Orenna

Buyer / Claimant

Standard Operating Procedure

Version 1.0

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This document standardizes how Buyer organizations use the Orenna platform to review projects, manage unit inventory, execute retirements, and generate claims packs for sustainability reporting and audit.

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1) Purpose

This SOP standardizes how Buyers (Corporate Claimants / Portfolio Owners) use Orenna to manage the complete lifecycle of water benefit claims—from receiving units through retirement and audit-ready reporting. The platform is designed as registry rails for credible outcomes: evidence packs are versioned and locked, verifier attestations are tied to evidence, and lifecycle events are recorded in a tamper-evident way.

Buyers use Orenna to:

- Onboard a Buyer organization and secure access (RBAC + MFA where required)
- Conduct consistent portfolio due diligence on projects, methods, and attestations
- Receive serialized Registry Units (via transfers) and maintain chain-of-custody
- Execute retirements to support sustainability reporting and disclosures
- Generate Retirement Receipts and Claims Packs suitable for audit/assurance
- Maintain audit readiness using platform audit trails and immutable evidence lineage

All funding of benefit projects and "sale" of volumetric water benefits occurs directly between Seller and Buyer outside of the Orenna ecosystem.

2) Scope

In Scope (Buyer Responsibilities)

- Buyer organization onboarding and access control
- Review and selection of units/projects for purchase (commercial agreements typically off-platform)
- Acceptance and management of unit inventory (received transfers)
- Retirement execution (including internal approvals and disclosure choices)
- Claims pack generation and export for reporting/audit
- Ongoing portfolio governance (period close, annual reporting, audit requests)

Out of Scope (Owned by Other Parties)

- Project development and evidence creation (Seller-owned)
- Independent verification decisions and signing (Verifier-owned)
- Pricing, contracting, invoices, payment settlement (handled off-platform)

3) Key Definitions

Term	Definition
Buyer	Organization retiring benefits for ESG/sustainability reporting and disclosure
Registry Unit	Serialized unit representing a verified outcome (ISSUED → TRANSFERRED → RETIRED)
Retirement	Final consumption of units (irreversible); generates a receipt (PDF + JSON)
Claims Pack	Audit-ready documentation package with retired unit serials, attestations, evidence hash proofs, and summary metrics
Vintage	Reporting year/time window tied to benefit delivery (e.g., 2024)

4) Roles & Responsibilities (Buyer-Side)

Buyer Organization Roles (OrgRole)

Role	Permissions
OWNER / ADMIN	Full org management (members, security, integrations)
COMPLIANCE	Read-only + exports (ideal for audit/assurance team)
BILLING	Subscription management (where enabled)
MEMBER	Basic membership

Buyer Project Access Roles (ProjectAccessRole)

Role	Permissions
BUYER_VIEWER	Read-only access to project and registry information
BUYER_RETIREMENT_OPERATOR	Can execute retirements for portfolio management

Buyer roles are intentionally limited to prevent accidental project/evidence edits.

Controls & Governance Responsibilities

OWNER/ADMIN ensures:

- Least-privilege access
- Correct retirement operator assignment
- Security posture (MFA where required)

RETIREMENT OPERATOR ensures:

- Retirement is aligned to the correct reporting period, purpose, and disclosure preferences
- Retirement receipts are stored and referenced in reporting workflows

COMPLIANCE ensures:

- Claims packs/receipts exported and retained per policy
- Audit artifacts are retrievable and consistent

5) Systems, Access & Prerequisites

Required Access

- Orenna application access via Privy authentication
- Membership in a Buyer organization
- Units in inventory (received via transfer) to retire

Recommended Prerequisites (Buyer Internal)

Before you start retiring units, have:

- Your **claim policy** (what you will say publicly, and what disclosures are required)
- Your reporting calendar (FY, quarter, or program cycles)
- Your internal approval chain (who approves retirement requests)
- Your basin/region priorities (context-based stewardship goals often vary by catchment)

6) Buyer Workflow Overview

The Buyer workflow follows a linear progression from receiving units through retirement and reporting. Transfers, retirements, receipts, and claims packs are the core buyer workflows.

Buyer Lifecycle Map

```
Receive Units (TRANSFERRED to Buyer org)
↓
Portfolio Review (project / method / attestation / vintage)
↓
Retirement Planning (purpose + reporting period + disclosure)
↓
Execute Retirement (burn/consume units)
↓
Artifacts Produced:
• Retirement Receipt (PDF + JSON)
• Claims Pack(s) (portfolio or project scoped)
↓
Reporting / Audit / Assurance
```

7) Detailed Procedure

7.1 Buyer Onboarding & Organization Setup

OWNER/ADMIN Steps:

1. **Sign in** via Privy authentication
2. **Navigate to Organization Settings** — confirm organization profile details
3. **Invite team members** and assign OrgRoles: OWNER/ADMIN (keep minimal), COMPLIANCE (audit/export team), MEMBER (general users)
4. **Assign BUYER_RETIREMENT_OPERATOR** only to approved individuals
5. **Ensure security requirements are met** (MFA is enforced for OWNER/ADMIN roles)

Control Point (Must Pass)

✓ Least privilege applied (few admins; few retirement operators)
✓ Compliance/audit team has read + export access
✓ Retirement operators trained on retirement purpose + period rules

7.2 Discover & Review Projects (Due Diligence)

Buyers may review project details either via project access granted by the Seller (read-only) and/or public registry views (unit lookup by serial and lifecycle history).

Buyer Review Steps:

1. Navigate to **Registry / Project view** (depending on access)
2. Validate: basin/location context aligns with your corporate target geography
3. Validate: methodology (VWBA / WQBA / NbS) matches intended claim type
4. Validate: vintage and reporting boundaries align with your reporting period
5. Validate: verifier attestation exists and references the relevant evidence pack
6. Check evidence integrity signals (locked evidence packs, hash proofs)

Control Point

✓ You can explain (internally) what you're claiming, where, when, and based on what verification
✓ Attestation and unit metadata are consistent (method + vintage + project)

7.3 Receive Units into Buyer Inventory

Confirm chain-of-custody and ensure inventory is correct upon receipt.

1. Monitor incoming transfers (Seller → Buyer) in your **portfolio/inventory** view
2. Validate: sender organization and intended recipient (your buyer org)
3. Validate: quantity and unit serial numbers
4. Validate: method and vintage are what you expected
5. Export or capture a record of the transfer event if your governance requires it

Control Point

✓ Received inventory matches your off-platform agreement (quantity, vintage, project)

✓ Units are in TRANSFERRED state under your org before retirement planning

7.4 Plan Retirements

Retire the right units at the right time, with the right disclosure metadata.

Buyer Retirement Planning Inputs:

- Reporting period (FY, calendar year, quarter)
- Purpose statement (why these units are being retired)
- Beneficiary disclosure choice: public vs private (where supported)
- Any internal claim language constraints or legal review requirements

Recommended Internal Controls:

- Require dual approval for retirements above a threshold (e.g., large volumes or high-visibility claims)
- Use a standard retirement "request form" internally (see templates in Appendix)

7.5 Execute Retirement

Prerequisite: Units exist in your org inventory (typically TRANSFERRED).

1. Navigate to **Retirements** → **New Retirement**
2. Select units to retire: by project, method, vintage, or serial range (as supported)
3. Complete required retirement metadata: reporting period/date, purpose, beneficiary (optional), disclosure preferences
4. Submit retirement
5. Confirm retirement state: units move to **RETIRED** (final state)

Output: Retirement Receipt generated (PDF + JSON documentation, with audit trail).

Critical Control

✓ Retirements are irreversible (retired units cannot be transferred again)

✓ Confirm selection carefully before submission

7.6 Generate Claims Packs

Produce audit-ready documentation for disclosure and assurance.

Claims Pack Options:

- **Portfolio scope:** all retirements in a selected period
- **Project scope:** retirements for a specific project in a selected period

1. Navigate to **Claims Packs**
2. Select: scope (portfolio or project) and date range / reporting period
3. Request generation
4. Download when status is **READY**

Claims Pack Contents (Typical):

- Unit serial numbers and quantities
- Methodology references
- Verifier attestation references/signatures
- Evidence hash proofs
- Ledger/lifecycle event references
- Timestamp of pack generation

Control Point

✓ Claims pack scope matches what you are disclosing publicly

✓ The pack is stored according to your retention policy

7.7 Reporting, Disclosure & Audit Support

Standard Practice:

- Use the **Retirement Receipt** as the single source of truth for "consumed/claimed units"
- Use the **Claims Pack** for audit/assurance requests and for structured reporting

Orenna is explicitly designed to help enterprise buyers move from narrative claims to **quantified, auditable outcomes** with defensible due diligence artifacts.

If Auditors Ask "Show Me the Evidence Trail":

Provide:

- Claims pack
- Retirement receipt(s)
- Unit serial lookup(s) from registry
- Verifier attestation references

Keep sensitive documents inside the platform's access controls—avoid uncontrolled email attachments where possible.

7.8 Exceptions Handling

A) Inventory Mismatch (Quantity/Serials Not as Expected)

- Do **not** retire units until resolved
- Compare: transfer record in platform vs off-platform agreement
- Escalate to Seller + Orenna admin support with: transfer identifiers/metadata, expected vs received summary

B) Disclosure Change After Retirement

- Retirement cannot be undone
- Use: an updated claims pack for the correct reporting scope
- Use: an internal correction memo referencing the original receipt ID/time
- If public statements were issued, involve legal/comms per your policy

C) Finding That Impacts Claim Eligibility

- Pause retirements for the impacted cohort
- Request updated evidence/attestation from Seller (new evidence pack/version may be required)

8) Buyer Checklists

8.1 Buyer Onboarding Checklist

- ■ Buyer org created / confirmed
- ■ Roles assigned (few OWNER/ADMIN; defined retirement operators)
- ■ Compliance/audit team has COMPLIANCE role
- ■ MFA enabled for privileged roles
- ■ Internal retirement approval policy documented

8.2 Pre-Retirement Checklist (Per Retirement Event)

- ■ Units are in Buyer inventory (TRANSFERRED to your org)
- ■ Project + basin + method + vintage match intended claim
- ■ Verifier attestation exists for the issuance basis
- ■ Reporting period selected correctly
- ■ Purpose statement approved internally
- ■ Disclosure preference confirmed (public/private beneficiary where applicable)

8.3 Post-Retirement Checklist

- ■ Retirement Receipt (PDF + JSON) downloaded/stored
- ■ Claims Pack generated for the correct scope (portfolio/project)
- ■ Receipt/pack links stored in your reporting workpapers

- Audit trail retained per policy

9) Buyer Operating Standards

9.1 Least Privilege Access

- Only assign **BUYER_RETIREMENT_OPERATOR** to users who execute retirements
- Use **COMPLIANCE** for auditors/assurance providers needing exports

9.2 Audit-Ready Behavior

- Prefer platform-native artifacts (receipts, claims packs, registry lookup) over custom one-off slide decks
- Keep all decisions tied to a period and purpose

9.3 Claims Integrity Guardrails (Recommended)

Do not "mix and match" claims language across methods:

- VWBA outcomes are volumetric; WQBA outcomes are indicator-typed

Be explicit about:

- Basin/catchment relevance
- Vintage/year alignment
- What the units represent and what they do not represent

10) Appendix: Buyer Templates

A) Internal Retirement Request

Retirement Request — Orenna

Requester:
Business unit / Region:
Reporting period (FY/Q/Calendar):
Intended public claim (draft):
Project(s):
Method(s): (VWBA / WQBA / NbS)
Vintage(s):
Quantity to retire:
Beneficiary disclosure: (Public / Private / N/A)
Purpose statement:
Approvals required:
- Sustainability lead:
- Legal:
- Finance (if applicable):
Notes / risk flags:

B) Buyer-to-Seller Clarification Message

Subject: Clarification needed — Units / Project verification artifacts

Hi [Seller Contact],

We received/transacted units for Project [Name], Vintage [Year], Method [X].
Before retirement, we need clarification on:

1) [Question about basin/boundary/vintage]
2) [Question about attestation scope]
3) [Question about units/serial ranges]

Please respond in-platform if possible so the audit trail remains centralized.

Thanks,
[Buyer Name / Role]

C) Auditor Handoff Cover Note

Subject: Orenna Water Benefit Claim — Audit Artifact Package

Attached / Provided:
- Claims Pack (scope: [portfolio/project], period: [dates])
- Retirement Receipt(s) (PDF + JSON)
- Unit serial list and registry lookup references
- Verifier attestation references

Contact:
- Buyer compliance lead: [Name]
- Orenna platform contact (if needed): [Name]

Orenna

Infrastructure for Credible Ecosystem Outcomes

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