



Case Study: X4 Environmental's Odor Control Solution for Houston Harris County Landfill

Background

A major landfill in **Houston Harris County** faced significant odor management challenges, with **foul odors leaking into surrounding residential areas**. As a result, local residents frequently filed complaints, prompting the **City of Houston to impose fines** on the landfill operator—at one point reaching up to **six fines per month**. The financial burden and reputational risks necessitated an **immediate and effective solution**.

Challenge

The landfill operator required a **proven odor control strategy** to:

- **Eliminate odors at the source** to prevent further complaints.
- **Avoid costly fines** from the city.
- **Improve community relations** by minimizing the environmental impact on nearby neighborhoods.

Solution & Implementation

X4 Environmental deployed a **comprehensive odor mitigation plan** utilizing its advanced **X4JH2000-OCC** technology:

1. Mist & Vapor System Installation

- A **1:10 dilution ratio** of **X4JH2000-OCC** was applied through a **strategically placed misting and vapor system** along the landfill's perimeter.
- The system worked to **neutralize airborne odors before they could escape into residential areas**.
- The effect was **immediate**, significantly reducing odor complaints from the community.

2. Truck Spray Stations at Entry & Exit Points

- X4 Environmental recommended the installation of **spray stations at key access points**.
- As garbage trucks **entered and exited the facility**, the system sprayed a fine mist directly onto **waste bins**, preventing odor from spreading into surrounding areas.
- This additional measure ensured **continuous odor suppression**, even beyond the landfill site.

Results & Impact

- **Immediate odor elimination** across the landfill and surrounding areas.
- **Significant reduction in resident complaints**, preventing further fines.
- **Cost savings for the client**, who no longer faced frequent penalties.
- **Improved environmental compliance** and community relations.

Conclusion

By implementing **X4JH2000-OCC** with a **targeted mist and vapor system**, **X4 Environmental** successfully helped the Houston Harris County Landfill **resolve its odor challenges**, mitigate financial penalties, and enhance its environmental responsibility. This case further reinforces X4 Environmental's position as a **leader in sustainable and effective odor control solutions** for large-scale waste management operations.

