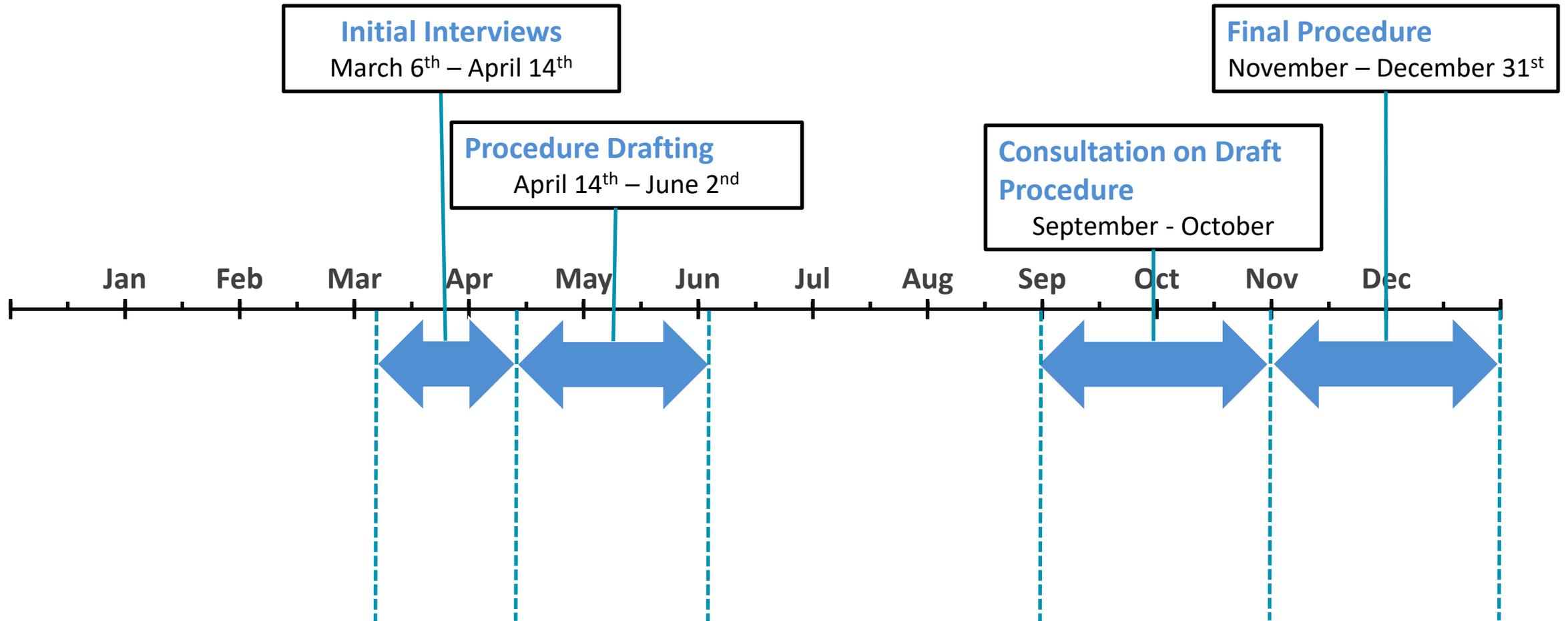


Recycling Efficiency Rate (RER) Calculation and Verification Procedures

Phase One Consultation Questions
Provided by Dillon Consulting

Procedure development process



Principles (1)

RER calculations should be:

- **Reliable**
 - Reflective of actual resource recovery as defined in the regulation
 - Accurate within reason/practical
- **Verifiable and auditable**
 - Standardized
 - Comparable
 - Reproducible
 - Fair

Do you agree with these principles?

Principles (2)

RER verification should be:

- Impartial
- Prudent
 - In case of doubt, conservative
- Transparent
 - Both positive and negative findings should be reported
- Constructive
 - Identifying any information gaps or areas for improvement in data collection and/or processes

Do you agree with these principles?

Procedure elements

Recycling Efficiency Rate Calculation and Verification Procedure

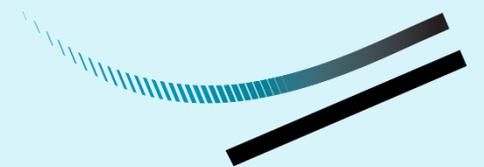
RER Calculation

- Methodologies to determine tonnage received, processed, sold and disposed at the primary facility, including:
 - Material-specific guidance
 - Methodologies to exclude material that is out of scope of the RER
- Approach to obtaining and verifying downstream RER(s)
- At what point resources can be considered recovered
- Examples of resources that are and are not considered recovered (unless demonstrated otherwise)

RER Verification

- Elements to include in the verification report
- Verifier credentials
- Step-by-step approach for verifiers to review and assess the correctness and accuracy of the RER measurement and calculation, including:
 - Primary facility mass balance verification (upstream and downstream)
 - Verification of downstream RER(s)

RER Calculation



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Material inputs

- Do you measure and track the tonnage you receive?
 - If not, do you have a methodology for calculating it? Is this methodology backed with field test(s)? What are the steps included in such field tests?
- Are there inputs into your process that are not designated under the regulation or out of the scope of the RER, but are difficult to measure and exclude?
- If you process materials from multiple jurisdictions, what systems do you have to confirm that materials are sourced in Ontario? Are these based on actual tracking?
 - If not, do you have a methodology for calculating the % of feedstock and output attributable to Ontario? Is this methodology backed with field test(s)? What are the steps included in such field tests?

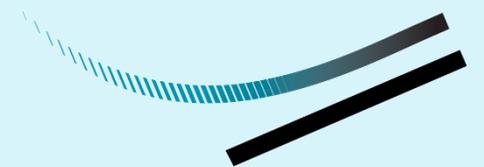
Resource recovery (1)

- How do you track the outgoing tonnage, and what documentation do you maintain relating to it?
 - What data measurement systems do you have in place to comply with permitting requirements, and how do these systems relate to the calculation and verification of residuals?
- How many downstream processors are in your supply chain before the material becomes a product or displaces a virgin material resource?

Resource recovery (2)

- What information do you or can you obtain on the downstream recovery performance?
 - Do you think downstream recycling performance should be determined specifically:
 - For your shipments?
 - Per downstream facility?
- How often do downstream vendors change, and does or should this impact RER verification?

RER Verification



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Verification report elements

What should be included in a verification report?

1. **Verifier and competence**
2. **Scope of verification**
 1. Desktop (resources considered)
 2. Onsite (sites and duration)
3. **Sampling methodology**
4. Assessment of data management systems and controls
5. Summary of verified RER calculation inputs and outputs
6. Summary of assumptions or other data considerations
7. Summary of discrepancies and opportunities for calculation improvement
8. Verification Statement
9. Review declaration

Verifier Credentials

What credentials or knowledge should the verifier have? For example:

- Certified Professional Engineer
- Certified Environmental Auditor
- Other?

Can the verifier be a staff member of the company, or does it have to be an independent third party?

- If a staff member, can this person be the same person the one preparing the calculation that is the scope of the verification?

Verification Scope

- What should be the scope of the desktop verification?
 - Processor RER
 - Downstream processor RER
- Should there be an onsite verification to confirm the processor RER? Or should that depend on the situation, for example:
 - Depending on the verifiers' familiarity with the client facility or process?
 - Depending on the methodologies used in the calculation?

Verification Downstream RER

- Can downstream RER verification be standardized in your supply chain?
- If yes, what information and supporting documentation should downstream processors provide to the EEE processor? For example:
 - Legitimacy of the downstream processors per material category sold
 - Third-party verification report of RER calculation for a predetermined standard feedstock description
- If not, what are other approaches to quantifying and verifying downstream RER(s)?

Sampling Methodology

- What is an acceptable sample size for massflow desktop verification?
 - 5% of shipments?
 - More?
- Onsite verification:
 - What is an acceptable sample size?
 - What is a reasonable frequency?
 - Should sample size be a function of the amount sent to a downstream processor?
 - Should machinery be cleaned out before RERs are measured?
- How often do downstream vendors change, and should this impact the sampling methodology?

Submit your feedback

Stakeholders are encouraged to submit their feedback up until April 14, 2023, to consultations@rpra.ca.

These insights will be taken into consideration during the development of the initial draft of the procedures.