



Case Study: X4 Environmental's Odor Control Solution for Hospital Medical Waste

Background

A leading hospital in **Italy** faced persistent **odor issues in its medical waste collection and treatment areas**. Despite using **industrial-grade double-sealed trash bags and plastic containers**, the hospital produced a **high volume of waste daily**, resulting in strong, unpleasant odors that posed potential health and environmental concerns. Before the waste could be transferred to a treatment facility, it required **pre-treatment** on-site, making odor control a critical challenge.

Challenge

The hospital needed a **reliable, long-term odor mitigation solution** that would:

- **Effectively neutralize odors** in the medical waste gathering and storage areas.
- **Enhance hygiene standards** within the facility.
- **Ensure compliance with hospital regulations** for a safe and sanitary working environment.

Solution & Implementation

X4 Environmental suggested a **multi-point odor control system** tailored to the hospital's specific needs, utilizing its advanced **X4JH2000-OCC** technology:

1. Integrated Spray System for Medical Waste Treatment

- A **spray system was installed within the hospital's medical waste treatment unit**, ensuring odors were neutralized during the pre-treatment process.
- A **1:10 dilution ratio** of **X4JH2000-OCC** was applied to break down odor molecules upon contact.

2. Storage & Workstation Odor Control

- Additional **spray systems** was suggested to be positioned around the **waste storage area** and **workstations** where staff handled medical waste.
- This **continuous odor suppression approach** created a cleaner, more hygienic environment for hospital personnel.

Results & Impact

- **Immediate and sustained odor elimination** within the waste processing and storage areas.
- **Enhanced workplace hygiene** and improved working conditions for hospital staff.
- **Compliance with stringent health and safety regulations** for medical waste management.
- **Demonstrated effectiveness of X4JH2000-OCC** in controlling even the most challenging waste odors.

Conclusion

Through the strategic implementation of **X4JH2000-OCC**, X4 Environmental provided the hospital with an **efficient and scalable odor control solution**, ensuring a **cleaner, safer, and more compliant medical waste management process**. This successful project highlights X4 Environmental's **expertise in tackling complex odor challenges** in healthcare environments.

