Universal Carbon Registry
Rainwater (RoU) Program Manual (Ver 1.0)

February 2022

UCR RoU Program Manual

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1. Universal Carbon Registry Rainwater (RoU) Program- (UCR RoU Program Manual) Overview

1.1 Introduction

Universal Co2 Emission And Offset Registry Pvt Ltd (Universal Carbon Registry or UCR) is a private limited company located in New Delhi, India (incorporated under the Companies Act, 2013, India. CIN: U74999DL2021PTC382180) and aims to launch a low cost, simple and robust voluntary water offset standard and accompanying voluntary water offset/credit registry/platform (UCR RoU Platform or RoU Registry) to enable a sustainable and water positive world economy.

The UCR Rainwater (RoU) Standard receives water conservation, recharging and recycling projects from the entire world, although it places special emphasis on water efforts in India and especially early action small scale projects that have been under-represented in water or environmental markets. *RoUs are generated for unutilized water sources that can be harvested/recycled/conserved repeatedly with negligible environmental impacts.* The UCR Rainwater Offset Standard and its flagship RoU registry platform is a one-stop shop for registration of positive unutilized water conservation, recharge and harvesting projects and issuance of water credits (Rainwater Offset Units or RoUs) based on the simple principle that project activities within the RoU system do not cause any net-harm to the environment and society or establishes water security via restoring groundwater or water harvesting efforts or contributes to the water sustainability goals as set out by India.

The UCR Rainwater Offset Program (UCR RoU Program) is comprised of the entire governance structure, registry platform system and the documentation framework to achieve this objective. The objective of this manual is to drive water harvesting, recharge and conservation efforts, defined as the actions taken for capturing/recycling/reusing unutilized sources of water that are socially and culturally equitable, environmentally sustainable and economically beneficial, achieved through on site or catchment project activities.

The UCR RoU Program has been designed based on international and traditional best practices, including:

- assuring transparency through a pre-approved positive list of eligible project activities;
- providing a de-centralized structure for accepting standards (e.g., baseline and monitoring methodologies) that are new to the water conservation and recharging market;
- establishing a low cost and fast project registration cycle, including transparent and simplified project registration and water-credit issuance procedures;
- establishing an international water registry to track, trace and retire water credits;
- ensuring effective approval of project and emission-reduction verifiers;
- adopting provisions to ensure and evaluate the sustainable-development performance of projects; and
- creating a platform for allowing results-based finance of projects via decentralized blockchain token technology for decentalized access to environmental finance.

This document provides the general provisions governing the UCR RoU Program and the development of UCR RoUs (water Credits or Offsets) Project Protocols, Verification, Registration of RoU Projects, and issuance and transfers of RoUs from projects registered in the UCR RoU Program or associated Registry. Project specific protocol guidance can be found in the individual UCR Standard. The procedures used to assess these proposals as candidates for new RoU project types are also described in this document.

1.2 General Qualifications

The UCR RoU Program Manual (this document) is the overarching program document and provides links to various UCR documents containing the rules and requirements governing the UCR RoU Program. The manual describes key elements of the program, such as the UCR Rainwater (RoU) Standard, UCR RoU Platform/Registry and approval requirements for UCR Water Verifiers.

All project activities are awarded verified or voluntary water credits (RoUs) for unutilized water conservation and recharge efforts (with or without treatment) worldwide as 1 (one) RoU equals 1000 litres ($1m^3$) of rainwater/unutilized water captured or recycled/reused from systems and measures undertaken by individuals and entities per year. **All project activities must be currently operational.**

The RoU or UCR RoU Projects can be registered on UCR via www.ucarbonregistry.io or www.ucarbonregistry.com,

directly by the Project Owner (Seller), or through a registered Aggregators (entities who open a UCR membership account as a Seller on behalf of the project owner or multiple project owners). Aggregators may serve as administrative agents for multiple small Project Owners in order to minimize verification costs and time. Aggregators manage project documentation, arrange for independent verification by Approved Verifiers, effect RoU transfers, conversion or retirement on behalf of Project Owners, and distribute sales proceeds back to the Project Owners in a de-centralized or centralized trading system. Entities wishing to register eligible RoUs with the UCR RoU Program must first qualify as an approved Participant (Seller) or must work through an Aggregator.

The generic considerations of UCR RoU Program are mostly based on the following combination of available guides and manuals:

(a) Rainwater Harvesting and Conservation Manual, 2019 (link) ,
(b) Guide on Artificial Recharge to Ground Water (link)
(c) Rainwater Harvesting Techniques To Augment Ground Water (link)
(d) Manual on Artificial Recharge of Groundwater (link)
(e) IS 15797: 2008 (link) and
(f) UCR Water Data Guide (link)

The UCR RoU Program provides a global platform for positive water conservation and/or recharge and/or recycling and/or harvesting projects and issuance of water offset/credits for eligible project activities, through an integrated and de-centralized UCR Registration, Verification and Issuance process.

The UCR RoU Program deals with the following sectoral scopes:

Scope 1	Measures which enhance the sustainable yield in areas where over-development has depleted the aquifer.
Scope 2	Measures for conservation and storage of unutilized water for future requirements.
Scope 3	Measures that improve the quality of existing ground water through dilution with rainwater runoff.
Scope 4	Measures that remove bacteriological and other impurities from *seawater**, sewage and waste water or unutilized water so that water is suitable for re-use and/or recycling. ***Desalination plants using seawater are eligible only if the project activity is powered by renewable energy systems and clear documentation and practices on brine management and scientific data is provided during registration indicating no net harm to the local marine ecosystem.***
Scope 5	Conservation measures taken to recycle and/or reuse water, spentwash, wastewater etc across or within specific industrial processes and systems, including wastewater recycled/ reused in a different process, but within the same site or location of the project activity. Recycled wastewater used in off-site landscaping, gardening or tree plantations/forests activity are also eligible under this Scope.

The *Scopes* mentioned above are part of the UCR requirements and shall be met either by the Project Owner or Aggregator (Sellers) or the Verifier who undertakes the verification and audit services on behalf of the Project Owner or Aggregator. Where there is any conflict between UCR Rainwater Offset (RoU) Standard, documentation and the above-mentioned Scopes, the UCR RoU Program (this document) shall take precedence.

1.3 Use of RoUs

Rain Water Offset Unit or Credit (RoU) is a volumetric measure of water harvested, recycled or conserved through project activities and expressed as m^3 or 1000 litres of water per year. *It is not a measure of the severity of the local environmental impact of water harvested or consumed and is not necessarily based on specific water quality or pollution standards.* Increasing, the supply of unutilized rainwater to groundwater and/or for reuse or recycling of process wastewater streams or treatment of unutilized water for potable purposes (subject to conditions) is the challenge this standard aims to address through the creation of RoUs.

The UCR RoU Program may issue RoUs on an annual basis or more frequently for some project activities on the submission of the required project verification documentation to the UCR. However, since the RoU Program quantifies conservation and recharging activities, it becomes the first water program and standard to award water offset units in terms of RoUs that can be used for water footprint (WF) offsetting purposes since it introduces an unutilized source of water, hence potentially compensating the WF of virtual water in supply chains, products and services worldwide.

1.4. Eligible Project Types

The generic requirements of the UCR RoU Program explained above, are based on list of documents utlined in Section 1.2 above, whereas the specific requirements of the UCR RoU Program are stipulated in the UCR Standard. UCR RoU Program, in cooperation with experts from the academic, industrial, government and non-governmental sectors, has developed and continues to establish eligibility and technical criteria for a variety of RoU Project categories. The eligibility criteria for projects to be registered as UCR Project Activities are contained in the UCR RoU Standard. The process for developing, submitting and seeking registration of a project is described in the UCR RoU Program Processes. Specific eligibility criteria for each project type are contained in UCR RoU Standard and as below.

Currently, the following project activities have prescriptive eligibility, evaluation and verification requirements:

Table 1: Eligible Project Types within the UCR RoU Program	
Different types of artificial recharge structures such as sub-surface dykes, nalla bunds, tank excavation and minor irrigation tanks that store the excess monsoon run off on the surface which other than supplying water for irrigation and/or are also used to recharge the shallow unconfined aquifer to create additional subsurface storage for further utilisation.	Percolation tanks with associated recharge shafts.
Desalination systems using seawater **<u>are eligible only if they meet all</u>** of the following: • *the project activity is powered by 100% renewable energy, **and** the brine generated by the desalination process or other types of waste, is not released into the surrounding environment causing damage to the marine ecosystem in the vicinity of the project activity.*	Artificial recharge through lateral shafts with associated injection wells
Sub surface barriers with associated gravity head inverted wells.	Roof top / paved area rainwater runoff diversion into injection tubewell or well or tank.
Replenishment of ground water reservoirs through artificial recharge by rainwater harvesting which involves inducing, collecting, storing and conserving local surface runoff.	Gabion and check dam structures across streams. Construction of artificial recharge of stagnant water in depressions with recharge shafts piercing through impermeable clay horizons.
Taanka traditional rainwater harvesting technique.	Panam keni type wells.
Johad (small earthen check dam) system to conserve and recharge ground water.	Kund system with associated underground well.
Baoli harvesting system with associated drainage systems	Nadi pond system for rainwater harvesting
Zabo rainwater harvesting system, Jackwell bamboo interconnected rainwater harvesting systems, Traditional ramtek model of rainwater harvesting system	Eri (tank) system of rainwater harvesting
All types of water purification systems creating potable drinking water from previously untapped water resources.	Conservation measures that recycle and/or reuse water and/or spentwash and/or wastewater across or within specific industrial processes and systems, including wastewater recycled and/or reused in different process activities, but within the same site or location of the project activity. Recycled wastewater from ETPs being used in off-site landscaping, gardening or tree plantations/forests/ reforestation activities.

In addition to recharge, consrvation, recycling and harvesting measures, the UCR RoU Program also provides an opportunity for Sellers to voluntarily demonstrate that their Project Activity does not cause any net harm to the environment and society, based on acceptable environmental and social standards within the environmental and water sustainability domain using ESG and NetZero principles.

1.5 Principles of the UCR RoU Program

The objective of this RoU Program is to drive water harvesting, recharge and conservation efforts, defined as the actions taken for capturing/recycling/reusing unutilized sources of water that is socially and culturally equitable, environmentally sustainable and economically beneficial, achieved through on site or catchment project activities. The UCR RoU Program employs rules designed to provide easily understood performance criteria for potential Project Owners and aims to include small and large scale projects at par to access climate finance. The COVID-19 pandemic has revealed the inter-relationships between the environment and our livelihoods. Climate change is our biggest challenge, and it's time to switch to a sustainable future in 2022. Water now finds itself at the heart of a decarbonised ecosystem that delivers multiple additional benefits for society and the environment.

India has no water trading market framework to provide universal and equitable access to safe, adequate and climate-resilient drinking water and sanitation services, however, India exported virtual water amounting to 496.98 trillion litres and imported 237.21 trillion litres during the 2006-2016 period. Virtual water export is the volume of water used domestically for making export products which are consumed elsewhere. Blockchain and commodity companies are already creating digital product tokens with a sort of "nutrition label" for every commodity that's been bought and sold to enable provenance. The supply chain industry for commodities is moving towards ESG tags for CO2 emissions, female participation, data on whether it was involved in modern slavery and water pollution, among other ESG parameters. We envision the creation of blockchain RoU tokens, created by users of this program, that can be wrapped or attached around product and supply chains seeking positive ESG or NetZero credentials seamlessly to help showcase water recycled, recharged and conserved.

The UCR criteria allow Participants, the Program Administrator and Approved Verifiers to distinguish best-in class water harvesting/recycling/recharging activities that may benefit from the de-centralized water finance market that could incentivize and make water positive action profitable.

Users of this methodology understand their own water use, catchment context and shared concerns in terms of water governance; water balance; water quality; important water-related areas (IWRAs); water sanitation and hygiene (WASH), and engage in meaningful individual and collective actions that benefit people, the economy and nature. In all project activities, under the UCR program/methodology, the end use of the water must either be consumption, utilization or groundwater recharge.

This manual, and the UCR RoU Standard, employs a broad monitoring and accounting framework that is expected to capture the impacts of various water recharging, harvesting, recycling and conservation practices aimed at unutilized water savings and/or enhancing groundwater supply stocks. Projects may apply a combination of practices as set out in Section 1.2 of this document.

It is not mandatory for UCR RoU Verifiers/Auditors to conduct an on-site visit or site inspections during project verification for proposed UCR Project RoU Activities. Verification is to be conducted remotely in view of the COVID pandemic across the world. Site visits are not required under the UCR program in the interest of health and safety concerns. This criteria for site visits is left at the sole discreation of the UCR verifier in case the COVID pandemic ends in the future.

The following summarizes the brief expectations of the UCR RoU Program from participants:

(a) Water offset or recharge or conservation or savings achieved by the Project Activity are conservative, real and verifiable;

(b) Contributions towards achieving voluntary water related Environment, Social and Governance (ESG) and/or Sustainable Development Goals (SDGs) are demonstrable; and

(c) Claims that the Project Activity does not cause any net harm to the environment or/and society are transparent

(d) RoUs are generated for water that can be harvested repeatedly with negligible environmental impacts – a condition that is analogous to sustainable water use.

1.5.1 Relevance

Project Protocols are designed to balance requirements for adequate documentation and verification of environmental effectiveness with the goal of minimizing transaction costs and time, while maintaining environmental integrity.

1.5.2 Completeness

Project Protocols are developed to ensure all unutilized water sources are appropriately included and quantified, project boundaries are defined where necessary, negative environmental and social impacts are avoided, and reporting requirements are well-defined.

1.5.3 Consistency

Project types obtain consistency through the development and use of standardized protocols and to ensure compatibility with the end goal of this Program.

1.5.4 Accuracy

Project Protocols are designed to generate unbiased estimates of water savings/recharge or conserved. RoUs, serve as an important tool in rebalancing the water dynamics of the region by incentivizing and monetizing all efforts to harvest and conserve rainwater and to methods that recycle and reuse wastewater or to projects that convert an unutilized water source into usable water. The establishment of RoUs leads to a water-rich environment. RoU estimates represent the best available scientific and technical information, as evidenced by peer-review published studies and high-quality research findings and archived rainfall data.

1.5.5 Transparency

Project Protocols and verification procedures are designed in a transparent fashion to evaluate and incorporate input from multiple stakeholders. Protocols are laid down based on acceptable international standards and buyer requirements in the voluntary virtual water market.

1.5.6 Conservativeness

Conservative quantification methodologies are adopted to ensure that accurate estimates will, if any potential deviations occur, undercount the quantity of actual RoUs through the application of discounts to parameters used to calculate RoUs.

1.6 General Terms and Conditions under the RoU Program

By registering a Project with UCR, each Project Owner acknowledges and agrees to the UCR Terms and Conditions required by a particular project type, as well as the general terms and conditions provided below:

1. The enrolled RoU Project Activity meets all applicable eligibility rules of the UCR RoU Manual and Standard.

2. UCR will issue to the appropriate Account of the Project Owner a quantity of RoUs based on the entire recognized verified credits approved by the UCR auditor/verifier. **The RoU issuance process and serialization will begin immediately at the time of verification report/statement submission by the Owner or aggregator for all the vintage years applicable.**

3. Each sale or transfer of RoUs executed through the Registry shall represent a complete transfer of all legal rights associated with the RoUs. The transferred legal rights are those corresponding to the quantity and Vintage of the RoUs issued in accordance with the terms and conditions provided in this section and other applicable provisions.

4. Sellers and Buyers within the UCR Platform may trade, transfer, retain, burn and tokenize or retire the RoUs earned under these provisions and as specified under the UCR Terms and Conditions document.

5. The Project Owner may elect to deregister the RoUs once registered with UCR. The Project Owner, Seller or Aggregator must cancel or deregister RoUs prior to entering into an agreement to sell the associated RoUs outside of UCR RoU Platform and RoU Registry.

6. UCR makes no warranty as to the marketability or market value of RoUs.

7. The Project Owner(s), and, when applicable, the Aggregator, is required to submit a signed Project Verification Report through a UCR-Approved Verifier that confirms conformance with the terms herein. Representatives of UCR may conduct onsite or virtual inspection of registered Projects and related documents. Each Project Owner or Aggregator agrees to provide access in such cases in a prompt and cooperative manner. All UCR RoU Projects, reports and verification reports are subject to inspection and review by any provider of regulatory services designated by UCR, and by other independent experts as may be engaged by UCR and also available on its pubilc database available worldwide for download and viewing.

8. Failure to conform to the rules provided herein may result in termination of enrollment in UCR and prohibition from all further participation in UCR.

1.7 Role of Aggregators

1. For-profit entities, cooperatives, governmental bodies and non-profit organizations may act as RoU Aggregators or Aggregator. Eligible entities must apply to become a UCR Aggregator by completing and submitting the applicable UCR forms. UCR Aggregators may charge for services they provide to Project Owners. UCR Aggregators shall have the discretion to refuse to represent individual Projects.
2. Aggregators are assigned an account in the UCR Registry. Aggregator shall undertake the following actions on behalf of Projects it represents:
   a. Accept initial registration forms from owners of RoU Projects.
   b. Assemble Project Reports from Project Owners and retain copies of Project verification records.
   c. Have sole authority to access the Registry Account(s) holding the RoUs issued to Projects it represents and to authorize transfers and retirement or burn and tokenize RoUs.
   d. Execute sales, conversion or transfers on behalf of Project Owners and distribute sales proceeds to Project Owners in accordance with the terms agreed between the Aggregator and Project Owners. The terms of the business and legal relationships between Aggregators and Project Owners are left to the discretion of those parties.

1.8 Prevention of Double-Counting

UCR provides a public listing of all registered RoUs. UCR allows and issues RoUs for vintages beginning 2014 onwards and also the same to be transferred, held or retired or burnt and tokenized on the UCR. UCR requires that all registered Projects attest that they have not been registered in other water registries or sustainable development programs for the same vintage or crediting period in which they seek to register at UCR. Verifiers or Project Owners or Aggregators must confirm this attestation has been made and search the other known worldwide registries (i.e. CDM, etc). UCR encourages other registries and sustainable development programs to review the UCR public listing of RoU projects. Additional requirements to address double-counting are contained in guidance documents and within this Manual.

The following safeguards are in place under the UCR RoU Program to prevent over issuance:

(a) Double Issuance by the UCR RoU Program: The UCR workflow systems do not allow double issuance. Prior to issuance, checks are made that no issuance has been made for the Project Activity for the same monitoring period. Issued RoUs will be deposited into the Sellers account in the Registry only once, by the UCR platform.

(b) Double Issuance by other similar programs: There is a risk that a UCR Project Activity will be registered with another SDG water program for the same crediting or monitoring period. Prior history of all RoU projects must be included in the Project Concept Note and disclosed to the auditor/verifier. The UCR Team checks the same on public listings of projects on other such registry systems. If such a case is identified, the UCR Team will require the Seller to inform the other GHG programs on suitable cancellation actions to be taken on their system prior to registration.

(c) Double Use and Double Sell: RoUs will either be retired or burnt for tokenization from a Seller's account or transferred to a Buyer's in a de-centralized manner without any intervention from the UCR system. There are no transfer costs associated with any transfers between Buyers and Sellers. Options are in place for end actions of the RoU that include transfer, retire or burn and tokenize and reasons for the same (e.g., water neutrality of an event) can be highlighted by the Buyer or Seller prior to the event. Consequently, double use and double selling of RoUs is avoided. It is upto the Buyer and Seller to maintain clear and transparent records of funds and transactions against the sale or cancellation or retirement or burn and tokenize events of RoUs.

2. Governance Structure

2.1 Overview

The UCR RoU Program is owned and operated by Universal Co2 Emission And Offset Registry Pvt Ltd (Universal water Registry), located at OC-4 , 573 Third Floor , Main Road Chirag, New Delhi 110017, India. The UCR procedures are devised and refined based on expert input provided and overseen by standing board of Directors. This Board provides input to the Program Administrator on issues pertaining to all RoUs or Projects. The UCR board of directors offer insight on standard development, procedure interpretation and refinement, case-by-case review of non-standardized projects, and oversight of technical issues. Recommendations from the Board will be acted upon at the discretion of the UCR RoU Program Administrator and staff.

2.2 Advisory Committee Member Composition

Members of the Board are comprised of representatives of company directors and/or academic experts, verification experts, and individuals representing both domestic and international perspectives. Membership of the UCR Board is based on a self-nomination process, with all members subject to the approval by the UCR directors.

2.3 UCR Standard Development

The UCR Standard may elect to develop a formal, standardized protocol for water offset projects that adhere to best management practices at any time or date. The design of a draft framework is typically assisted by a technical subcommittee comprised of representatives from governments, non-governmental organizations, academia, or industry experts.

2.4 Public Feedback and Protocol Revisions or Inclusions

UCR Standard or Program Protocols are available on the Program website for public review. The UCR Standard may be revised in reflection of input provided by the UCR Committees incorporating input based on the insights gained through practical project-related experience, public feedback, and the emergence of new technologies, scientific information and market regulations.

Individuals wishing to provide feedback on UCR Standard or Program Protocols may do so via email to info@ucarbonregistry.io.

2.5 Project Verification and Registration Procedures

To assure quality and legitimacy of RoUs registered in the UCR, independent verification of project eligibility and effectiveness must be obtained from an Approved Verifier before the RoUs will be issued to the Participant's Registry account. Every RoU project enrolled in the program must conform to eligibility standards and undergo independent verification before it can be issued RoUs in the UCR.

Project Owners or sellers that intend to submit projects for registration and issuance of RoUs under the UCR RoU Program are required to prepare and submit the project documentation. Project details required for submitting projects for registration are provided in the UCR Rainwater (RoU) Standard and Documents Section on the website. The details of project implementation and data required are provided in Project Concept and Monitoring Report (PCMR). These documents are submitted to UCR Verifiers during third party verifications. The Verifier then prepares the Verification Report and Statement for the Seller. Project documentation submitted to the UCR is available publicly on its platform and RoU Registry.

Certain UCR documents from Sellers or Buyers, that are deemed confidential, are not made available to the public. However, PCNMR, Additional Monitoring Reports, Double Counting Attestations, Verification Reports and Verification Statements are not treated as confidential.

2.5.1 Requirements for conducting RoU Verifications

Verification of project documentation by approved UCR Verifiers is a pre-requisite for project issuance of RoUs under the UCR RoU Program. The fees for such verification services are paid directly by the Project Owner or Aggregator (Seller) to the verifier. The approach to and requirements for Project and RoU Verifications are provided in the RoU Verification Standard. Verifications of projects are carried out following the requirements in the RoU Verification Standard and relevant baseline and monitoring methodologies. UCR Verifiers provide their conclusions in reports referred to as Verification Reports and Verification Statement Reports, applying UCR RoU templates.

UCR RoU Program relies on evidence verified by UCR-approved Verifiers for RoU issuances. Since

Verification Reports and Verification Statements are are key inputs to UCR decisions, the UCR RoU Program requires that all Verifiers are professionally liable for any false or erroneous evidence that they provide regarding the RoUs resulting from UCR Project Activities. A clause addressing this liability is included in the UCR Verifier Agreement and UCR Verifiers shall make appropriate provisions to cover or understand this liability. UCR-approved Project Verifiers will be required to assess and transparently declare any conflict of interest they may have in the Project Activities that they evaluate.

2.5.2 RoU Over issuance Safeguard

Actual or potential over issuance of RoUs means that the RoUs issued for a Project Activity are greater than that in the registered Project Concept Note (PCN) or Project Design Document (PDD) or the Project Monitoring Report (MR) or the PCNMR.

Over issuance of RoUs is a threat to environmental integrity and the reputation of the UCR RoU Program and its stakeholders. In normal situations, there is very low risk of actual over issuance of RoUs, for the following reasons:

(a) The determination of baseline and project emissions, and the design of monitoring protocols, in UCR methodologies are conservatively and robustly designed.

(b) Project documentation and monitoring reports undergo several checks, including assessments carried out by an approved UCR verifier and the UCR Operations Team before approvals for the issuance of RoUs are granted.

(c) If an issuance request and monitoring report submitted to the UCR reports greater RoUs than those delineated in the registered PCN, PDD or MR, this will be duly verified and evaluated by the UCR Verifier.

(d) The UCR Platform has all of the due diligence in place to administer issuance of the correct amount of RoUs.

(e) Provisions are in place in the UCR Verifier Agreement and the UCR Conflict of Interest Report template that address the risk of over issuance.

However, the following special situations have been identified for which there is a risk of over issuance of RoUs:

(a) Situation 1: (Actual over issuance): Erroneous project verification or emission reduction verification by a UCR Verifier, which could be due to: (i) incompetence of Verifier; or (ii) negligence, fraud or willful misconduct by the Verifier.

(b) Situation 2: (Potential over issuance): Changes in the operating conditions of project that were not foreseen during the project registration process and are not in the control of the Project Owner.

(c) Situation 3: (Potential over issuance): Changes in the project design compared to that described in registered MR, VS or VR.

If a case of actual or potential over issuance is called to the attention of the UCR by any UCR stakeholder, the UCR will duly investigate it in detail to assess the case. If a complaint of over issuance or the potential for over issuance is found to be legitimate in accordance with one or more of the three situations indicated above, the UCR shall take the following actions:

(a) Situation 1: If over issuance has occurred due to incompetence of the Verifier, the UCR will immediately suspend the Verifier, requiring a verifiable corrective action to be reinstated. If over issuance has occurred due to negligence, fraud or willful misconduct by the Verifier, the Verifier will be immediately terminated. All approved UCR Verifiers sign a UCR Verifier Agreement, which requires the UCR Verifier to conduct services as per its terms and conditions, act with integrity, have adequate insurance and provide the conditions of dealing with improper RoU issuance, including such instances of over issuance. Further, the UCR Terms and Conditions Document requires Project Owners to take responsibility for any improper RoU issuance that occurs as a result of their actions, including negligence, fraud or willful misconduct.

(b) Situation 2: If changes in operating conditions are duly justified and do not lead to issuance requests of more than 10% of the amount indicated in the registered PCN, PDD or MR, issuance is approved if all other issuance requirements are met. If the issuance request is for more than 10% than that in the registered project documents, the issuance of water credits is capped at a maximum of 10% over and above the amount of RoUs indicated in the registered VS, VR, PCN or MR.

(c) Situation 3: Issuance requests indicating a greater amount of RoUs than the amount mentioned in registered PCN or MR or VR or M&VR due to changes in project design will be rejected by the UCR and the Project Owner will be requested to initiate the process of formally changing their project reports to update the quantity of RoUs.

In event of actual over issuance (situation 1), the UCR Verifier is required to use its professional liability insurance to cover the loss, as indicated in the UCR Verifier Agreement. To address the environmental integrity concerns due to actual over issuance, the UCR RoU Program will make corresponding adjustments in the issuance of RoUs in the next monitoring period of the same Project Activity. This will be indicated in the UCR Monitoring Report available on the UCR RoU Program website.

The following information provides a summary of the RoUs or water offsets registration process in the UCR RoU Program.

Step 1: Determining Eligibility:
All projects must submit a Project Concept Note & Monitoring Report (PCNMR) and video describing the activity. Upon receipt and review of the same, the Program Administrator may seek input from the Advisory Committee regarding the feasibility and appropriateness of the requested PCNMR if it is not on the Approved Positive Project list or deviates from the same, and, as needed, seek guidance from appropriate technical experts. Project Owners will be notified of the decision of the Program Administrator and shall proceed accordingly.

Regardless of whether a project satisfies the standardized Approved Positive List protocol or if, the Project Owners have requested a specific deviation approval from an existing standardized protocol, or have requested approval for a new category, all Project Owners seeking to register a project must receive their **Project Approval Authorization which will be displayed on the UCR** prior to initiating verification. Verifiers should view the UCR prior to verification to ensure that the project has been approved for verification.

Direct Registration

Projects are eligible for "direct registration" provided that they strictly satisfy the standardized requirements of a pre-specified project category with no deviations. Projects that adhere strictly to protocol requirements do not require review but are required to obtain a Project Approval Authorization on the UCR prior to Verification.

Projects already holding other water program verification reports for the 2014-2021 vintage years can apply for direct registration provided they cancel the project listing completely with the water registry concerned and obtain a verification attestment statement from the UCR approved verifier or auditor stating the same.

In such cases, the Project Design Document (PCNMR), verification report, video evidence of current operation of the activity and verification statement would need to be uploaded by the Aggregator or Project Owner prior to issuance of RoUs.

Approval of Non-Standard Projects
Alternatively, projects may be approved as eligible by the UCR Board or Program Administrator, with input from the relevant Advisory Committee, after the review of the PCNMR. If the project is approved, the Program Administrator will issue the Project Approval Authorization on the UCR prior to Verification with an explicit description of the conditions under which the project was approved.

Review is required for all projects that do not adhere strictly to the Approved Positive List of established project types and scopes.

Projects under other water offset programs
Unless specific circumstances warrant otherwise, other GHG mechanism-approved projects may be considered to be eligible to earn RoUs in the UCR RoU Program for 2014 vintage years onwards, provided that such water Credits or Offsets are not retired or traded or owned by another entity not part of the UCR RoU Program, subject to the terms and conditions provided herein:

1. Projects that are registered on any other water offset program but have generated water

offsets for the time period prior to their acceptance at that water program, but which adhere to an approved UCR RoU Standard, may be eligible to register in the UCR RoU Program provided they also satisfy the Approved Project Positive List and are seeking to earn **RoUs beginning vintages 2014 onwards**. A crosscheck of the applicable Registry by verifier/auditor/DoE shall assure that RoUs have not been retired for the said vintage years, that the project Owner has clear title and right to the said vintages and no double counting is permitted. A verification statement to this effect must be submitted by the UCR verifier.

2. Other water project program approvals notwithstanding, **project types under section 1.4 as described earlier, are not eligible** to be registered in the UCR RoU Program:

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Step 2: Project Verification

Third-party independent verification is required of all projects to ensure that the requirements of the applicable protocol, this Program Standard or Manual, and Verification Standard are correctly applied. Project Owners seeking to register RoU Projects must have the project verified by an Approved Verifier in accordance with the protocol-specific requirements and the provisions contained herein before RoUs may be issued. A list of Approved Verifiers is found on the UCR RoU Program **website**.

Approved Verifiers must review the UCR and review the approval conditions prior to conducting verification through the following process:

- **1. UCR Search**
  Complete a search of the UCR and view the Project Approval Authorization on the registry. Ensure that the PCNMR is uploaded and an accompanying video is displayed on the RoU Project Page. For projects that use the Positive List, the Program Administrator will ensure that the Project Approval Authorization is displayed on the UCR. For projects that involve review, post approval, the Project Approval Authorization status will be displayed on the UCR.
- **2. Receiving approval that no conflicts of interest exist**
  Approved Verifiers must submit the project-specific conflicts-of-interest form, signed by the Verifier and the Project Owner. This submission also serves as confirmation that the Project Owner has given the UCR RoU Program Administrator permission to disclose project-specific information (e.g. PCNMR, Communication Agreement etc.) to the prospective Verifier.
  The UCR RoU Program retains the right to reject any submitted verification report and statement that does not adhere to this process. Project specific conflicts-of-interest forms will remain valid through the approval period, provided that no substantive change has occurred in the nature of the relationship between the organizations. If such a change has occurred, a new project specific conflicts of interest form must be submitted.

The cost of the verification shall be borne by the Project Owner/Aggregator/. All Project registration documents, verification reports, related documents and documentation of quantification methods shall be subject to inspection and review. Additional provisions governing verification of RoU Projects are provided in the Program Verification Standard.

Step 3: Project Registration in order to earn RoUs, the Project Owner must:

1. Be a Project Participant/Owner or Aggregator (Seller).
2. Register the project with the UCR RoU Program.
3. Obtain ongoing independent verification of the project by an Approved Verifier.

The performance of each project must be quantified and verified in accordance with the provisions of this document and related protocol documents. Each Project Owner must submit their project for verification or has been suitable verified by an approved verifier under a different water offset program/protocol and has not been double counted. RoUs will be issued only if a satisfactory verification report is received by the UCR RoU Program Administrator.

The vintage year assigned to RoUs shall correspond to the time period of mitigation realized by the Project activity in question and **must be on or after January 01, 2014 only.**

2.6 UCR RoU Registry

The UCR RoU Program Registry operates a water offset (RoU) registry that is designed, operated and maintained by UCR. The registry follows thorough operational procedures related to the management of projects and RoUs throughout the entire lifecycle of water credits. The UCR aims to maintain environmental integrity by using the this Registry to prevent double counting and double issuance while ensuring complete transparency. The registry is an electronic database that serves as the official holder of the flow record and transfer or retirement or burn mechanisms of RoUs by Program Participants. The Registry is a serialized RoU tracking system that provides Registry Account Holders a full suite of administration and reporting tools to assist in managing and transferring their RoUs. The Registry provides a full audit trail of each registered RoU from its creation, transfer, burning event, tokenized event and/or retirement action.

The Registry takes into account that UCR Project Activities are not restricted to a fixed crediting period and no restrictions on the renewal of crediting periods. The Registry also takes into account that it is de-centralized and has no role in approving or rejecting any transfer or retirement or burn events of RoUs carried out by sellers or buyers.

The Registry facilitates RoU status changes that include transfers from one account to another, and through the RoU lifecycle including from issuance through retirement or burning for token creation. The Registry also assigns unique serial numbers to issued RoUs, which can be tracked from issuance through to transfer or end use (burning or retirement). The Registry maintains a clear chain of custody in operating the UCR RoU Platform. The Registry operations are according to an established internal governance and code of conduct structure. Certain details related to UCR Project Activities and RoUs are publicly visible on the UCR website, including the host country, project type/sector, and RoU vintage years. The UCR RoU Program webpage for the Registry displays all project labels awarded to and RoUs issued to UCR Project Activities. Information regarding project registrations and issuance of RoUs is disclosed to the public on a project-by-project basis on the UCR website.

The Registry also displays different stages at which Project Activities are registered and RoUs have been issued. For example, Project Activities with PCNMR submission and approved for verification are declared to be RoU Projects under verification on the public webpage of the UCR Platform.

The Registry performs several functions, including accounting and recording of verified or audited RoUs issued by the UCR to Project Activities. The Registry uses a de-centralized process for assigning and transferring RoUs between buyers and sellers.

The Registry tracks and reports the deposit/withdrawal of RoUs to/from the centrally managed accounts; and maintains custody and records of the legal ownership of RoUs. The Registry allows listing, issuance, transfer, retirement and burning to tokenize of RoUs.

RoU Projects are registered when RoUs are issued to the Project Owner's/Aggregator's UCR Account **immediately after submission of a valid verification document/statement**. Issuance fees to the UCR are 5% of the total RoUs issued to the Project Owner/Aggregator (seller) and deducted from the latest vintage year prior to initial issuance into the Project Owner/Aggregator (Seller) UCR account. RoUs are recorded and transacted in unit size equal to one cubic metre ($1m^3$) or 1000 litres of water equivalent. RoUs in the amount of one m3 of water offset/recharged/conserved/harvested shall constitute one water Rainwater Offset Unit ("RoU"). Unless otherwise authorized by UCR in advance, the minimum quantity that can be registered in the Registry is 20 RoUs.

Members may use their UCR Account to:

1. Manage RoU holdings and associated project activities.
2. Search and effect transfers and/or retirements and burn and tokenize events.
3. Review account status.
4. Access Participants-only information
5. Connect to other applications/decentralized applications/decentralized finance platforms to convert RoUs as and when this facility is setup.

Each UCR Account Holder is assigned a UCR Account to facilitate management, transfer, retirement and trade of RoUs.

Each UCR Account can be viewed only by parties authorized by the Registry Account Holder. Information contained in each Registry Account will be accessible only by parties authorized by the Registry Account Holder. The Program Administrator may publicly report certain aggregate information on Transfers across Registry Accounts, but may not publicly report Registry activity of any single Registry Account Holder.

Each Registry Account Holder shall be responsible for controlling and monitoring log-in and password protocols.

Further terms and conditions governing access and usage of the UCR RoU Program are provided in the UCR Terms and Conditions Document.

2.7 RoU Transfer De-centralized Procedures

RoU transfers are executed by the **Registry Account holder directly (peer-to-peer)** in a decentralized manner using the UCR dashboard between representatives of both sides to a RoU transfer via an over the counter (OTC) trade or directly via any trading/transfer/conversion mechanism chosen by the counterparties. Business terms of Transfer agreements among Participants are established through private negotiations and business terms need not be disclosed to UCR to effect a RoU transfer.

- There is no transfer/trade/retirement fees for any RoU Transfer/Trade/Retirement events payable to UCR.

2.8 RoU Issuance Fee and De-centralized Transfers

Issuance of RoUs to Sellers in the UCR RoU Program confers to the recipient legal ownership rights associated with water harvested/conserved/recharged/recycled realized through implementation and verification of eligible RoU practices.

- RoU issuance and serialization begins at the time of submission of the verification report/statement via the UCR member/owner/participant dashboard. UCR RoU Issuance fees are 5% of the total RoUs issued to the Project Owner/Aggregator and deducted from the latest vintage year prior to initial issuance into the Project Owner/Aggregator UCR account. There is no cash or invoice requirements for the same.

Every transfer of RoUs among Registry Account Holders (Buyer and Seller) is the conveyance from seller to buyer of full legal title to all legal rights associated with water conservation/recharge/offset/recycled/harvested rights represented by RoUs transferred from transferor to transferee.

Full legal title transfers from seller to buyer when the UCR member holding the RoUs (seller), effects a Registry transfer directly to the counterparty (buyer) to the trade using the UCR dashboard. The UCR neither approves nor rejects any trade between buyer and seller. If the buyer rejects the transfer, the RoUs are returned into the account of the seller.

The UCR RoU Program makes no representation as to the marketability or market value of RoUs. Issuance fees are 5% of the total RoUs generated by Project Owner/Aggregator and is deducted automatically prior to the first issuance of RoUs into the Project Owner's/Aggregator's account. Hence the issuance fee is a one time charge only and is payable in RoUs without money or cash being exchanged.

