



Do You Smell Something?

A Case Study of How One Landfill Overcame
Their Struggle with Odor

Stephanie Stolz | GHD

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Discussion Points



Background

Generalities on the Facility
What happened?



Initial Actions

What to do first?



Additional Actions & Innovative Solutions

Steps to re-establish trust



Facility Background



Was Rural Now Surrounded by Development



Waste From Large Geographic Area

- Local
- Regional
- Large Urban Center (via transport truck and rail)



Established LFG System

- 100s of LFG Wells and Horizontals
- Multiple Flares
- LFGTE Plant



What Happened?



Won a New Contract

- Large Increase in Tonnage



Wet Year

- 30% more rain than average



Switched LFG Well Install

- Used conventional LFG wells and horizontals
- Started installing no-drill LFG wells



Main Perimeter Header Blockage

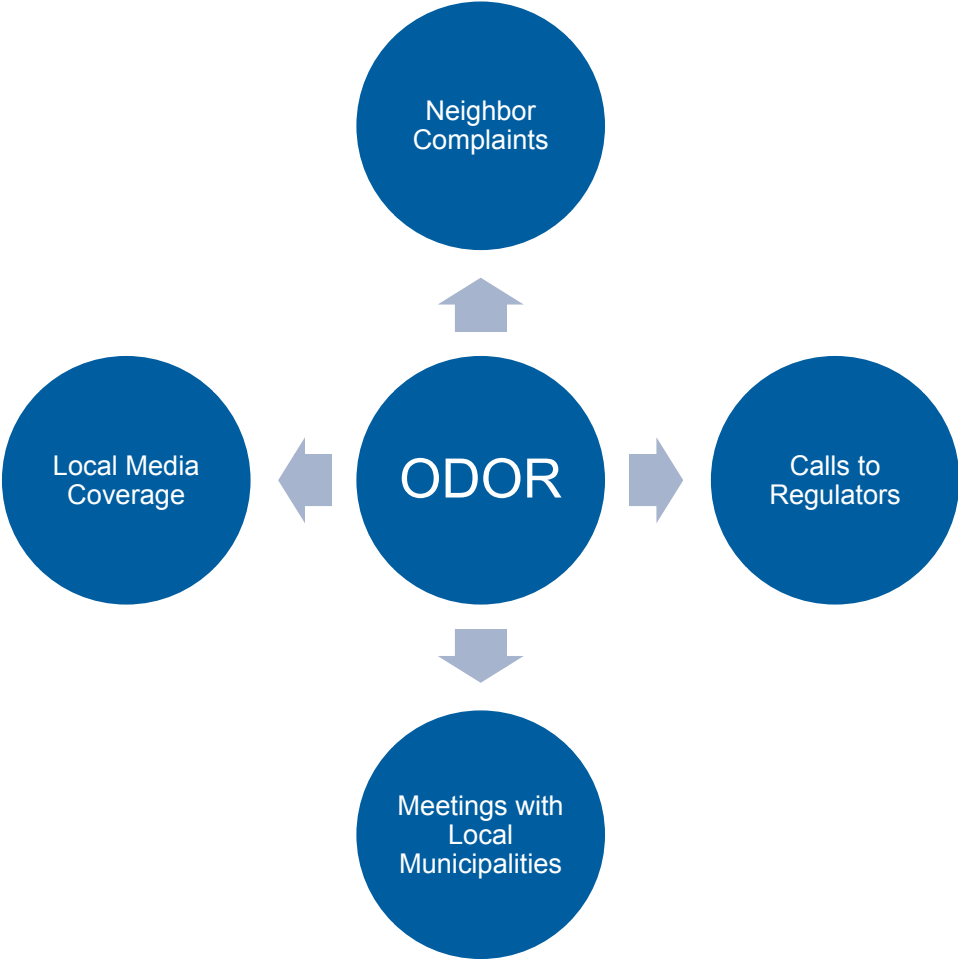
- Rerouted LFG, but maxed out Header



What Happens Next?



What Happens Next?



Initial Solutions

- QUICK ACTION -

Interim LFG Control

- Fixed Header Blockage
- Installed Additional LFG Wells
- Installed Horizontal Collectors

Installed Final and Intermediate Cover

Odor Control System

- Along Perimeter
- @ Working Face

Communication

- State Regulators on-site daily
- Weekly meetings w/ municipalities – Public Meetings
- Web-site with Regular Updates



Initial Solutions



Public Response

Take
Action

Use Data



Listen to
Concerns



Additional Actions

Installed Additional Header (Secondary)

Hired Additional Staff

Investigation of all Odor Complaints

- Conducted by Third Party
- On-Call (investigated immediately)
- Odor Training
- State Regulators also investigated complaints

Real-time Odor Monitoring

- Perimeter of Site
- Nearby School
- Mobile Unit
 - Travels through neighborhoods



Additional Actions

Waste Characterization Study

- Nearby Residents Blamed Waste from Urban Areas for Odor
- Multi-phase Study to Investigate Waste Odor of Incoming Waste
- Collected Odor Sampling of Incoming Waste and of Ambient Air during Various Activities
- Evaluated Collection to Disposal Times Across Various Geographic Regions

Test Alternative Covers

- Odors Worst in Morning Due to Cover Stripping
- Tested Variety of ADC

Enhanced Odor Control Network

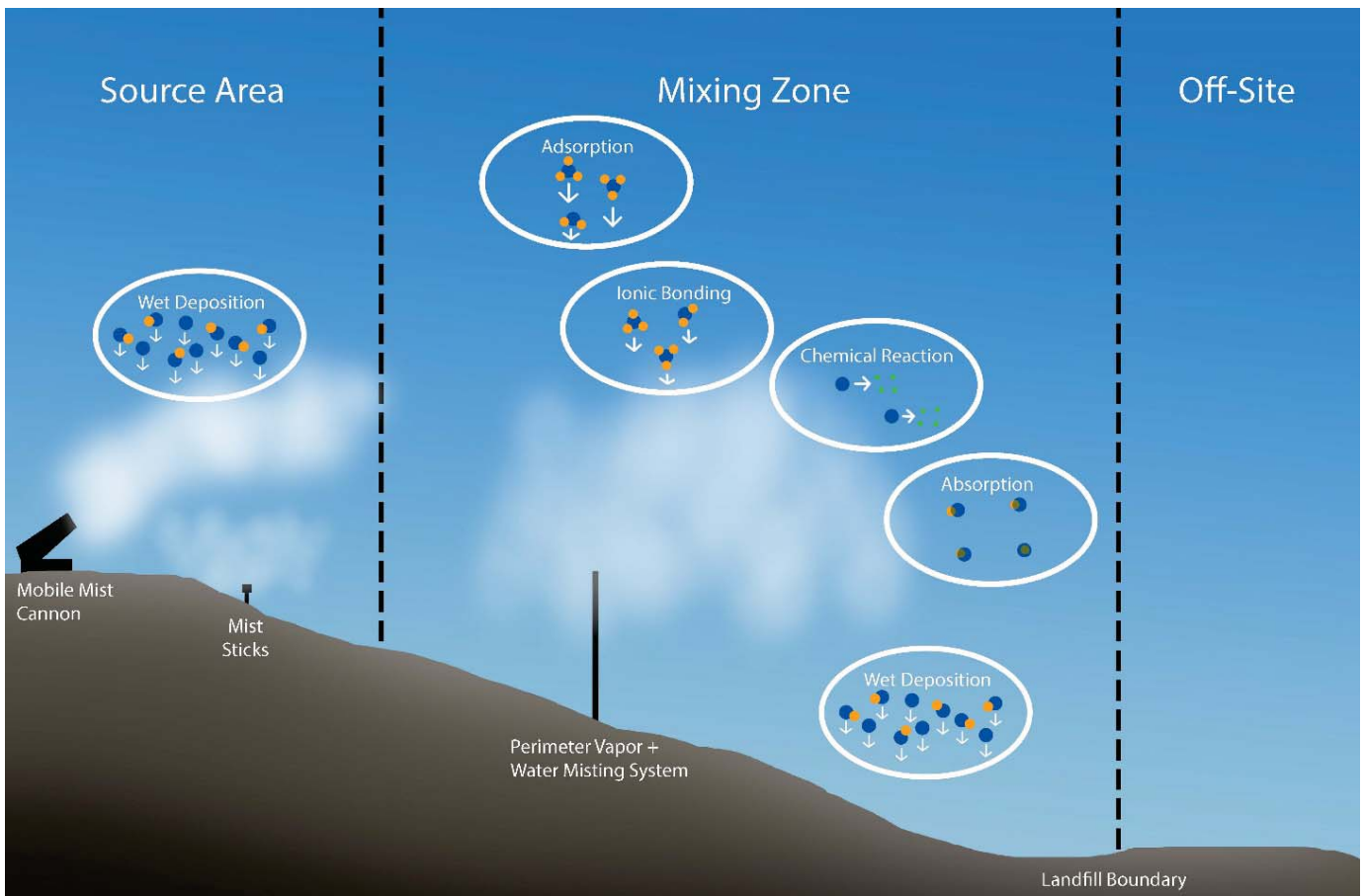
- Conducted Modeling to Determine Locations
- Expanded Perimeter System
- Additional Coverage at Working Face



Alternative Cover



Odor Control Network



Odor Control Network



Take Aways

Stay Current on LFG Collection System

Plan transition to newer technologies

Implement redundancies when possible

Be Responsive – Good Communication

Use Data to Make Decisions





Thank you

Stephanie Stolz, PE

O: 612 524 6883

M: 612 500 1095

E: Stephanie.Stolz@ghd.com

St. Paul, Minnesota





www.ghd.com
