

Storage Tank Insurance and Bonding

A Comprehensive Guide to Regulations, Coverage, and Compliance

CVI

Commercial Insurance Specialists



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Executive Summary

Storage tanks, whether above ground or underground, represent significant financial investments and potential liabilities for businesses across multiple industries. These assets require comprehensive insurance coverage and appropriate bonding to protect against environmental contamination, regulatory penalties, and third-party claims.

This white paper provides an in-depth analysis of the insurance and bonding requirements for storage tank operations, covering federal and state regulations, coverage options, and best practices for risk management. Understanding these requirements is essential for business owners, facility managers, and risk management professionals to ensure compliance and adequate protection.

CVI specializes in providing customized insurance solutions for businesses operating storage tank facilities, helping clients navigate complex regulatory environments while securing appropriate coverage at competitive rates.

Introduction to Storage Tank Operations

Storage tanks are critical infrastructure components used across numerous industries including petroleum distribution, chemical manufacturing, agriculture, transportation, and manufacturing. These facilities store a wide range of materials from petroleum products and chemicals to water and agricultural products.

The operation of storage tanks involves inherent risks including environmental contamination, property damage, and potential harm to public health. As a result, federal and state agencies have established comprehensive regulatory frameworks requiring specific insurance coverage and financial assurance mechanisms.

The complexity of storage tank regulations varies significantly based on tank type, stored materials, location, capacity, and operational characteristics. This guide addresses the major regulatory and insurance considerations applicable to storage tank operations.

Types of Storage Tanks

Underground Storage Tanks (USTs)

Underground Storage Tanks (USTs) are defined by the Environmental Protection Agency (EPA) as tanks with at least 10 percent of their volume underground, including connected piping. USTs commonly store petroleum products, hazardous substances, and other regulated materials.

Key characteristics of USTs include:

- Capacity typically ranging from 500 to 20,000 gallons
- Primary use for petroleum product storage at retail facilities
- Subject to extensive federal EPA regulations under Subtitle I of RCRA
- Higher contamination risk due to leak detection challenges
- Mandatory financial responsibility requirements for petroleum USTs

Above Ground Storage Tanks (ASTs)

Above Ground Storage Tanks (ASTs) are storage containers positioned entirely above ground level. These tanks vary dramatically in size and application, from small farm tanks to massive petroleum storage facilities with capacities exceeding millions of gallons.

Key characteristics of ASTs include:

- Wide capacity range from hundreds to millions of gallons
- Used across diverse industries including oil and gas, agriculture, and manufacturing
- Subject to Spill Prevention Control and Countermeasure (SPCC) requirements
- Easier inspection and maintenance compared to USTs
- May require secondary containment systems

Federal Regulations

Environmental Protection Agency (EPA) Requirements

The EPA establishes and enforces federal standards for storage tank operations under multiple regulatory programs. These regulations establish technical standards, operational requirements, and financial responsibility mandates.

UST Technical Requirements

Underground Storage Tanks containing petroleum or certain hazardous substances must comply with technical requirements under 40 CFR Part 280. These regulations address tank design, installation, leak detection, corrosion protection, release detection, and closure procedures.

Key technical requirements include:

- Corrosion protection systems for steel tanks and piping
- Spill and overfill prevention equipment
- Release detection monitoring systems
- Regular inspections and testing of equipment
- Operator training programs
- Recordkeeping and reporting procedures

Financial Responsibility Requirements

Under 40 CFR Part 280, Subpart H, owners and operators of petroleum USTs must demonstrate financial responsibility for taking corrective action and compensating third parties for bodily injury and property damage caused by releases.

Financial responsibility amounts required:

- \$1 million per occurrence for petroleum marketing facilities
- \$2 million annual aggregate for petroleum marketing facilities
- \$500,000 per occurrence for non-petroleum marketing facilities
- \$1 million annual aggregate for non-petroleum marketing facilities

Spill Prevention Control and Countermeasure (SPCC) Requirements

Under the Clean Water Act, facilities that store oil in above ground or underground tanks must prepare and implement SPCC Plans if they have an aggregate oil storage capacity greater than 1,320 gallons or a completely buried storage capacity greater than 42,000 gallons.

SPCC Plan requirements include:

- Professional Engineer certification for most facilities
- Secondary containment for storage tanks
- Facility security measures
- Personnel training and spill response procedures
- Equipment inspection and testing protocols

Department of Transportation (DOT) Requirements

Storage facilities involved in the transportation of hazardous materials or petroleum products may fall under Department of Transportation jurisdiction. DOT regulations address the safety of bulk storage and transfer operations, particularly at terminal and pipeline facilities.

Occupational Safety and Health Administration (OSHA) Standards

OSHA regulations govern worker safety at storage tank facilities. These requirements address process safety management for facilities handling hazardous chemicals, confined space entry procedures, hazard communication, and emergency response planning.

State-Level Regulations

Individual states maintain regulatory authority over storage tank operations within their jurisdictions. State programs often exceed federal minimum standards and may impose additional technical requirements, financial assurance obligations, and permitting procedures.

State UST Programs

Most states have received EPA approval to implement their own UST regulatory programs. These state programs must meet or exceed federal requirements but frequently include additional provisions specific to local environmental conditions and policy priorities.

Common state program elements include:

- Registration and permit requirements
- Tank installation and closure permits
- Enhanced leak detection standards
- Stricter operator training requirements
- State cleanup fund programs
- Financial assurance verification procedures

State AST Regulations

Above ground storage tank regulations vary considerably among states. Some states have comprehensive AST programs with registration requirements, technical

standards, and inspection protocols, while others rely primarily on federal SPCC requirements.

States with enhanced AST programs may require:

- Facility registration and annual renewals
- Construction and installation permits
- Specific secondary containment standards
- Regular inspection and certification programs
- Financial assurance mechanisms

State Cleanup Funds

Many states operate cleanup funds specifically designed to help tank owners address contamination from releases. These state funds often provide reimbursement for cleanup costs and third-party liability claims, subject to deductibles, caps, and eligibility requirements.

Tank owners typically contribute to state cleanup funds through per-tank fees or fuel taxes. While state funds can provide valuable financial support, they should not be viewed as a complete substitute for comprehensive insurance coverage due to coverage limitations and potential fund insolvency.

Insurance Coverage for Storage Tanks

Storage tank operations require specialized insurance coverage to address the unique risks and regulatory requirements associated with these facilities. Standard commercial insurance policies typically exclude or severely limit coverage for pollution-related incidents, necessitating specific environmental insurance products.

Pollution Legal Liability Insurance

Pollution Legal Liability (PLL) insurance provides coverage for third-party bodily injury and property damage claims arising from pollution conditions, as well as cleanup costs for contamination on or migrating from the insured premises.

PLL policies typically cover:

- On-site cleanup costs for newly discovered contamination
- Third-party bodily injury and property damage claims
- Legal defense costs
- Natural resource damages
- Emergency response costs
- Transportation liability for tank trucks

UST Specific Coverage

Underground Storage Tank insurance policies are specifically designed to meet EPA financial responsibility requirements while providing comprehensive protection for UST operations. These policies can be structured as standalone coverage or endorsements to pollution legal liability policies.

UST insurance provides:

- Corrective action coverage for cleanup costs
- Third-party liability coverage
- EPA compliance with required limits
- Defense costs
- Regulatory oversight costs
- Tank closure and assessment costs

Tank Physical Damage Coverage

Tank physical damage insurance protects the tank itself and associated equipment against direct physical loss or damage from covered perils such as fire, explosion, lightning, windstorm, and vandalism. This coverage is particularly important for expensive above ground storage tanks and related infrastructure.

Business Interruption Coverage

Business interruption insurance provides coverage for lost income and continuing expenses when storage tank operations are suspended due to a covered physical loss. This coverage can be critical for facilities where tank operations are essential to business continuity.

Environmental Impairment Liability

Environmental Impairment Liability (EIL) insurance provides broader environmental coverage beyond traditional pollution liability policies. EIL policies may cover gradual pollution conditions, pre-existing contamination with appropriate disclosures, and non-owned disposal sites.

Contractors Pollution Liability

Contractors performing work on storage tanks, including installation, maintenance, removal, and remediation activities, require contractors pollution liability insurance. This coverage protects against pollution claims arising from the contractor's operations, both on and off the project site.

Bonding Requirements for Storage Tanks

Surety bonds may be required for storage tank operations in various contexts including contractor licensing, facility permits, financial assurance for tank closure, and demonstration of financial responsibility for environmental obligations.

Financial Assurance Bonds

Storage tank owners and operators can satisfy EPA financial responsibility requirements through surety bonds guaranteeing payment of corrective action and third-party liability costs. These bonds must meet specific EPA requirements regarding language, conditions, and surety qualifications.

Financial assurance bonds must:

- Be issued by a qualified surety with Treasury Department authority
- Contain EPA-specified language and conditions
- Provide coverage amounts meeting regulatory minimums

- Include automatic renewal provisions
- Allow state agency direct action rights

Closure and Post-Closure Bonds

Some state regulations and permit conditions require storage tank owners to post closure bonds guaranteeing funds will be available to properly close tanks when they are permanently taken out of service. These bonds ensure that tanks are properly cleaned, removed or filled, and that any contamination is addressed.

Contractor License and Permit Bonds

Contractors who install, remove, or clean storage tanks often require license bonds or permit bonds mandated by state or local regulations. These bonds protect tank owners and the public by ensuring contractors comply with regulations and fulfill contractual obligations.

Remediation Bonds

When storage tank contamination is discovered, regulatory agencies may require the responsible party to post a remediation bond guaranteeing completion of cleanup activities. These bonds ensure financial resources are available to complete environmental remediation if the responsible party fails to do so.

Risk Management and Loss Prevention

Effective risk management for storage tank operations involves comprehensive programs addressing technical systems, operational procedures, training, and emergency response planning. Proactive risk management reduces insurance costs, prevents environmental releases, and demonstrates regulatory compliance.

Tank Integrity Management

Regular inspection and testing programs are essential to identify potential problems before they result in releases. Tank integrity management includes routine visual inspections, non-destructive testing, cathodic protection monitoring, and periodic tightness testing.

Best practices include:

- Implementing comprehensive inspection schedules
- Maintaining detailed records of all testing and maintenance
- Using qualified inspectors and service providers
- Addressing identified deficiencies promptly
- Upgrading aging tank systems proactively

Operator Training and Certification

Properly trained operators are critical to preventing releases and ensuring regulatory compliance. Federal and state regulations require designated operators with appropriate training for different levels of responsibility including Class A, Class B, and Class C operators for UST facilities.

Release Detection and Monitoring

Advanced release detection systems enable early identification of leaks, minimizing environmental impact and cleanup costs. Modern monitoring systems include automatic tank gauging, statistical inventory reconciliation, groundwater monitoring, and vapor monitoring.

Emergency Response Planning

Comprehensive emergency response plans ensure personnel know how to respond to releases, equipment failures, fires, and other emergencies. Effective plans include clear roles and responsibilities, communication protocols, containment procedures, and coordination with emergency responders.

Secondary Containment Systems

Secondary containment systems provide an additional layer of protection by capturing releases before they can contaminate soil or groundwater. These systems may include double-walled tanks, containment basins, liners, and sumps designed to contain the maximum potential release volume.

Compliance Strategies

Maintaining compliance with storage tank regulations requires systematic approaches to understanding requirements, implementing technical standards, maintaining proper documentation, and working effectively with regulatory agencies.

Regulatory Compliance Audits

Regular compliance audits help identify deficiencies before they result in violations or releases. Professional audits evaluate technical systems, operational procedures, recordkeeping, and financial assurance mechanisms against applicable federal and state requirements.

Documentation and Recordkeeping

Comprehensive documentation demonstrates regulatory compliance and supports insurance claims when releases occur. Essential records include inspection reports, testing results, maintenance logs, operator training certificates, financial assurance documentation, and incident reports.

Working with Regulatory Agencies

Establishing positive relationships with state and federal regulatory agencies facilitates compliance and can help resolve issues efficiently. Proactive communication, prompt response to information requests, and voluntary disclosure of problems demonstrate good faith and regulatory cooperation.

Closure Planning

When storage tanks are permanently removed from service, proper closure procedures are essential to prevent future liability. Closure planning should address

tank cleaning and removal, soil and groundwater assessment, contamination remediation if necessary, regulatory notifications, and site restoration.

Insurance Coverage Considerations

Selecting appropriate insurance coverage for storage tank operations requires careful evaluation of exposures, regulatory requirements, and available coverage options. Tank owners should work with insurance professionals experienced in environmental and storage tank risks to structure comprehensive programs.

Coverage Limits and Deductibles

Coverage limits should reflect potential exposure including cleanup costs, third-party claims, business interruption losses, and regulatory penalties. While EPA minimum requirements provide a baseline, actual exposure often significantly exceeds these minimums. Deductibles should balance premium costs against retention capability.

Policy Triggers and Coverage Terms

Environmental insurance policies may use claims-made or occurrence triggers with important differences in coverage scope and timing. Claims-made policies require both the pollution condition and claim to occur during the policy period, while occurrence policies cover conditions that first occur during the policy period regardless of when claims are made.

Exclusions and Coverage Gaps

Understanding policy exclusions is critical to identifying coverage gaps. Common exclusions include pre-existing contamination known to the insured, intentional acts, fines and penalties, contract liability, and certain types of operations. Endorsements may be available to address some exclusions.

State Fund Coordination

In states with cleanup funds, coordination between state fund coverage and private insurance is essential. Policies should clearly address how state fund reimbursements interact with insurance coverage, whether through excess coverage structures or specified coordination clauses.

The Underwriting Process

Obtaining insurance coverage for storage tank operations involves detailed underwriting evaluation of physical conditions, operational procedures, regulatory compliance status, and loss history. Understanding the underwriting process helps applicants present their operations favorably and secure optimal terms.

Information Requirements

Insurance applications for storage tank coverage require comprehensive information about facility characteristics, stored materials, tank specifications, regulatory compliance status, operational procedures, and loss history. Supplemental

information may include site assessments, inspection reports, and financial assurance documentation.

Site Assessments

Many underwriters require Phase I Environmental Site Assessments to evaluate potential contamination at tank facilities. These assessments review historical uses, current operations, and environmental conditions to identify recognized environmental conditions that may affect coverage and pricing.

Factors Affecting Pricing

Insurance pricing for storage tank coverage reflects numerous factors including tank age and condition, stored materials hazard levels, regulatory compliance status, loss history, secondary containment presence, monitoring systems, operator training programs, and financial strength of the applicant.

Claims Management

Effective claims management is essential when storage tank releases occur. Prompt notification, thorough documentation, and professional response can minimize environmental impact, control costs, and facilitate successful insurance recovery.

Immediate Response Procedures

When a release is discovered, immediate response priorities include stopping the release source, preventing spread of contamination, protecting human health and safety, notifying regulatory agencies, and contacting the insurance carrier. Delayed notification can jeopardize coverage.

Documentation Best Practices

Comprehensive documentation supports claim processing and provides evidence for coverage decisions. Critical documentation includes discovery circumstances, immediate response actions, regulatory correspondence, environmental assessment reports, remediation proposals, cost estimates, and contractor invoices.

Working with Environmental Consultants

Qualified environmental consultants provide essential services during response and remediation including site assessment, regulatory liaison, remediation design and implementation, and cost control. Insurance carriers often maintain pre-approved consultant networks, though policyholders typically retain selection rights.

Regulatory Coordination

Effective coordination with regulatory agencies during claims is critical to achieving efficient case resolution. Regular communication, prompt information provision, and cooperative attitude facilitate regulatory approval of remediation approaches and case closure.

Special Situations

Tank Removals and Upgrades

Tank removal and upgrade projects require special insurance considerations. Contractors pollution liability coverage protects against claims arising from removal activities, while tank owners need coverage addressing contamination discovered during closure activities. Pre-removal site assessments help identify existing contamination requiring remediation.

Acquisitions and Transfers

Property acquisitions involving storage tanks require careful environmental due diligence and appropriate insurance structuring. Phase I and Phase II Environmental Site Assessments identify contamination that may affect transaction value and allocation of cleanup responsibility. Acquisition policies can protect buyers against unknown contamination discovered post-closing.

Abandoned and Orphaned Tanks

Abandoned tanks from former operators present unique challenges for current property owners. These situations may involve claims against former owners, contribution claims among multiple responsible parties, or state-mandated cleanup requirements. Insurance coverage for abandoned tank scenarios requires specialized policies addressing historical operations.

Leased Locations

When storage tanks are located on leased property, both lessors and lessees face potential liability. Lease agreements should clearly allocate responsibility for tank operations, maintenance, and environmental compliance. Insurance programs should reflect contractual obligations with both parties maintaining appropriate coverage.

Cost Factors and Budgeting

Understanding the various costs associated with storage tank operations helps facility owners budget appropriately and make informed decisions about tank management, upgrades, and risk transfer through insurance.

Insurance Premium Considerations

Storage tank insurance premiums vary widely based on tank characteristics, stored materials, regulatory compliance, and underwriting factors. Small retail facilities with modern tanks and strong compliance programs may obtain coverage for several thousand dollars annually, while larger or higher-risk operations may face substantially higher premiums.

Compliance and Maintenance Costs

Ongoing compliance and maintenance costs include regulatory fees, inspection and testing expenses, monitoring system maintenance, operator training, and recordkeeping. These investments are essential to regulatory compliance and favorable insurance terms.

Potential Cleanup Costs

Storage tank cleanup costs vary dramatically depending on contamination extent, site conditions, regulatory requirements, and remediation technology. Small releases may be addressed for tens of thousands of dollars, while extensive contamination can require millions of dollars in assessment and remediation costs. This wide range of potential costs underscores the importance of adequate insurance limits.

Industry-Specific Considerations

Petroleum Retail and Distribution

Retail petroleum facilities including gas stations and convenience stores face unique exposure due to high-traffic operations, frequent tank loading activities, and public access. These operations typically involve multiple USTs storing gasoline, diesel, and potentially used oil, requiring comprehensive coverage meeting EPA financial responsibility requirements.

Chemical Manufacturing and Distribution

Chemical facilities may store a wide range of hazardous materials in both ASTs and USTs. These operations often involve CERCLA hazardous substances requiring enhanced financial assurance. Complex chemical storage operations demand specialized underwriting expertise and customized policy terms.

Agricultural Operations

Agricultural facilities commonly maintain storage tanks for diesel fuel, gasoline, and agricultural chemicals. While some agricultural tanks are exempt from certain federal regulations, responsible farm operators maintain voluntary compliance programs and appropriate insurance coverage to protect their operations and property.

Transportation and Logistics

Transportation facilities including truck stops, distribution centers, and logistics hubs often maintain bulk storage tanks for vehicle fueling operations. These facilities face exposure from both storage tank operations and vehicle fueling activities, requiring coordination between storage tank coverage and commercial auto liability programs.

Manufacturing and Industrial

Manufacturing facilities may maintain storage tanks for process chemicals, fuel oils, waste materials, and product storage. These operations often involve complex storage configurations with multiple tank types and stored materials, requiring customized insurance programs addressing specific operational exposures.

Emerging Trends and Considerations

Alternative Fuels and Biofuels

The growing use of alternative fuels including ethanol, biodiesel, and renewable diesel creates new considerations for storage tank operations. These fuels may have

different compatibility requirements with tank materials, corrosion characteristics, and environmental behavior requiring adapted storage systems and insurance approaches.

Climate Change Impacts

Climate change introduces new risks to storage tank operations including increased flooding potential, more severe storm events, and changing groundwater conditions. These factors may affect tank design standards, regulatory requirements, and insurance underwriting criteria.

Advanced Monitoring Technologies

Technological advances in tank monitoring including real-time inventory management, remote monitoring capabilities, and predictive analytics enable earlier leak detection and improved loss prevention. Insurance underwriters increasingly recognize superior monitoring systems with favorable premium consideration.

Regulatory Evolution

Storage tank regulations continue to evolve at both federal and state levels. Recent EPA revisions have enhanced technical standards, expanded inspection requirements, and strengthened operator training mandates. Tank owners must stay informed of regulatory changes affecting their operations and insurance requirements.

Conclusion

Storage tank operations involve significant environmental risks, complex regulatory requirements, and substantial potential liabilities. Comprehensive insurance coverage and appropriate bonding are essential components of responsible tank management, providing financial protection while demonstrating regulatory compliance.

Successful storage tank risk management requires integration of technical systems, operational procedures, regulatory compliance, and appropriate risk transfer mechanisms. Tank owners who invest in modern equipment, comprehensive training programs, and proactive maintenance achieve better operational results while qualifying for more favorable insurance terms.

The storage tank insurance and bonding marketplace offers diverse products designed to meet varying operational needs and regulatory requirements. Working with experienced insurance professionals who understand the technical and regulatory complexities of storage tank operations is essential to securing appropriate coverage at competitive rates.

CVI provides specialized expertise in storage tank insurance and bonding, helping clients navigate regulatory requirements while structuring comprehensive protection programs. Our experience across multiple industries and regulatory jurisdictions enables us to deliver customized solutions addressing the unique aspects of each client's operations.

Contact Information

For assistance with storage tank insurance and bonding requirements, or to discuss your specific operational needs, contact CVI's specialized commercial insurance team. Our professionals can provide detailed analysis of your coverage requirements, competitive quotes from multiple carriers, and ongoing support for claims and compliance matters.

CVI

Commercial Insurance Specialists

818-974-8117

steve@cvins.com

www.fcisgroup.com

Disclaimer

This white paper provides general information about insurance coverages and bonding requirements for storage tank operations.. It does not constitute legal advice, financial planning recommendations, or insurance coverage guarantees for specific operations.

Insurance requirements, coverage availability, regulatory obligations, and bonding requirements vary significantly based on mining type, location, operational scope, financial strength, and numerous other factors. Mining entrepreneurs should consult with qualified insurance professionals, legal counsel, financial advisors, and risk management consultants to determine appropriate coverage for their specific circumstances.

Cost projections and premium estimates provided in this document represent general industry ranges and do not constitute actual quotes or commitments for specific operations. Actual insurance costs may be higher or lower based on individual underwriting factors. Always obtain formal insurance proposals from licensed carriers before making financial decisions.

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