POLICY ON ACTIVE PHARMACEUTICAL INGREDIENTS (APIs) IN THE ENVIRONMENT

3xper Innoventure Limited

Effective Date: 01/01/2024 **Next Review Date: 31/12/2025**

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1. Introduction

3xper Innoventure Ltd is a pioneering Contract Research, Contract Development, Contract Manufacturing and Production of APIs and is committed to innovation, safety, and sustainability in the fields of pharma, healthcare, nutrition, agri, and specialty chemicals. Understanding the environmental risks of chemical production, we have invested in advanced infrastructure to manage and eliminate harmful discharges, ensuring compliance, conservation, and long-term ecological well-being.

2. Scope

This policy applies to all operations, processes, departments, and employees of 3xper Innoventure Ltd involved in the handling, treatment, and discharge of liquid and semi-liquid waste generated during the development and manufacturing of APIs and associated services.

3xper Innoventure Ltd (Corporate)	4th Floor, C54-55 & Super B-4, Chola Crest Thiru-Vi-Ka Industrial Estate, Guindy 600032 Chennai, India
R&D	Ticel Bio Park (Phase-2), 7th floor Taramani, Chennai-600113, Tamil Nadu, India
Manufacturing	Plot No. 53 part, 54 & 55 Palchur Village, Naidupeta SEZ, Tirupati, Andhra Pradesh- 524 421, India
USA Office	#255, Main Street, STE 200, Cambridge, MA 02142-1029, USA

3. Policy Statement

We are dedicated to the responsible development and manufacturing of APIs. In this regard, we are responsible for effluent generation, treatment and discharge through technological innovation and sustainability-driven practices. With access to government-controlled Common Effluent Treatment Plant (CETP) and by deploying Zero Liquid Discharge systems, reverse osmosis technologies, and biological treatment methods, we commit to eliminating pollution and optimising water use across our operations.

4. Key Focus Areas and Commitments

1. Access to CETPs

We have successfully implemented alignment and agreement with CETPs across all our facilities, eliminating the discharge of untreated effluents into the environment and enabling full recovery and reuse of wastewater. We are targeting a 50% increase in internal water reuse and a 35% reduction in freshwater withdrawal per unit of production by 2030, compared to 2023 levels.

2. Zero Liquid Discharge Systems

We have successfully implemented Zero Liquid Discharge (ZLD) systems in manufacturing facilities for treating high TDS effluent, eliminating the discharge of untreated effluents into the environment and enabling full recovery and reuse of wastewater. We are committed to maintaining 100% ZLD compliance while targeting a 50% increase in internal water reuse and a 35% reduction in freshwater withdrawal per unit of production by 2030, compared to 2023 levels.

3. Advanced Effluent Treatment Technologies

With the deployment of advanced Effluent Treatment Plants (ETPs) equipped with multiple-effect evaporators, reverse osmosis systems, and bioreactors, we have significantly improved the treatment and organic load removal from waste streams, and we aim to sustain a 60% reduction in Chemical Oxygen Demand (COD) in treated effluents and ensure 95% or higher operational uptime of treatment equipment by 2030, using 2023 as the baseline year.

4. Biological Treatment through Bioconversion

We have adopted an eco-friendly biological treatment system based on natural bioconversion processes to sustainably manage chemical effluents, and we are committed to maintaining its application for 70% of eligible waste streams and improving the process efficiency by 35% through R&D and optimisation by 2030, compared to 2023.

5. Advanced Reverse Osmosis Technologies

Our operational RO plants are supported by robust pre-treatment infrastructure including pressure sand filters, activated carbon filters, micron filtration, and chemical dosing systems to ensure optimal pollutant removal, and we aim to retain 100% coverage of these advanced filtration systems while achieving a 50% reduction in suspended solids in influent streams by 2030, relative to 2023 levels.

5. SDGs Covered

This Policy aligns with:

6. Responsibility

- **Head – Environment, Health & Safety (EHS):** Responsible for overseeing the implementation, monitoring, and compliance of API discharge management systems across all facilities.
- **Plant Operations Manager:** Ensures proper day-to-day functioning and maintenance of effluent treatment plants and associated machinery in alignment with the policy requirements.
- **Head – Sustainability & R&D:** Leads innovation efforts for improving discharge systems through research, development, and integration of advanced technologies, including bioconversion and reverse osmosis systems.
- **Chief Operating Officer (COO):** Provides executive-level oversight and ensures alignment of discharge practices with strategic business goals and regulatory compliance.
- **Quality Assurance Manager:** Monitors output quality from the effluent systems to ensure treated discharge meets internal and external environmental standards.

Governance Mechanism

To ensure effective execution of the API Discharge Policy, the following governance framework is in place:

- **Environmental Committee:** A multidisciplinary team reviews effluent treatment performance quarterly and ensures alignment with environmental targets and compliance requirements.
- **Internal Audits and Reporting:** Regular audits of ZLD systems, bioreactors, and RO units are conducted, with findings reported to management for corrective action.
- **Stakeholder Engagement:** Ongoing collaboration with regulators, technology partners, and industry peers helps integrate best practices and maintain compliance.
- **Performance Monitoring:** KPIs track reductions in effluent discharge and water reuse efficiency, with results reviewed monthly and reported annually in a sustainability report.

Measures for Policy Violation

To ensure strict adherence to this policy, the following measures will be implemented in case of violations:

- **Investigation and Corrective Actions:** Any suspected violation will be investigated by the Sustainability & Compliance Team. Corrective actions will be taken to address issues and prevent recurrence.
- **Training and Awareness Programs:** Employees found non-compliant may be required to undergo targeted environmental training to reinforce understanding of the policy and best practices.
- **Disciplinary Actions:** Severe or repeated violations may result in disciplinary actions, including formal warnings, suspension, or termination, depending on the seriousness of the breach.

- **Supplier and Contractor Compliance:** Suppliers, contractors, or third-party associates failing to comply with the policy may face contract reviews, financial penalties, or termination of business relationships.

Do's:

- ✓ Follow all API discharge control procedures as outlined in the policy.
- ✓ Use only approved containment, treatment, and monitoring systems (e.g., ZLD plants, bioreactors, RO units) to minimise API discharge impact.
- ✓ Immediately report any suspected violations, leaks, or spills to the Environmental Compliance Team.
- ✓ Actively participate in training and refresher programs on API discharge management and environmental safety.
- ✓ Maintain accurate records of API waste handling, treatment, and discharge for regulatory and internal audits.
- ✓ Ensure strict adherence to all applicable environmental regulations and internal discharge standards.

Don'ts:

- × Do not discharge untreated or inadequately treated API effluents into water, soil, or air.
- × Do not tamper with or disable any monitoring or effluent treatment systems to bypass controls.
- × Do not conceal or delay reporting of any accidental API release or policy violation.
- × Do not ignore safety and handling protocols while managing API waste streams.
- × Do not use unauthorised methods or contractors for waste disposal that may lead to contamination.
- × Do not skip mandatory compliance audits or training sessions critical for policy adherence.

7. Review mechanism

This policy will be reviewed annually by the EHS department to ensure alignment with regulatory requirements, sustainability targets, and technological advancements. Recommendations will be submitted to senior leadership for approval.

Rev No.	Effective Date	Last Review Date	Next Review Date	Section Updated	Description of Changes	Reviewed By	Approved By
0	01/01/2024	01/01/2025	31/12/2025	Initial Release	First version of the Environmental Policy	Compliance Officer	Sustainability Officer
1.0	01/01/2025	01/01/2025	31/12/2025	Review	Updated governance	Compliance Officer	Sustainability Officer

				Mechanism	structure and compliance measures		

Last Review Date: 01/01/2025 **Next Review Date: 31/12/2025**

Approved By: Sk. Gousepasha

Designation: Sr. Manager

Signature: 01-01-2025

Acknowledgement

I, Venkata Sai, acknowledge that I have read, understood, and agree to adhere to 3xper Innoventure Ltd.'s Policy on APIs in the environment. I recognise the importance of my role in supporting the company's commitment to minimising Active Pharmaceutical Ingredient (API) discharges and ensuring environmentally responsible operations.

I am committed to actively contributing to the implementation of this policy by following best practices for API containment, treatment, and disposal. I will comply with all regulatory requirements, company policies, and environmental guidelines to prevent pollution and protect public health.

I understand that my commitment is essential to achieving the company's API discharge reduction objectives and fostering a culture of sustainability and compliance. I am dedicated to integrating responsible API management practices into my daily work and supporting continuous improvements in environmental performance.

Employee Name: Venkata Sai

Employee Signature: Venkata Sai

Date: 04-01-2025