 5%.

Assumptions: 1% Expected Deviation Rate, 5% Tolerable Deviation Rate.



### **Example of Sample Size Ranges – Attribute Sampling**

#### 90% Confidence Level

Population	Sample size required	Deviations
10,000	76	1
5000	76	1
1000	73	1
500	70	1
250	66	1
100	51	1
50	40	1
10	10	1

If no more than X deviations are observed in a sample of size X, you can be at least 90% confident that the population deviation rate is not more than 5%.

Assumptions: 1% Expected Deviation Rate, 5% Tolerable Deviation Rate.



### **Example of Sample Size Ranges – Non-statistical**

#### Selection of samples must be random

Higher sample sizes required for most integral processes, permitted to use lower sample sizes for less critical areas.

Population	Sample size required
250+	25-60
50 - 200	5-25
12-50	5-9
4-12	2-4
4	2

#### **Key Question**

Would you prefer statistical or non-statistical sampling?

### **General Questions**

- Was the audit procedure easy to follow and understand?
- Does the audit procedure seem achievable to be completed by an auditor retained by you?
- Do any of the PROs or processors have their own internal audit processes?
- Have PROs included auditability clauses in all contracts they have agreed with third parties?
- Would you like RPRA to determine the format of the audit report (e.g. include a suggested template or sample ISAE 3000 report)?
- Would process maps of the audit process be helpful? If so, which ones?
- Are there any definitions missing?
- Would a guidance document to accompany the audit be helpful?
- What process maps for material processing would you find useful to give to your auditor?



### **Next steps**

- Producers: sign up with a PRO (if you haven't already) and ensure your contracts include flow-through auditability rights.
- Consultation documents, including today's webinar recording, are available at <u>https://rpra.ca/consultations/current-consultations/development-of-tire-audit-procedures/</u>
- We encourage you to share the draft audit procedure with your auditors for their input.
- We will be taking your feedback today into account to finalize the audit procedure, along with any additional feedback we receive at <u>consultations@rpra.ca</u> until March 18.
- Our next webinar will be held on **March 25**. You can register at the website listed above



## **Contact us**

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