

This document should be read in conjunction with Ontario Regulation 30/20: Batteries and compliance bulletins for batteries published by the Resource Productivity and Recovery Authority (RPRA). See [Appendix I](#) for links to these documents, which contain definitions and criteria that are essential to understand for the performance of reasonable assurance engagements and agreed-upon procedures related to batteries.

Appropriate contractual relationships between producer responsibility organizations (PROs), collection sites, haulers, processors and refurbishers must exist that allow for the assurance practitioner to obtain and review data and documentation to support the audit reasonable assurance engagement.

Purpose

Under the Batteries Regulation, battery producers are required to meet mandatory management targets. Section 31 of the regulation requires that an audit of the performance of each producer's management system be completed by an independent auditor who is licensed or holds a certificate of authorization under the Public Accounting Act, 2004 and in accordance with the procedures set out in the Registry Procedure – Verification and Audit published by the Authority.

This document is intended to ensure consistency of reporting by producers and PROs and provide sufficient guidance to allow assurance practitioners to be able to provide a consistent level of assurance in a consistent format.

Producers and PROs are exempt from submitting performance audit reports for any periods which have previously been audited by RPRA.

Applicable Assurance Standard

All reports which include processing by a battery processor must be reasonable assurance reports prepared in accordance with the Canadian Standard on Assurance Engagements 3000 (CSAE 3000), Attestation Engagements Other than Audits or Reviews of Historical Financial Information. As per CSAE 3000, "a reasonable assurance engagement may be referred to as an audit engagement" therefore the terms 'audit' and 'auditor' will be used throughout the rest of this document.

Producers and PROs are required to engage a public accountant to report under CSRS 4400, Agreed-upon Procedures, with respect to any processing by a downstream battery processor.

In order to meet a producer's annual resource recovery obligation, producers or PROs may have transferred (bought or sold) resource recovery performance credits before the annual reporting deadline. Given that an auditor may not be able to verify the existence of the credits bought from or sold to another PRO, the CSAE 3000 report will only cover a PRO's own performance before the consideration of any credits bought or sold.

Producers and PROs are required to engage a public accountant to report under CSRS 4400, Agreed-upon Procedures, with respect to any credits transferred. The procedures to be performed are outlined later in this document.

To create a more efficient reporting process that helps minimize the burden on business, the Authority is allowing registrants to align the deadline and period of the CSRS 4400 report

with the CSAE3000 report. Therefore, on or before April 30, 2024, and every third subsequent year, registrants can submit both reports at the same time.

Batteries Performance Reporting Criteria

Section 31, paragraph 2 of the Batteries Regulation states that:

(2) On or before April 30 in any year in which an audit is required under subsection (1), the producer shall prepare and submit a copy of a report on the audit to the Authority, through the Registry, that includes the following with respect to each applicable category of batteries:

1. The weight of batteries that were refurbished.
2. The weight of batteries that were reused.
3. The weight of processed materials that resulted from the processing of batteries that were,
 - i. provided to a person for the making of new products or packaging,
 - ii. used to enrich soil, or
 - iii. used as aggregate.
4. A list of the types of products and packaging that were made with the processed materials referred to in paragraph 3.
5. The weight of batteries and the weight of processed materials that were,
 - i. land disposed,
 - ii. incinerated,
 - iii. used as a fuel or a fuel supplement,
 - iv. stored, stockpiled, used as daily landfill cover or otherwise deposited on land, or
 - v. used as aggregate, with respect to any aggregate that was used beyond the 15 per cent maximum permitted under subsection 16 (2).
6. A statement confirming whether the producer satisfied their management requirement.

Section 3 of the Batteries Regulations states that:

This Regulation applies to the following categories of batteries and a reference to a category of batteries is a reference to one of the following categories:

1. Primary batteries.
2. Rechargeable batteries.

Section 16, paragraph 2 of the Batteries Regulation states that:

(2) With respect to satisfying the management requirement under section 13, the weight of material used as aggregate, referred to in sub-subparagraph 1 ii C of subsection (1), may only account for up to 15 per cent of the management requirement.

Additionally, references to “calculated weight of batteries” in the regulation and this audit procedure can mean either the actual weight of batteries or the corresponding weight of batteries determined in accordance with the Registry Procedure - Verification and Audit (Appendix B – Batteries Weight Conversion Factors).

Definitions

The following is a list of words used in this document that have not been defined in the Batteries Regulation or RPRA compliance bulletins:

“Collected” means when a battery has been delivered to a registered battery hauler, refurbisher, or processor.

“Collection Year” means calendar year.

“Downstream Processor” means a person that receives recoverable resources that were generated from batteries used and collected in Ontario from a battery processor for the purpose of further processing. All processing activities are considered in scope of this definition, until the resources can be considered a recovered resource.

“End Market” means any company or individual where batteries or material can be sent that would not require any additional processing to be used for its intended use.

“Non-processed percentage” means the percentage of battery material that flows through a processing facility that is not used to create a product or packaging allowable under the Batteries Regulation.

“Non-refurbished percentage” means the percentage of battery material that flows through a refurbishing facility that is not included in a refurbished battery.

“Resource Recovery Performance Year” is January 1st of the reporting year to March 31st of the following year (e.g., January 1, 2023, to March 31, 2024).

“Processed percentage” means the percentage of battery material that flows through a processing facility that is used to create product or packaging allowable under the Batteries Regulation.

“Recovered Resource” means a resource derived from batteries that that will not undergo further refining and is fully used to displace a virgin material in the manufacturing of a new product.

“Recycled Product Manufacturers (RPMs)” manufacture products and packaging from processed battery material.

“Refurbished percentage” means the percentage of battery material that flows through a refurbishing facility that is included in a refurbished battery.

“Resource Recovery” means reuse, refurbishing or processing of batteries.

“Semi-Processed Material” means material derived from a battery processed at one or more processing facilities but requires processing at another processor before sending it can be sent to an end market or RPM.

Suggested Audit Procedures for the CSAE 3000 Engagement

The following outlines suggested procedures for auditors in the performance of the CSAE 3000 engagement. Auditors may find that some or all of these procedures are not applicable to their particular client and this is not an exhaustive list of all possible audit procedures. The required validation of performance metrics defined in section 31(2) of the Batteries Regulation.

Notes:

- Procedures only apply to battery processors who process, for the purpose of resource recovery, batteries used by a consumer in Ontario. Agreed-upon Procedures that apply to downstream processors are included in the following section.
- Procedures #3 and #5 below could be completed simultaneously, as the processes are similar.
- Any reference below to an activity being performed by a producer or a PRO includes activities being overseen, coordinated or contracted by the producer or PRO.

1. The weight of batteries, for each battery type (primary and rechargeable), that were refurbished.

- a) Obtain a listing of all transactions for the PRO, by refurbisher, that make up the calculated weight of batteries that were refurbished.
- b) Recalculate the calculated weight of refurbished batteries.
- c) Compare the recalculated weight based on the listing received to the reported calculated weight of batteries, for each battery type that were refurbished in the PRO's annual report.

For each refurbisher:

- d) Use analytical procedures to assess the reasonableness of transactions.
- e) Select a sample of inbound shipments (see [Appendix A](#) for suggested sampling methodology).
- f) For each sample, check the validity of the original batteries (see [Appendix B](#) for a definition of validity summarized from the Regulation).
- g) For each sample, agree the calculated weight of batteries (see [Appendix C](#) for guidance on the use of weight conversion factors).
- h) Select a representative sample of outbound shipments.
- i) For each sample, confirm the validity, accuracy and completeness of the recording of the sale/transfer/charge to the end market (see [Appendix D](#) and [Appendix E](#) for guidance on assessing validity).
- j) For each sample, confirm the validity of the end market, the reusing party, and that they are going to reuse the refurbished battery (see [Appendix F](#) for guidance on assessing validity).
- k) For each sample, agree the number and calculated weight of batteries to support.

2. The weight of batteries, for each battery type, that were reused.

- a) Obtain a listing of all transactions for the PRO, by battery haulers, refurbishers and processors who reported the transaction, that make up the calculated weight of batteries that were reused.
- b) Recalculate the calculated weight of reused batteries.

- c) Compare the recalculated weight based on the listing received to the reported calculated weight of batteries, for each battery type that were reused in the PRO's annual report.
- d) Use analytical procedures to assess the reasonableness of transactions.
- e) Select a sample of inbound shipments (see [Appendix A](#) for suggested sampling methodology).
- f) For each sample, check the validity of the original batteries (see [Appendix B](#) for a definition of validity summarized from the Regulation).
- g) For each sample, agree the calculated weight of batteries (see [Appendix C](#) for guidance on the use of weight conversion factors).
- h) Select a representative sample of outbound shipments.
- i) For each sample, confirm the validity, accuracy and completeness of the recording of the sale/transfer/charge to the end market (see [Appendix D](#) and [Appendix E](#) for guidance on assessing validity).
- j) For each sample, confirm the validity of the end market, the reusing party, and that they are going to reuse the battery (see [Appendix F](#) for guidance on assessing validity).
- k) For each sample, agree the calculated weight of batteries to support.

3. The weight of processed materials that resulted from the processing of batteries that were:

- i. provided to a person for the making of new products or packaging,**
- ii. used to enrich soil, or**
- iii. used as aggregate.**

- a) Obtain a listing of all transactions for the PRO that make up the calculated weight of batteries that were collected and delivered to a processor.
- b) Obtain a listing of all transactions for the PRO that make up the calculated weight of batteries that were processed, by a processor, for each use type.
- c) Recalculate the calculated weight of batteries that were collected and delivered to a processor.
- d) Recalculate the total weight of processed material.
- e) Compare the recalculated weight based on the listing received to the reported weight of processed materials in the PRO's annual report.

For each battery processor:

- f) Use analytical procedures to assess the reasonableness of transactions.
- g) Select a representative sample of inbound shipments (see [Appendix A](#) for suggested sampling methodology).
- h) For each sample, check the accuracy, completeness and validity of the original batteries recorded (see [Appendix B](#) for a definition of validity summarized from the Regulation).
- i) For each sample, agree the calculated weight of batteries or semi-processed material (see [Appendix C](#) for guidance on the use of weight conversion factors).
- j) Select a sample of outbound shipments from across the three use types and transfers to subsequent processors.
- k) For each sample, confirm the validity of the sale/transfer/charge to the RPM, end market, or downstream processor (see [Appendix D](#) and [Appendix E](#) for guidance on assessing validity).
- l) For each sample, confirm the validity of the RPM, end market, or subsequent processor, and that the material is going to be used in the manner intended (see [Appendix F](#) for guidance on assessing validity).

- m) For each sample, agree the weight of the outbound processed material to support (e.g., weight scale ticket).
- n) Obtain the processing facility's mass balance(s) for the audit period (see [Appendix G](#) for guidance on assessing validity).
- o) For the processing facility's mass balance, identify and recalculate the percentage of processed material per kg inbound batteries.
- p) Confirm that the total weight of processed material allocated to the PRO equals the total weight of inbound batteries allocated to the PRO multiplied by the processor's processed percentage, as confirmed by the mass balance recalculation.

4. A list of types of products and packaging that were made with the processed materials referred to in paragraph 3.

- a) Obtain a listing of all transactions for the PRO that make up the calculated weight of batteries that were processed, which includes the name of the RPMs or that it was sold directly to an end market.
- b) Filter the transaction list into a list of RPMs or, if the material was not sent to an RPM, the product that was sent to an end market.
- c) For each RPM, obtain a supporting document signed by the RPM that states the products and packaging types manufactured by those RPMs.
- d) Confirm that the list of products and packaging across all RPMs and the products that were sent to end markets matches the products and packaging reported by the PRO.
- e) Confirm the validity of the products and packaging made by the RPM (see appendix [E](#) and [F](#) for guidance on assessing validity).

5. The weight of batteries and the weight of processed materials, that were:

- i. land disposed,**
- ii. incinerated,**
- iii. used as a fuel or a fuel supplement,**
- iv. stored, stockpiled, used as daily landfill cover or otherwise deposited on land, or**
- v. used as aggregate, with respect to any aggregate that was used beyond the 15 per cent maximum permitted under subsection 16 (2) of the Batteries Regulation.**

- a) Obtain a listing of all transactions for the PRO, which make up the total weight of processed materials that were land disposed, incinerated, used as a fuel or a fuel supplement, stored, stockpiled, used as daily landfill cover or otherwise deposited on land, or used as aggregate beyond the 15 per cent maximum permitted.
- b) Recalculate the total weight of non-recycled material.
- c) Compare the recalculated weight based on the listing received to the reported calculated weight of batteries and the weight of processed materials that were land disposed, incinerated, used as a fuel or a fuel supplement, stored, stockpiled, used as daily landfill cover or otherwise deposited on land, or used as aggregate beyond the 15 per cent maximum permitted in the PRO's annual report.

For each battery processor:

- d) Use analytical procedures to assess the reasonableness of transactions.
- e) Leverage testing completed in sections 3 G, H, I.
- f) Select a sample of outbound shipments from across the four non-recycling methods.
- g) For each sample, confirm the accuracy, completeness of the recording and the validity of the sale/transfer/charge to end market (see Appendix [D](#) and [E](#) for guidance on assessing validity).
- h) For each sample, agree the weight of the outbound material to support, e.g., weight scale ticket.

- i) Obtain the processing facility's mass balance(s) for the audit period (see [Appendix G](#) for guidance on assessing validity).
- j) For the processing facility's mass balance, identify and recalculate the percentage of non-recycled material per kg inbound batteries or semi-processed material.
- k) Confirm that the total weight of non-processed material allocated to the PRO equals the total weight of inbound batteries/material allocated to the PRO multiplied by the processor's non-processed percentage as confirmed by the mass balance recalculation.
- l) By dividing the total weight of reported battery derived aggregate used in roadbed construction or repair by the total weight of processed material, confirm that battery derived aggregate used in roadbed construction or repair, is not more than 15% of the reported processed material and any over 15% is reported as non-processed.

6. A statement confirming whether the producer satisfied their management requirement.

- a) Obtain a listing of all batteries collection transactions for the PRO which makes up the total weight of collected batteries.
- b) Use analytical procedures to assess the completeness of the collected batteries performance data.
- c) Using the recalculated weight of batteries from performance metrics 1, 2 and 3 (if they are not the same as the reported figures), confirm that the total at least equals the PRO's total weight of management requirement by category.

If the PRO has not satisfied their management requirement:

- d) Obtain the PRO's allocation methodology and allocated volumes for each producer they represent to determine how the weight of collected batteries and the weight of refurbished batteries, reused batteries, and processed materials have been allocated to the producer.
- e) Review the weight of collected batteries and the weight of refurbished batteries, reused batteries, and processed materials for each PRO broken down by producer to ensure that no collected batteries, refurbished batteries, reused batteries, or processed material was allocated to more than one producer.
- f) Confirm which producers, if any, met their management requirement and which did not.

Required Procedures for the Downstream Processor Performance Verification CSRS 4400 Engagement

Downstream processors receive semi-processed material from primary processors who received batteries but only partially processed them. It is suggested that either processors have contracts with their downstream processors or PROs have contracts with downstream processors in their system to ensure that sufficient evidence is available to support performance verification.

The following outlines procedures to be performed for downstream processors in accordance with the Canadian Standard on Related Services (CSRS) 4400, Agreed-Upon Procedures Engagements.

- 1) The following procedures relate to the weight of opening inventory product and material as at January 1, 20XX that resulted from the processing of batteries received in the prior collection period.
 - a) Obtain a listing of opening battery inventory as at January 1, 20XX and recalculate the total weight based on the individual weights listed.
 - b) Obtain a listing of opening processed materials inventory as at January 1, 20XX and recalculate the total weight based on the individual weights listed.
 - c) Obtain a listing of opening semi-processed materials inventory as at January 1, 20XX and recalculate the total weight based on the individual weights listed.
 - d) Obtain a listing of opening non-program materials inventory as at January 1, 20XX and recalculate the total weight based on the individual weights listed.
 - e) Calculate the total opening inventory by adding the totals of the listings obtained in (a), (b), (c), and (d) above.
- 2) The following procedures relate to the weight of inbound batteries and material received by a downstream processor from January 1, 20XX to December 31, 20XX:
 - a) Obtain a listing of inbound batteries received between January 1, 20XX and December 31, 20XX and recalculate the total weight based on the individual weights listed.
 - i) Select a sample of inbound shipments (see Appendix A of [TBD – final name of the RPR Battery Audit Procedure Document] for a definition of validity summarized from the Regulation] for sampling methodology).
 - (1) For each sample, confirm the validity of the original batteries recorded (see Appendix B of [TBD] for a definition of validity summarized from the Regulations]).
 - (2) For each sample, agree the calculated weight of batteries from the listing to the [insert name of supporting documentation] (see Appendix C of [TBD] for guidance on the use of weight conversion factors).
 - b) Obtain a listing of inbound semi-processed materials received between January 1, 20XX and December 31, 20XX and recalculate the total weight based on the individual weights listed.
 - i) Select a sample of inbound shipments and perform the following procedures (see Appendix A of [TBD] for sampling methodology):
 - (1) For each sample, confirm the validity of the original batteries recorded (see Appendix B of [TBD] for a definition of validity summarized from the Regulation).
 - (2) For each sample, agree the weight of semi-processed material from the listing to the [insert name of supporting documentation].
 - c) Calculate the weight of inbound batteries and material received by a downstream processor by adding the totals of the listings obtained in (a), and (b) above.

- 3) The following procedures relate to the weight of outbound batteries and materials that resulted from the processing of batteries received between January 1, 20XX and December 31, 20XX:
- a) Obtain a listing of batteries sent to end market for reuse between January 1, 20XX and December 31, 20XX and recalculate the total weight based on the individual weights listed.
 - i) Select a sample of outbound shipments and perform the following procedures (see Appendix A of [TBD] for sampling methodology):
 - (1) For each sample, confirm the validity of the recording of the sale/transfer/charge to the end market (see Appendix D and E of [TBD] for guidance on assessing validity).
 - (2) For each sample, confirm the validity of the end market, the reusing party, and that they are going to reuse the battery.
 - (3) For each sample, agree the calculated weight of batteries from the listing to the [insert name of supporting documentation].
 - b) Obtain a listing of batteries sent to end market for refurbishment between January 1, 20XX and December 31, 20XX and recalculate the total weight based on the individual weights listed.
 - i) Select a sample of outbound shipments and perform the following procedures (see Appendix A of [TBD] for sampling methodology):
 - (1) For each sample, confirm the validity of the recording the sale/transfer/charge to the end market.
 - (2) For each sample, confirm the validity of the end market, the reusing party, and that they are going to reuse the refurbished battery.
 - (3) For each sample, agree the calculated weight of batteries from the listing to the [insert name of supporting documentation].
 - c) Obtain a listing of recovered material sent to an end market to be used in the making of products and packaging between January 1, 20XX and December 31, 20XX and recalculate the total weight based on the individual weights listed.
 - i) Select a sample of outbound shipments and perform the following procedures (see Appendix A of [TBD] for sampling methodology):
 - (1) For each sample, confirm the validity of the sale/transfer/charge to the end market.
 - (2) For each sample, confirm the validity of the end market and that the material is going to be used in the manner intended.
 - (3) For each sample, agree the weight of the outbound processed material from the listing to the [insert name of supporting documentation].
 - d) Obtain a listing of program material or semi-processed material sent to an end market to be disposed of or stored in a manner that is not considered recycling between January 1, 20XX and December 31, 20XX and recalculate the total weight based on the individual weights listed.
 - e) Obtain a listing of non-program material sent to an end market between January 1, 20XX and December 31, 20XX and recalculate the total weight based on the individual weights listed.
 - i) Select a sample of outbound shipments and complete the following procedures (see Appendix A of [TBD] for sampling methodology):
 - (1) For each sample, confirm the validity of the sale/transfer/charge to end market.
 - (2) For each sample, agree the weight of the outbound material from the listing to the [insert name of supporting documentation].

- f) Obtain a listing of non-recovered product transferred to downstream processors between January 1, 20XX and December 31, 20XX and recalculate the total weight based on the individual weights listed.
 - i) Select a sample of outbound shipments and complete the following procedures (see Appendix A of [TBD] for sampling methodology):
 - (1) For each sample, confirm the validity of the sale/transfer/charge to the downstream processor.
 - (2) For each sample, agree the weight of the outbound material from the listing to the [insert name of supporting documentation].
 - g) Calculate the total weight of outbound batteries and materials that results from the processing of batteries by adding the totals of the listings obtained in (a), (b), (c), (d), (e) and (f) above.
- 4) The following procedures relate to the weight of closing inventory product and material as at December 31, 20XX that resulted from the processing of batteries received in the collection period:
 - a) Obtain a listing of closing battery inventory as at December 31, 20XX and recalculate the total weight based on the individual weights listed.
 - b) Obtain a listing of closing processed materials inventory as at December 31, 20XX and recalculate the weight based on the individual weights listed.
 - c) Obtain a listing of closing semi-processed materials inventory as at December 31, 20XX and recalculate the weight based on the individual weights listed.
 - d) Obtain a listing of closing non-program materials inventory as at December 31, 20XX and recalculate the weight based on the individual weights listed.
 - e) Calculate the total weight of closing inventory product and material by adding the totals of the listings obtained in (a), (b), (c) and (d) above.
- 5) The following procedures relate to the mass balance for the period of January 1, 20XX to December 31, 20XX:
 - a) Calculate the total weight of opening inventory and inbound batteries and material by adding the totals of 1(e) and 2(c).
 - b) Calculate the total weight of gross processed and closing inventory by adding the totals of 3(g) and 4(e).
 - c) Calculate the total weight of shrinkage/wastage of material during the resource recovery performance period by subtracting the total of 5(b) from the total calculated in 5(a).
 - d) Calculate the total weight of outbound material, shrink/wastage, and closing inventory by adding the total weights calculated in 5(b) and 5(c).
 - e) Calculate the weight of total available material during the resource recovery performance period by subtracting the total weights calculated in 3(a), 3(b), 3(e), 3(f), 4(e) and 5(c) from 5(a).
 - f) Calculate the recycling rate by dividing the total recycled material calculated in 2(c) by the total available weight calculated in 5(e).
- 6) The following procedures relate to comparing the downstream processors recycling rate determined through the mass balance and calculation in 5(f) to the imputed recycling rate determined from the inbound semi-processed material and recovered resources reported by the downstream processor to the PRO.
 - a) Obtain a listing of inbound semi-processed materials received between January 1, 20XX and December 31, 20XX allocated to the PRO and recalculate the total weight based on the individual weights listed.
 - b) Obtain a listing of recovered material sent to an end market to be used in the making of products and packaging between January 1, 20XX and March 31, 20XX⁺¹ derived

- from semi-processed material from 6(a) and allocated to the PRO and recalculate the total weight based on the individual weights listed.
- c) Obtain a listing of program material or semi-processed material sent to an end market to be disposed of or stored in a manner that is not considered recycling between January 1, 20XX and March 31, 20XX⁺¹ derived from semi-processed material from 6(a) and allocated to the PRO and recalculate the total weight based on the individual weights listed.
 - d) Calculate the imputed recovery rate by dividing 6(b) by 6(a).
 - e) Calculate the difference between the imputed recovery rate calculated in 6(d) and the recycling rate determined through the mass balance calculated in 5(f).
- 7) The following procedures combine the performance of all downstream processors within a PRO's system:
- a) Calculate the total weight of recovered material by downstream processors in the PRO's system by adding 6(b) for each downstream processor.
 - b) Calculate the total weight of program material or semi-processed material sent to an end market to be disposed of or stored in a manner that is not considered recycling by downstream processors in the PRO's system by adding 6(c) for each downstream processor.
- 8) The following procedures combine the performance of all primary and downstream processors within a PRO's system:
- a) Identify the reported weight of reused batteries in the PRO's CSAE 3000 performance report.
 - b) Identify the reported weight of refurbished batteries in the PRO's CSAE 3000 performance report.
 - c) Calculate the total weight of recovered material by primary and downstream processors in the PRO's system by adding 7(a) and the reported weight of recovered material in the PRO's CSAE 3000 performance report.
 - d) Calculate the total weight of program material or semi-processed material sent to an end market to be disposed of or stored in a manner that is not considered recycling by primary and downstream processors in the PRO's system by adding 7(b) and the reported weight of program material sent to an end market to be disposed of or stored in a manner that is not considered recycling in the PRO's CSAE 3000 performance report.
 - e) Calculate the PRO's resource recovery rate by adding 8a), 8(b), and 8(c) and dividing by the reported weight of collected batteries in the PRO's CSAE 3000 performance report.

Required Procedures for the Batteries Recovery Credits Transferred CSRS 4400 Engagement

In order to meet a producer's annual resource recovery obligations, producers or PROs may have bought or sold resource recovery performance credits before the annual reporting deadline. For compliance purposes, the following procedure outlines how to validate credits transferred (bought/sold) between PROs. Although audits are only required to be performed on a three year cycle in accordance with the Regulation, it is suggested that a PRO selling credits during the cycle might want to complete an audit on an annual basis to provide comfort to the purchasing PRO.

PROs who transferred any credits

It is recognized that an auditor may not be able to verify the existence of the credits bought from or sold to another PRO. As a result, the PRO should engage an auditor to provide a CSAE 3000 report for a PRO's own performance and a separate report related to the credits transferred in accordance with CSRS 4400, Agreed-upon Procedures Engagements.

To create a more efficient reporting process that helps minimize the burden on business, the Authority is allowing registrants to align the deadline and scope of the resource recovery transfer verification report with the battery performance audit report. Therefore, on or before April 30, 2024, and every third subsequent year, registrants can submit both reports at the same time.

The following outlines procedures in accordance with the Canadian Standard on Related Services (CSRS) 4400, Agreed-Upon Procedures Engagements to be performed over resource recovery credits transferred by any PROs:

1. Obtain copies of all purchase and sales agreements (i.e., legal agreement/contract) related to batteries recovery credits transferred and ensure two signatures are present.
2. For each purchase and sale:
 - Obtain an email from the purchaser/seller confirming the total volume of credits bought/sold by the PRO. Agree the confirmed amounts with the volume of credits added to or removed from the PRO's performance and the purchase/sale documentation.
 - Obtain the invoice and agree the total monetary transaction amounts to the purchase/sale order (if applicable) the funds withdrawn from/deposited in the PRO's bank statement.
3. Agree the total amount of weight credits bought/sold by the PRO to the amount reported on the credit transfer documentation (i.e., Certificate of Transfer).
4. Calculate the resource recovery percentage for the PRO as follows:
 - Take the PRO's own performance before the consideration of any credits bought or sold.
 - Add/subtract credits bought from or sold to another PRO, and
 - Divide the volume of processed material by the volume of collected material.
5. Determine if the results of the calculation meet or exceed their management requirement as defined in Ontario Regulation 30/20: Batteries.

Appendix A – Sampling Methodology

Attribute sampling is the most appropriate audit methodology to efficiently validate compliance. It tests a sample of a population to validate whether the attribute is consistent in a population (e.g., the reported volumes of reused batteries are accurate, complete, and exist).

Sample sizes obtained through this sampling methodology are based on four variables: population size, confidence level, expected deviation rate, and tolerable deviation rate. Suggested variables are defined below:

Confidence Level = 95%

Expected Deviation Rate = 0%

Tolerable Deviation Rate = 5%

Based on the below populations, this leads to the stated sample sizes:

Population	Sample size required	Deviations
500+	60	0
250	50	0
100	40	0
50	30	0
10	10	0

Appendix B – Validating Batteries

There are three specific criteria that a battery must meet in order to be considered valid for collection performance reporting under the audit procedure:

- a) It meets the Batteries Regulation definition of a battery.
 - i. is a container consisting of one or more voltaic or galvanic cells, in which chemical energy is stored as electricity or converted into electricity and used as a source of power; and
 - ii. weighs five kilograms or less.
- b) It was used in Ontario.
- c) It was collected in Ontario in compliance with the Batteries Regulation and transported to a registered processor or registered refurbisher by a registered batteries hauler or transferred for reuse. A list of RPRA registered battery haulers, refurbishers and processors can be obtained from RPRA and is available on their website.

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Appendix C – Validating Calculated Weight of Batteries

Calculated weight of batteries means either the actual weight of batteries, or the weight of batteries using conversion factors in accordance with the Registry Procedure Verification and Audit (Appendix B – Batteries Weight Conversion Factors).

Actual Weight

Whenever actual weight is reported:

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

Weight Based on Conversion Factors

Whenever weight calculated based on conversion factors is reported, the auditor must ensure the following:

- The correct conversion factor for the types of used batteries has been applied.
- The conversion factor calculation is accurate.

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Appendix D – Validating Transfers

The following is a list of transfers of batteries or material that may occur during the process of collecting and processing batteries. For each transfer, the listed information would be expected to be recorded as part of the supporting documentation for that transaction.

Collection Site to Hauler

- Electronic or hard copy record of transfer of material from collection site to hauler, which includes at least:
 - Name and location of collection site.
 - Name of battery hauler.
 - Unique document ID number.
 - Signed by representatives of the collection site and hauler.
 - Estimated number of batteries or estimated weight of batteries.

Hauler to Processor

- Electronic or hard copy record of transfer of batteries from hauler to processor, which includes at least:
 - Name and location of processor.
 - Name of battery hauler.
 - Unique document ID number.
 - Signed by representatives of the hauler and processor.
 - Estimated number of batteries or estimated weight of batteries.
 - Actual weight of batteries.
 - Weigh scale ticket or photograph of weigh scale ticket, including unique ID number.

Processor to Downstream Processor

- Electronic or hard copy record of transfer of material from processor to hauler, which includes at least:
 - Name and location of processor.
 - Name of hauler.
 - Name and location of downstream processor.
 - Unique document ID number.
 - Signed by representatives of the processor and hauler.
 - Type of material.
 - Actual weight of outbound material.
 - Weigh scale ticket or photograph of weigh scale ticket, including unique ID number.
- Electronic or hard copy record of transfer of material from hauler to downstream processor, which includes at least:
 - Name and location of processor.
 - Name of hauler.
 - Name and location of downstream processor.
 - Unique document ID number.
 - Signed by representatives of the hauler and downstream processor.
 - Type of material.
 - Actual weight of inbound material.
 - Weigh scale ticket or photograph of weigh scale ticket, including unique ID number.

Processor to Recycled Product Manufacturer

- Electronic or hard copy record of transfer of material from processor to hauler, which includes at least:
 - Name and location of processor.
 - Name of hauler.
 - Name and location of RPM.
 - Unique document ID number.
 - Signed by representatives of the processor and hauler.
 - Type of material.
 - Actual weight of outbound material.
 - Weigh scale ticket or photograph of weigh scale ticket, including unique ID number.
- Electronic or hard copy record of transfer of material from hauler to RPM, which includes at least:
 - Name and location of processor.
 - Name of hauler.
 - Name and location of RPM.
 - Unique document ID number.
 - Signed by representatives of hauler and RPM.
 - Type of material.
 - Actual weight of inbound material (may not be available depending on RPM's facilities).
 - Weigh scale ticket or photograph of weigh scale ticket, including unique ID number (may not be available depending on RPM's facilities).

Processor to End Market

- Electronic or hard copy record of transfer of material from processor to hauler, which includes at least:
 - Name and location of processor.
 - Name of hauler.
 - Name and location of end market.
 - Unique document ID number.
 - Signed by representatives of the processor and hauler.
 - Number of items.
 - Type of product.
 - Actual weight of outbound material.
 - Weigh scale ticket or photograph of weigh scale ticket, including unique ID number.
- Electronic or hard copy record of transfer of material from hauler to end market, which includes at least:
 - Name and location of processor.
 - Name of hauler.
 - Name and location of end market.
 - Unique document ID number.
 - Signed by representatives of hauler and end market.
 - Type of material.
 - Actual weight of inbound material (may not be available depending on end market's facilities).
 - Weigh scale ticket or photograph of weigh scale ticket, including unique ID number (may not be available depending on end market's facilities).

Refurbisher to End Market

- Electronic or hard copy record of transfer of batteries from refurbisher to hauler, which includes at least:
 - Name and location of refurbisher.
 - Name of hauler.
 - Name and location of end market.
 - Unique document ID number.
 - Signed by representatives of the refurbisher and hauler.
 - Number of refurbished batteries.
 - Actual weight of outbound material (may not be available depending on refurbishers' facilities).
 - Weigh scale ticket or photograph of weigh scale ticket, including unique ID number (may not be available depending on refurbishers' facilities).
- Electronic or hard copy record of transfer of material from hauler to end market which includes, at least:
 - Name and location of refurbisher.
 - Name of hauler.
 - Name and location of end market.
 - Unique document ID number.
 - Signed by representatives of hauler and end market.

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Appendix E – Validating Outbound Shipments

Material / Use	Examples of Suitable End Markets	Examples of Suitable Evidence
Processed		
Batteries	Battery Manufacturers	Sales Invoice
Metals	Metal Manufacturers	Shipping Invoice / Bill of Lading
Fertilizer	Farms	Evidence of payment received in GL
Aggregate for Road Construction	Construction Companies Highway Maintenance Municipalities	Evidence of payment received in bank (statement)
Refurbished		
Refurbished Batteries	Direct Consumers	Sales Invoice for Refurbishing Services Shipping Invoice / Bill of Lading Evidence of payment received in GL Evidence of payment received in bank (statement)
Non-processed		
Land Disposed	Waste Disposal Companies	Tipping Fee Shipping Invoice / Bill of Lading Evidence of payment made in GL Evidence of payment received in bank (statement)
Incinerated	Waste Disposal Companies	Purchase Invoice Shipping Invoice / Bill of Lading Evidence of payment made in GL Evidence of payment received in bank (statement)
Used as Fuel	Alternative Fuel Companies Concrete manufacturer	Receipt Shipping Invoice / Bill of Lading Evidence of payment received in bank (statement)
Stockpiled	Any remaining inventory after March 31 st of the year following the audit period	Mass Balance Physical Observation
Reused		
Used Batteries	Direct Consumers	Sales Invoice Shipping Invoice / Bill of Lading Evidence of payment received in GL Evidence of payment received in bank (statement)

Appendix F – Validating Actual Use of Material

Assessing the validity of RPMs and end markets is a critical component of the audit procedure. The procedure is designed to give reasonable assurance that sales of materials to RPMs and end markets are for uses appropriate under the Batteries Regulation. The following are examples of the types of procedures that may be applied by auditors to gain assurance of valid RPM and end market sales.

- Does the RPM or end market exist and is it active?
 - What actions has the PRO or processor taken to verify? Can they be relied upon?
 - Contact the company.
 - Check company website.
 - Check company directories.
- Does the type of RPM or end market that received the processed material seem like the type of company that would use the material in the manner intended?
 - What actions has the PRO or Processor taken to verify? Can they be relied upon?
 - Contact the company.
 - Check company website.
 - Conduct a site visit.
 - A signed attestation from the company's auditor that supports their stated use.
 - Evidence that can be obtained from other regulatory bodies.
 - Does the cost of the material to the RPM or end market logically suggest that it would be used for the manner intended?
 - Does the cost of transportation of the material, combined with the cost of material or separately, logically suggest that it would be used for the manner intended?

Appendix G – Validating the Mass Balance Calculation

A mass balance calculation can be used by processors to calculate the average flow of material where it would be unviable to track specific units of input. For example, for battery processors it would be almost impossible to track an inbound shipment of batteries and accurately state that 70% was processed into black mass, 20% was processed into scrap metal and 10% was processed into plastic waste because the inbound material would be mixed with many other inbound shipments.

The mass balance calculation uses the premise that a mass that enters the system must, by conservation of mass, either leave the system or accumulate within the system. In this scenario, this means for whatever volume of batteries that is received by a processor, there would be evidence of it either leaving the processor or held as inventory at the processor.

The simplified mass balance calculation:

$$\begin{array}{ccccccc}
 \text{Opening} & & \text{Opening} & & \text{Outbound} & & \text{Closing} \\
 \text{Batteries} & & \text{Material} & & \text{Material} & & \text{Material} \\
 \text{Inventory} & + & \text{Balance} & + & \text{Material} & + & \text{Balance} \\
 \text{Balance} & & \text{(Processed} & + & \text{(Processed} & & \text{(Processed} \\
 & & \text{and Non-} & \text{Batteries} & \text{and Non-} & & \text{and Non-} \\
 & & \text{Processed)} & = & \text{Processed)} & & \text{Processed)} \\
 & & & & & & \text{Closing} \\
 & & & & & & \text{Batteries} \\
 & & & & & & \text{Inventory} \\
 & & & & & & \text{Balance}
 \end{array}$$

For the purposes of the audit procedure, outbound material volume should be broken down into two categories:

1. Material sent to an end market to be used in the making of products and packing such as:
 - Black mass.
 - Scrap metal.
 - Plastic.
 - Other.
2. Material sent to an end market to be disposed of or stored in a manner that is not considered recycling such as:
 - Land disposed.
 - Incinerated.
 - Used as a fuel or a fuel supplement.
 - Stored, stockpiled or otherwise deposited on land.
 - Used as aggregate, with respect to any aggregate that was used beyond the 15 per cent maximum permitted under subsection 16 (2).

Each variable in the mass balance calculation can be verified during audit by testing an appropriate sample of inbound and outbound shipments, as detailed in this document. Once the mass balance has been verified, proportions for outbound material can be reasonably applied to all inbound shipments. This means that, for every kg of material collected by one producer and processed at the specified processor, it would be possible to calculate the percentage of that material volume that was recycled and the percentage that was not.

Example:

Processor A receives inbound shipment ID no. 123XYZ of 10,000 kg. The PRO has allocated the volume to the producers it represents in the following way: Producer 1—5,000 kg, Producer 2 —2,000 kg, and Producer 3—3,000 kg.

Processor A completes a mass balance that shows that 90% of inbound material was sent to an end market to be used in the making of products and packing and 10% of inbound material was disposed of or used as fuel.

Therefore, for shipment ID no.123XYZ, the following recycled material can be reported by the producers: Producer 1—4,500 kg, Producer 2—1,800 kg, and Producer 3—2,700 kg. The following non-recycled material can be reported by the producers: Producer 1—500 kg, Producer 2—200 kg, and Producer 3—300 kg.

If a producer is only reporting material processed at one processor, then the mass balance percentage calculation would be able to be applied to all collected material for that producer.

Collection Year vs Resource Recovery Performance Year

Batteries collected in the collection year (January 1 to December 31) can be processed up until March 31 of the following year and count towards the producer's Resource Recovery target. Any batteries collected in the Collection Year that have not been processed and / or ownership of processed material has not been transferred to an End Market or RPM by March 31 of the following year must be reported as "stockpiled" and cannot count towards the management requirement.

Semi-processed Material Received by Downstream Processors

Processed material can only count towards the producer's resource recovery performance target once. Therefore, if material is sent from a battery processor to a downstream processor, the auditor must ensure that the processing performance is only counted once towards the producer's processing target.

As part of the audit process, the auditor should validate that the inbound batteries were received from a collection facility and not another processor. If recorded correctly, a listing of all transactions by a processor, for the PRO, that make up the total weight of collected batteries, would not include semi-processed material transactions.

Appendix H – Manual and Automated System Controls

- Automated trigger alerts for submitted inbound and outbound shipment volumes outside of reasonable boundaries (e.g., greater than a standard pallet 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 batteries multiplied by pre-defined weights.

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Appendix I – References

Batteries Regulation (O. REG. 30/20): <https://www.ontario.ca/laws/regulation/r20030>

Registry Procedure – Batteries Verification and Audit

https://rpra.ca/wp-content/uploads/Registry-Procedure-Batteries-Verification-and-Audit_March-2023.pdf

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