

R2v3...The Next Evolution of the R2 Standard

The original intent of the R2 Standard remains unchanged in R2v3 and many of the requirements in R2v3 will be familiar—just reorganized into **Core Requirements** (applicable to all R2 facilities) and specialized **Process Requirements** (additional requirements applicable only to R2 facilities that perform specific processes). In cases where requirements were unclear or ambiguous, clarifying language was added for better understanding of expectations, and to achieve more consistent implementation, audits and outcomes.

Summary of R2v3 CORE REQUIREMENTS

1 **Scope** *(in R2:2013, covered by Provision 1)*

Added scope requirements to ensure transparency and that all R2-related activities performed at a facility are audited and included on the R2 Certificate.

2 **Hierarchy of Responsible Management Strategies**

(In R2:2013, covered by Provision 2)

- Focus remains on **reuse** before other management strategies. This core principle of R2 is aligned with the global trend towards a more circular economy.
- Focus Materials continue to be prohibited from disposal.

3 **EH&S Management System**

(in R2:2013, covered under Provisions 1, 4, 13)

- Includes all of the core EH&S related requirements in the same section for greater clarity and efficiency
- Increased emphasis on risk assessment, inspection, and monitoring activities to ensure potential hazards are being identified and managed.

4 **Legal and Other Requirements**

(in R2:2013, covered under Provision 3)

- Separated compliance monitoring into individual requirements to ensure adequate coverage of each.
- New requirements: prohibition on the use of child and forced labor; and developing and maintaining a non-discrimination policy.

5 **Tracking Throughput**

(In R2:2013, covered by Provision 2)

- New requirements for tracking, managing, and maintaining records for equipment 'under control.'
- New requirements regarding inventory levels, and storage of negative value/controlled equipment.
- More clarity regarding inbound, under control, and outbound equipment.

6 **Sorting, Categorization and Processing**

(NEW- Clarifies & strengthens R2:2013 Provisions 2 & 6)

- New **R2 Equipment Categorization (REC)** reference document to be used in conjunction with the R2v3 Standard.
- New requirements provide more clarity about how equipment is categorized and how R2 requirements are applied.

7 **Data Security**

(in R2:2013, covered under Provisions 8 & 10 3)

- Enhanced requirements for securing the facility; receiving and securing data containing equipment; and securing and tracking equipment during transport.
- Controls for sanitizing equipment in a timely and effective manner.

8 **Focus Materials**

(In R2:2013, covered by Provision 5)

- Requires FM management plan and downstream flowchart to final disposition **OR** 1st R2 Facility.
- Existing R2:2013 requirements for Removal of FMs and Selection of Downstream Vendors move to *Process Requirements*.

9 **Facility Requirements**

(in R2:2013, covered under Provisions 9 & 11)

- New requirement to register closure plan & financial instrument with SERI. Small, low risk facilities may be exempted from financial assurance.
- Pollution liability insurance moved to *Process Requirements*.

10 **Transport**

(in R2:2013, covered under Provision 12)

- Proper packaging of equipment, components, and materials during transport to prevent environmental, health, or safety hazards; and to secure data containing items.
- Clear and accurate labeling and shipping documents.
- All transport, including import/export, must be in compliance with legal requirements.

Summary of R2v3 PROCESS REQUIREMENTS

While **Core Requirements** are applicable to all R2 facilities, **Process Requirements** are additional requirements that apply only to R2 facilities that perform those specific processes. Many **Process Requirements** are based on R2:2013 requirements, but are reorganized, clarified and/or enhanced as needed to achieve more consistent implementation and outcomes.

R2 Facilities are not required to perform all R2-related processes in order to be certified. It is important to note, however, that all R2-related processes performed at a facility ***must be audited*** and cannot be excluded from R2 Certification.

A Downstream Recycling Chain

(Consolidates R2:2013 Due Diligence requirements covered in Provisions 3, 5, 6, 8 & 11)

- Downstreams must be registered with SERI. Facilities no longer required to document downstream beyond the 1st R2 Certified downstream vendor (DSV).
- Due diligence still required for each DSV in the recycling chain to ensure conformance to R2 DSV requirements.
- New for Non-R2 DSVs: 1-year time limit to process and proof of data destruction.

B Data Sanitization *(Replaces R2:2013 8a)*

Core Requirements for Data Security (R2v3 Prov. 7) apply to ALL R2 Certified facilities.

- Process Requirements for Data Sanitization apply ONLY to R2 facilities that perform data sanitization using logical or physical sanitization processes.
- New or enhanced requirements for traceability, security controls, notifications of discrepancies, and verification by Data Protection Manager.
- More prescriptive requirements in certain areas to achieve desired outcomes.

C Test and Repair

(Replaces or enhances requirements in R2:2013 Provisions 6 & 8)

- Applies to facilities performing test & repair in-house.
- Must be certified to Quality Management System standard ISO 9001 or RIOS.
- Certified to Process Requirement B – Data Sanitization.
- Requires detailed R2 Reuse Plan for test and repair by equipment type; test results recorded for each function tested; and product safety evaluation.
- 1 year limit to process equipment and components.
- Requires technical competency of workers.

D Specialty Electronics Reuse

(in R2:2013, covered under Provision 6)

- New requirements for R2 Facilities concentrating in the specialty equipment market.
- This Process Requirement will not eliminate the ability for most R2 facilities to sell Specialty Equipment for Reuse under the 1% rule.

E Materials Recovery

(In R2:2013, covered primarily by Provisions 4 & 5)

- Required for any R2 Facility processing electronics for materials recovery including manual dismantling, mechanical separation, or other engineered method.
- Requires Environmental Pollution Liability Insurance
- Targeted and enhanced EH&S requirements for higher risk methods including wash facilities, clean areas for eating, transition rooms, medical monitoring.
- Allows for precious metal refiners, lead smelters, battery recyclers, lamp processors, etc. to be R2 Certified.

F Service Only

- Intended to enable contracted service arrangements while ensuring that the same R2 requirements apply to all equipment, components and materials being serviced at the R2 Facility.
- Controlled equipment, components and material shall only be transferred to an R2 Certified downstream vendor. Owner of equipment must disclose to R2 Facility the R2 Certified downstream vendor and provide commercial records of transfer.

G Brokering

- Clarifies requirements for brokering only (no facility), **AND** to facilities that perform brokering services.
- Requires QMS Certification (ISO 9001 or RIOS) for brokering activity.
- Certified to Process Requirement A - Downstream Recycling Chain.
- Must provide packaging requirements to seller prior to shipment (Prov. 10).

REC

(R2 Equipment Categorization)

Reference document to be used in conjunction with R2v3

- Eliminates "Key Functions" terminology and replaces R2 Ready for Reuse/Resale/Repair labels.
- Identifies the functional, cosmetic, and data sanitization status at any point in the process.
- Clarifies status of equipment throughout the process.