



TALES FROM THE TRENCHES

Successful UST Practices



OVERVIEW

Part One

Successful Practices of UST Owners

Part Two

Successful Practices of UST Regulators

Part Three

Successful Practices of UST Consultants



PART ONE

Successful Practices of UST Owners

Jose Rios, Murphy USA

SUCCESSFUL PRACTICES OF UST OWNERS

Stay Updated on Regulations

- Federal, state, and local regulations

Maintain Accurate Records

- Submit timely reports

Preventive Maintenance

- Routine inspections
- Inspect spill and overfill prevention systems regularly

SUCCESSFUL PRACTICES OF UST OWNERS

Training & Emergency Planning

- Train staff on operations, maintenance, and emergency response

Environmental Risk Management

- Stay ahead of regulatory changes

Collaboration and Financial Preparedness

- Benchmark program

PROACTIVE COMPLIANCE

Stay updated on regulations

- Federal regulations
- State regulations
- Local regulations

Maintain accurate records

- Ensure all records are up-to-date
- Regularly review and update records

Submit timely reports

- Adhere to reporting deadlines
- Proactively review report accuracy in advance

PREVENTIVE MAINTENANCE

Routine Inspections

- Conduct regular checks
- Ensure UST system integrity

System Integrity Testing

- Schedule and perform tests
- Identify potential issues early

Spill and Overfill Prevention Systems

- Install prevention systems
- Test systems regularly

LIFECYCLE ANALYSIS

- What Is Lifecycle Analysis? A proactive, full-picture approach to identifying and managing environmental risks and costs from acquisition, management and divestment.
- Why It Matters for Owners:
 - Reduce Surprise Costs: Identify hidden liabilities before they become expensive problems.
 - Improve ROI: Align environmental investments with long-term business goals.
 - Strengthen Negotiations: Be informed and confident during acquisitions, redevelopments, or divestments.
 - Stay Compliant, Stay Operational: Avoid costly shutdowns or penalties.
 - Preserve Exit Value: Clean, documented environmental records protect asset value at sale.

COLLABORATION AND FINANCIAL PREPAREDNESS

Engage Consultants for Support

- Perform audits
- Compliance support

Ensure Financial Assurance

- Cleanup costs
- Liabilities

TRAINING & EMERGENCY PLANNING

Training & Emergency Planning

- Train staff on operations, maintenance, and emergency response
- Develop and implement a spill response plan (add one pager)

Environmental Risk Management

- Monitor soil and groundwater around USTs
- Use secondary containment systems
- Upgrade aging equipment

Case Studies

- Showcase examples of proactive owners
- Avoid costly environmental impacts

PART TWO

Successful Practices of UST Regulators

L. Todd Perry, PPM Consultants



SUCCESSFUL PRACTICES OF UST REGULATORS

1. Clear Communication
 2. Supportive Partnerships
 3. Effective Enforcement
 4. Innovate and Evolve
- 

CLEAR COMMUNICATION

Provide Accessible Guidelines

- Offer clear and understandable guidelines
- Ensure guidelines are easily accessible to all stakeholders

Training Resources

- Develop comprehensive training materials
- Make training resources available online

Regulatory Updates

- Keep stakeholders informed of regulatory changes
- Provide timely updates on new regulations

Workshops and Webinars

- Organize educational workshops
- Host webinars to reach a wider audience

SUPPORTIVE PARTNERSHIPS

Engaging UST Owners and Consultants

- Host regular coordination meetings
- Establish clear and responsive feedback loops

Sharing Compliance Tools and Best Practices

- Co-develop tools, templates, and guidance documents with stakeholders
- Offer technical assistance on evolving standards and best practices
- Actively participate in national conferences and regulatory discussions

EFFECTIVE ENFORCEMENT

Tiered Enforcement Strategies

- Apply proportionate enforcement actions based on the severity and frequency of non-compliance
- Use informal notices, compliance schedules, or formal penalties depending on risk and repeat violations

Follow-Up and Resolution

- Conduct timely follow-up inspections or documentation reviews
- Confirm corrective actions are completed and compliance is fully restored

INNOVATION & EVOLVE

Targeted Risk-Based Support

- Focus enforcement and support on high-risk systems based on type, materials, location, age and historical performance
- Utilize GIS and data analytics tools to monitor compliance and identify emerging risks

Modernize Infrastructure for Safety and Efficiency

- Promote enhanced containment systems, such as double-walled tanks with interstitial monitoring and secondary containment for piping
- Encourage adoption of automated tank gauging (ATG) and real-time leak detection systems to improve early warning and reduce release impact

CASE STUDIES OF REGULATORS



BEST IN CLASS UST COMPLIANCE: MODELS FOR SUCCESS

Best of the Best:

- Connecticut 95%, New Jersey 91%, Delaware 92%, Missouri 93%, Colorado 94%, Wyoming 97%. National Total 61%

Common Threads

- Robust Operator Training Programs
- Strong Financial Assurance Mechanisms
- Consistent Walk-Through Inspections
- Proactive Inspection and Data Tracking

Strategic Pillars

- **Proactive Education**
 - Advance notification, assistance before inspections and emphasis on meaningful owner/operator training
- **Supportive Partnerships**
 - Close collaboration with UST owners and consultants with ongoing feedback loops.
- **Rigorous Tracking Systems**
 - Digital reminders and test tracking for compliance events. Fast escalation when deadlines are missed.



BEST IN CLASS UST CLOSURE: LOUISIANA'S RECAP PROGRAM

How Louisiana Stands Out in UST Closure

- **RECAP (Risk Evaluation/Corrective Action Program)** tailors UST site investigations and remediation to each location's contamination profile, land use, and risk level.
- **Defined Risk-Based Standards:** Minimum remediation objectives are clearly defined under RECAP, ensuring consistent and protective outcomes.

Key Features of Louisiana's RECAP Approach:

- **Tiered Remediation Options:** Offers a structured choice between multiple options—from initial screening to extensive corrective actions (Management Options 1–3).
- **Site Ranking & Exposure-Based Evaluation:** Prioritizes and tailors actions through detailed site ranking and investigation criteria.
- **Guidance & Experience:** Assessment and Remediation activities follow established LDEQ UST guidance, continually enhanced by regulators, UST owners and consultants.



PART THREE

Successful Practices of UST Consultants

Jared Saterfiel, PPM Consultants

SUCCESSFUL PRACTICES OF UST CONSULTANTS

- Comprehensive Assessments
- Remediation & Risk Management
- Compliance Support
- Technology-Driven Solutions
- Collaboration & Training
- Case Studies

COMPREHENSIVE ASSESSMENTS

Detailed Site Assessments

- Identify potential risks

Advanced Technologies

- Leak detection
- Contamination testing

Utilize State and Site-Specific Tools and Techniques

- Know the rules and requirements

REMEDICATION & RISK MANAGEMENT

Develop Site-Specific Remediation Strategies

- Create cost-effective plans tailored to individual sites
- MStC (ASTM E3488-25)

Assist with Emergency Response Planning

- Help owners prepare for and respond to emergencies
- Implement risk mitigation measures

COMPLIANCE SUPPORT

Guidance on Regulatory Requirements

- Assist both the UST Owner and Regulator with understanding and meeting regulatory standards
- Ensure accurate and timely reporting

Support for Audits and Inspections

- Help prepare for and navigate through audits
- Assist with inspections to ensure compliance

Financial Assurance Compliance

- Ensure financial practices meet regulatory standards
- Support in maintaining financial assurance

TECHNOLOGY-DRIVEN SOLUTIONS

Leverage Mapping Tools

- Enhance spatial data analysis

Real-Time Data Analysis

- Improve decision-making with immediate data processing and up-to-date information

Automated Systems

- Reduce manual intervention and errors

Digital Platforms for Compliance Tracking

- Streamline compliance processes with digital tools that ensure accurate and timely tracking

COLLABORATION & TRAINING

Collaboration with Stakeholders

- Act as a liaison between owners and regulators

Training and Support

- Train UST operators
- Support stakeholder engagement

CASE STUDIES OF CONSULTANTS

Case Studies

- Abandoned Tank vs Trust Fund Collaboration
- Showcase collaborative efforts

CONCLUSION

Collaboration among stakeholders

- Owners, regulators, and consultants working together
- Ensures efficient outcomes
- Cost-effective solutions

Actionable Takeaways

- Implement proactive strategies
- Innovative approaches
- Cooperative methods for success