

CMRT EXAMINER HANDBOOK

Version 1.0

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Document Governance

Purpose:

To establish standardized supervisory review procedures for loans secured by Certified Mineral Reserve Dossiers and Certified Mineral Reserve Tokens. This handbook provides examiners and internal audit teams with a structured, repeatable method for assessing documentation integrity, collateral accuracy, and adherence to the CMRT Standard.

Scope:

Applies to financial institutions that use CMRT-backed collateral within their underwriting and credit risk management processes. Covers review steps, documentation requirements, red flag indicators, and verification methods.

Approved By:

GMxVault Standards Committee

Version History:

- Version 1.0. Initial publication.
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Legal Notice

This handbook provides guidance on supervisory review and does not constitute legal advice, a regulatory opinion, or valuation instruction. Banks remain responsible for establishing and maintaining

sound underwriting and credit risk policies. Minex.Global LLC does not dictate mineral valuation approaches or credit decisions.

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1. Overview of the CMRT Examination Framework

Certified Mineral Reserve Dossiers (CMRDs) and Certified Mineral Reserve Tokens (CMRTs) represent a standardized structure for documenting unextracted mineral reserves for collateral purposes. This handbook equips examiners with the procedures needed to review such collateral consistently.

The examiner's objective is to confirm:

- documentation completeness
- independence and validity of third-party certification
- alignment between survey volumes and CMRT issuance
- integrity of the chain of title
- accuracy of lien perfection
- reliability of audit trails
- compliance with bank credit policies

Examiners do not determine mineral values. Their role is verification of integrity and process reliability.

2. Defined Terms

CMRD:

The Certified Mineral Reserve Dossier. This is the authoritative collateral file containing the survey, validator certification, title documents, voxelization records, and audit logs.

CMRT:

Certified Mineral Reserve Token. One CMRT corresponds to one cubic meter of validated mineral reserve volume.

Validator:

An independent, credentialed professional responsible for confirming survey accuracy, title evidence, courthouse verification, and reserve volume integrity.

Voxelization:

The division of surveyed mineral reserves into one cubic meter units for consistent collateral measurement and issuance of CMRTs.

3. Required Components of a Complete CMRD

Examiners must confirm that the following documents and data elements are present and complete.

1. Geological survey
2. Reserve volume calculations
3. Mineral composition report
4. Title documentation
5. Courthouse verification memorandum
6. Validator certification
7. GeoVoxel breakdown
8. CMRT issuance report

9. Borrower attestation
10. Document hash log
11. Revision history
12. Bank pledge event documentation

The absence of any required element must be recorded as an exception.

4. Examiner Review Procedures

Examiners should follow this sequential process when evaluating a CMRT backed credit file.

4.1 Validator Verification

- Confirm validator licensing status.
- Confirm no conflicts of interest.
- Confirm certification date and signature.

4.2 Survey to CMRT Reconciliation

- Verify reserve volumes match CMRT quantity.
- Confirm voxelization occurred after validator approval.
- Confirm no adjustment to reserve volume post certification.

4.3 Title and Ownership Review

- Verify chain of title is complete and consistent.
- Confirm courthouse verification was performed.
- Confirm any applicable leases are valid and enforceable.

4.4 Data Integrity and Hash Review

- Inspect document hashes.
- Confirm no changes after validator certification.
- Review revision history for unauthorized modifications.

4.5 Valuation and LTV Review

- Confirm bank valuation method is documented.
- Confirm LTV calculations comply with credit policy.
- Confirm exceptions are justified and approved.

4.6 Lien Perfection Review

- Confirm recorded lien references the correct legal description.
 - Confirm borrower and property identity.
 - Confirm pledge event matches the CMRT issuance record.
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5. Independent Verification Methods

Examiners may independently complete the following tests to verify the accuracy of collateral.

- Compare validator-certified volume with voxel totals.
 - Confirm survey metadata matches validator records.
 - Inspect courthouse recording data.
 - Review audit trail for gaps or inconsistencies.
 - Confirm CMRT pledge quantity equals collateral schedule.
 - Verify that no overlapping pledges appear in issuance logs.
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6. Red Flag Indicators

A heightened supervision posture is warranted if any of the following appear.

- Missing validator certification
- Survey volume inconsistent with CMRT issuance
- Title irregularities or an incomplete chain of title
- Missing courthouse verification
- Document hash anomalies
- Alterations after certification
- Inadequate valuation documentation
- Validator appears financially connected to borrower
- Unexplained variances in voxelization or reserve totals

Examiners should require the financial institution to resolve or document each red flag.

7. Supervisory Expectations

Supervisory agencies expect banks to:

- maintain a complete CMRD for each loan
- use independent validators
- document all exceptions
- verify ownership and filing accuracy
- apply internal valuation standards consistently
- maintain audit-ready records of CMRT issuance and pledge events
- ensure no conflicts of interest in collateral documentation

The CMRT Standard exists to support these expectations by providing uniform structure, traceability, and independent validation.

8. Examiner Conclusion and Documentation

Examiners should prepare a written conclusion summarizing:

- completeness of documentation
- accuracy of collateral representation
- adherence to policy
- any exceptions or corrective actions
- assessment of the overall integrity of the CMRT collateral

The conclusion becomes part of the institution's examination workpapers.

Contact Information

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