



Association of State and Territorial Solid Waste Management Officials (ASTSWMO)

Tanks Subcommittee - Financial Responsibility Task Force

Rate Establishment Guide for State Financial Assurance Funds

Part I

August 2024

Introduction/Purpose of this document

Over forty (40) state and territorial tank programs have a financial assurance fund used to reimburse cleanup costs associated with contamination from tank releases. Most, if not all, of these programs have processes in place to reimburse consultants and contractors for investigation and cleanup work. The methods for establishing reimbursement rates vary widely across programs. Some states routinely update their rates, but don't have a prescribed process for doing so, while others don't have a prescribed schedule but do have a detailed process. The purpose of this document is to provide a useful guide for state programs which are updating or establishing reimbursement rates. While this is not a one-size-fits all guide, it is intended to provide tools for programs to use for rate establishment.

In March 2023, the ASTSWMO Financial Responsibility (FR)Task Force sent out a survey to thirty-eight (38) states asking about their reimbursement rate establishment process. Thirty-six (36) states responded to the survey. Each state reported valuable information and tools used to establish rates. Upon compiling this data, these common tools were reported by states:

- 1) **Consumer Price Index (CPI) [reviews](#)** – The CPI measures the average change in prices paid by consumers over a period of time for specific goods and services and is published regularly by the Bureau of Labor Statistics. Many states reported using this popular measurement of inflation and deflation.
- 2) **Consultant survey responses** – Soliciting feedback from the state's consulting community. Consultants and/or consulting organizations representing the consulting community in states are asked to provide input on rates which are being updated.
- 3) **Comparing rates to neighboring states** - Since many consulting firms conduct work in certain regions which span multiple neighboring states, it is helpful to compare what other nearby states allow for costs. This can include labor rates, equipment costs, lab costs, unit costs for certain "bulk" items, etc.
- 4) **Negotiation of labor and equipment rates** – Maximum rates are identified and agreements are made on rate adjustments.

- 5) **Holding Stakeholder meetings** – Some states set up meetings to provide the opportunity for regulators, environmental contractors, and stakeholders to discuss appropriate rates and actions.

This guide focuses on states that have a process for establishing rates as well as review and update their rates every one to three years. There were eleven (11) states that met this criterion, which include: Colorado, Idaho, Illinois, Michigan, Montana, North Carolina, Ohio, Tennessee, Utah, Virginia and Washington. Other states that reported information in the survey update their rates every four to five years, or on an “as needed” basis. Each of the eleven states are summarized below detailing the “Who?”, “When?” and “How?” fundamentals of their program’s rate establishment process.

Colorado 

Who: Colorado’s [Petroleum Storage Tank Fund](#) establishes [Reasonable Cost Guidelines](#) (RCG) for costs to investigate and clean up petroleum releases from USTs and ASTs.

When: These rates are updated on an annual basis. Colorado’s process includes the following:

How: Input is solicited from Colorado’s Recognized Environmental Professionals (REPs) for feedback on the existing labor rates and subcontractor rates (i.e. drilling, lab analyticals, transport and disposal, etc.). Feedback is also solicited directly from the subcontractors themselves. Over the course of about a month and a half, a Google form is sent to the REPs asking for specific feedback. Once responses are received, a meeting is held with the Division of Oil and Public Safety (OPS)/REP Peer Group to discuss the initial input. The Peer Group is made up of 5 to 10 individuals that have gained their REP certification to perform tasks in collaboration with OPS such as: REP Application Review, meeting with OPS to discuss matters that affect the REPs at large, etc. OPS also reviews the Consumer Price Index to see statewide and national averages on rates for labor, materials, etc., as well as check the inflation numbers to ensure that they are in line with current increases relevant to Colorado. Feedback on proposed changes from the REP Peer Group also needs to be supported in writing (letters from subcontractors, etc.). OPS may meet with REPs to go over proposed RCG changes prior to presentation of the RCGs to the Petroleum Storage Tank Committee (PSTC). OPS then presents the proposed changes to the PSTC and has a required 30-day comment period. During this time stakeholders (REPs, facility owner operators, responsible parties, etc.) can provide input of the proposed rate changes. OPS will review any comments provided at the next PSTC meeting along with the committee members. The RCGs will be voted on by the PSTC members and if the majority rules the proposed changes are final.

Idaho 

Who: The [Idaho Petroleum Storage Tank Fund \(PSTF\)](#) is a state-created, not-for-profit insurance organization that provides coverage for approved petroleum cleanup costs and valid third-party claims resulting from covered accidental releases commencing during the policy period.

When: It is not mandatory to update the rates within a certain timeframe, however rates are reviewed and updated annually with fund retained contractors.

How: Labor and equipment rates are negotiated annually with fund retained contractors. Rates can be negotiated on a contract-by-contract basis. This process includes contractors sending bids to the PSTF

office. When the PSTF office completes their review, a proposal is sent back to the contractor. An agreement between both parties is then formalized on the updated rate amount.



Illinois

Who: Illinois helps tank owners and operators pay for cleaning up leaks.

When: Illinois rates are established in regulation and every year a multiplier is added to increase by a certain percentage.

How: The rates are increased each year based on the annual Implicit Price Deflator for Gross National Product and is written out in Illinois' Administrative Code on how to increase maximum payment amounts. In no case must the inflation factor be more than 5% in a single year. Adjusted maximum payment amounts must become effective on July 1 of each year and must remain in effect through June 30 of the following year. After each year, the calculation will be reviewed and completed for the next year. The Agency must post the inflation factors on its website no later than the date they become effective, and it must remain posted on the website.



Michigan

Who: The [Michigan Underground Storage Tank Authority \(MUSTA\)](#) serves Michigan's petroleum underground storage tank owners and operators, local units of government, and county road commissions by managing the Underground Storage Tank Cleanup Fund, Legacy Release Program, and Public Highway Cleanup Program on a sound fiscal basis. Michigan provides prompt and consistent service in assisting stakeholders in meeting their financial responsibility requirements and efficiently providing financial assistance to remediate contamination caused by releases from petroleum underground storage tanks.

When: Annually review and update costs.

How: Consultants that have submitted an invoice for reimbursement are asked to provide recommended changes to MUSTA's Cost Controls ([Schedule of Costs](#), [Ineligible Cost List](#), [Bidding Requirements](#), and [Professional Descriptions](#)) annually. At the end of the review period, respondents are invited to participate in a meeting to discuss and compare MUSTA staff recommendations. Following the meeting, updated Cost Controls are presented to the MUSTA Board for review and approval.

- 1) On or about August 1st representatives of every consulting agency that has submitted an invoice for reimbursement are invited to review the current [MUSTA Schedule of Costs](#) (with associated notes), [Competitive Bidding Document](#), [Positions and Technician Position Classifications](#), and [Ineligible Costs List](#) and provide their recommended changes by October 1st. A reminder is sent in the beginning of September. During these two months MUSTA the staff reviews notes from the previous year and also recommended changes. These changes range from cost increases, addition of items, the elimination of items, etc. After consultant responses are received, they are added to staff recommendations in a spreadsheet or associated documents. Anything that is provided is retained for documentation purposes. All companies that provided changes are invited to discuss

in person at a meeting held at MUSTA's office in mid-October. At this meeting, recommendations are discussed, and draft documents are finalized. These drafts are then presented to the Board during the November meeting for approval to take effect on January 1st.

- 2) This process is required in the Natural Resources and Environmental Protection Action 451; [324.21510b Itemized corrective actions; schedule of costs.](#)
 - (1) The authority shall establish a schedule of costs that itemizes corrective actions that are generally conducted at a site and lists an allowable reimbursement amount that may be paid for each corrective action as part of a claim under this part. If the authority determines that costs for particular corrective actions vary in different regions of the state, the authority may establish allowable reimbursement amounts that reflect regional differences.
 - (2) The authority shall annually review and update the schedule of costs as necessary or appropriate.
 - (3) The department shall post the schedule of costs and any updates to the schedule of costs on the department's website.



Montana

Who: The [Petroleum Tank Release Compensation Fund](#) was created in 1989 to provide adequate remedies for the protection of the environmental life support system from degradation by petroleum and to provide adequate remedies to prevent unreasonable depletion and degradation of natural resources by petroleum use. The cleanup fund was established as a state special revenue fund ([ARM 17-1-101\(4\)\(b\)](#)) and is administered as a revolving fund by the Petroleum Tank Release Compensation Board (Board).

When: Required every year per promulgated Rule.

How: The process includes the statistical analysis of costs and invoices from companies for the previous five years to determine allowable rates. The standard plans, standard reports and standard remediation tasks are billed as Lump Sums and the standard labor, equipment and supplies are billed as Time and Materials (T&M). The allowable Lump Sum rates are based on the five-year average and T&M allowable rates are based on annual rates. This process includes the following:

- 1) The reasonable costs for standard plans, standard reports and standard remediation tasks are calculated once a year from costs received from companies in a quantity sufficient for a meaningful statistical analysis. The calculation uses the requested costs from the prior five years (for most things) and the reasonable costs are the mean rate for each standard plus the standard deviation, not to exceed 10% of that mean. Thus, iterations are required until the results meet the not-to-exceed requirement.
- 2) The reasonable costs for standard labor, equipment and supplies are calculated once a year from rate schedules received from companies in a quantity sufficient for a meaningful statistical analysis. The calculation uses the submitted rate schedules for the coming year (for most things) and the reasonable costs are the mean rate for each standard plus the standard deviation, not to exceed 10% of that mean. Thus, iterations are required until the results meet the not-to-exceed requirement.

An example of this would be for a recurring groundwater monitoring event. The calculation of the reasonable cost for the groundwater monitoring event would be calculated/updated by taking the costs for groundwater monitoring from the last year added to the previous four years of data for a total of five

years of data to make the calculation. The mean rate from this calculation plus one standard deviation is the cut off for the maximum acceptable rate. Lower than this rate is acceptable. If the calculated standard deviation for the groundwater monitoring event is more than 10% of the calculated mean, then evaluation of the data for the costs of the groundwater monitoring event are evaluated to determine if there are charges of scope for the groundwater monitoring event that is not similar to all the other data sets used for the calculation. An example would be very deep wells that take longer than a normal site to sample and monitor and require equipment not used on common groundwater monitoring sites in the five-year data set. The costs from monitoring sites like this would be removed from the calculation so all the data being used is similar and would give less of a standard deviation.

North Carolina



Who: North Carolina Environmental Quality (NCEQ) [UST Trust Fund Branch](#) establishes the [Reasonable Rates Documents](#). The UST Trust Fund provides reimbursement for costs incurred during the cleanup of soil and groundwater contamination resulting from a release of petroleum from a commercial underground storage tank. NCEQ uses a task pre-approval system.

When: The Reasonable Rates Document is updated every 2 years.

How: The document is updated with stakeholder input to update the rates.

Ohio



Who: The [Ohio Petroleum Underground Storage Tank Release Compensation Board](#) consists of government and industry representatives and has the primary responsibility of administering the Petroleum Underground Storage Tank Financial Assurance Fund. The Fund is a source of money derived from mandatory per tank fees and is available to eligible underground storage tank owners for the reimbursement of petroleum release cleanup costs. There is a mandatory cost pre-approval process for defined corrective action program tasks. Owners/consultants may also request voluntary pre-approval of costs.

When: Each year the Board Chairman appoints a rules committee, and the committee subsequently holds one or more meetings to consider promulgating new rules, revising existing rules, or rescinding existing rules.

How: Usual, customary and reasonable (UCR) costs, including labor and unit rates, are established through the collection and analysis of data from each claim application submitted for reimbursement as well as the claims analyst's independent research, experience and knowledge. The UCR costs for Tier 1 Source Investigation, Tier 1 Delineation and Tier 2 Evaluation tasks are based upon a formula that establishes an overall cost for the required typical work plus an allowance(s) for any non-typical necessary work performed.

Additional process details: Each claim application is reviewed by an Environmental Claims Analyst, who evaluates the submitted costs to verify the claim was timely submitted, that the work was necessary for corrective actions and that the costs fall within a range considered to be typical for performing similar work, as well as auditing any non-reimbursable costs, such as administrative

costs and mileage costs exceeding the maximum allowable rate. During this review process, the Analyst captures data from the submitted invoices, including the hourly labor rates for different personnel categories, daily rates for equipment use and drilling services, unit rates for laboratory analyses, costs for preparing standard report forms and unit costs for transportation and disposal of drums, liquid and soil. Generally, the data points come directly from the actual, submitted primary and subcontractor costs, provided the work performed was usual, customary and reasonable (UCR). In addition, where appropriate, the Analyst calculates per-well costs for groundwater sampling and well abandonment. These data are then entered into a database from which reports are generated for statistical analyses to establish a typical range of costs for each cost category.

The Board's formula cost worksheet is an internal document used by the Analysts while reviewing claims. The formula is based on a detailed accounting of the work performed, including installing soil borings and monitoring wells, performing groundwater sampling and slug testing, performing fate and transport modeling, completing door-to-door surveys for determining land and water use, and preparing reports, as well as "non-typical" work such as negotiating off-site access or obtaining permission to drill in the right-of way. Each component of the formula is assigned a typical cost based on the work performed and the typical cost for that work. For example, if a consultant performed groundwater sampling at eight monitoring wells, the formula would reflect an amount of \$2,400 based on eight wells at a typical cost of \$300 per well, which includes all associated costs for oversight, field work, laboratory costs and reporting. Ultimately, the total claimed cost for all the work performed is compared to the sum of all components of the formula for the documented work. The formula cost evaluation is a starting point for the Analysts and can be adjusted based on site-specific factors (e.g., an atypically long round-trip travel distance or documented inclement weather when the work was performed) as well as their professional experience.

Tennessee

Who: Tennessee's [Division of Underground Storage Tanks Reimbursement Guidance Document](#) (RGD) - 002 provides detailed descriptions and maximum costs for routine tasks associated with underground storage tank (UST) system closure, hazard management, investigation, and cleanup of contaminated sites where tank owners, tank operators or petroleum site owners may apply for reimbursement of eligible expenses from the Petroleum Underground Storage Tank Fund.

When: Equipment rates are reviewed each year and staff rates are reviewed every other year.

How: Tennessee's process for updating these reimbursement rates largely involves comparing their existing rates with other neighboring states, reviewing rental company rates for equipment, and soliciting input from their Corrective Action Contractors (CACs) for suggestions for revisions to the Reimbursement Guidance Documents.

TN follows the current steps when updating rates:

- 1) Rental company websites are reviewed for specific Heavy Equipment and equipment. Information not included on websites is requested through phone calls and emails. A deadline for providing updated rates is established by Tennessee's Division of Underground Storage Tanks.
 - a. Follow up with emails if quotes are not received by the agreed upon deadline date.
- 2) The revised proposed rates are reflected in Tennessee's Equipment Excel spreadsheet, which includes two quotes per region (West, Middle & East Tennessee).
- 3) The revised proposed Staff Rates are reflected in the Staff Rates Excel spreadsheet (Personnel rates) for Alabama, Kentucky, Mississippi, Louisiana, and Virginia.
- 4) The spreadsheets are reviewed and proposed increased rates are highlighted for review by the RGD-002 Cost Committee, which is comprised of UST Program staff.
- 5) Following review and approval by the RGD-002 Cost Committee, the RGD-002 must be reviewed and approved by the Executive Leadership staff. Once approved at the Executive Leadership level, it is presented to legislators by a member of the Executive staff to obtain final legislative approval.



Utah

Who: The [Utah Petroleum Storage Tank Fund](#) is a state created enterprise fund that provides coverage for approved petroleum cleanup costs for participating owners of underground and aboveground storage tanks.

When: Labor rates are adjusted as required every other year.

How: Labor rates are adjusted based on the Consumer Price Index ([CPI](#)). Approved equipment and supply rates are reviewed periodically and adjusted as necessary. This process involves the following:

- 1) Labor rates are set and adjusted with the CPI every other year.
- 2) Common costs, including Work Plan & Budget development for groundwater sampling, have set [Not to Exceed](#) rates. The Work Plan & Budget are submitted for preapproval of the cost and scope of work. The costs to prepare the Work Plan & Budget are set as a Not to Exceed cost. Common tasks with a Not to Exceed cost for the preparation of the Work Plan & Budget proposal are recurring costs (like preparing a Work Plan & Budget for an initial subsurface investigation, additional investigation, groundwater sampling events, etc.) The work that will be done at the release location will have varying scope and is done on a time and materials basis and varies with each release location. There is guidance on how many hours are generally needed to complete these tasks and when costs are adjusted every other year with CPI, it changes the Not to Exceed costs.
- 3) Common equipment has established rates in the "[Cost Guidelines](#)" document for reimbursable rates. The common equipment is not adjusted with the CPI. These rates are established based on research of common purchase and rental prices.

The [Cost Guidelines](#) are in State Rule and establishes rates for labor, common equipment, common tasks, bidding requirements, etc. The tables with hourly rates and Not to Exceed costs are adjusted every other year with the CPI. The State Rule restricts any changes or updates in the document unless it is made by

going through the State Rule process. An exception to the State Rule process is allowed for CPI adjusted labor rates in the form of supplemental tables that supersede the labor rate tables in the Cost Guideline. This exception helps make labor rate updates happen in a timelier manner. These supplemental tables for the CPI adjusted labor rates can be used for the following applicable years until the Cost Guidelines are updated.



Who: Virginia [Petroleum Storage Tank Fund Program](#) reimburses costs to investigate and clean up releases from underground and aboveground storage tanks.

When: Rates are adjusted between one to three years.

How: Virginia has an informal process for adjusting rates. Much of the process is being aware of and responsive to changes in pricing. Either receive outside communication or encounter supply vs demand issues. Once alerted to these changes, the Program reviews as a group. Then a determination is made regarding a reasonable rate change.

Rates are developed from a composite of inputs for products and services used by outside contractors. Example inputs include: invoices submitted for reimbursement, quotes received, vendor surveys/solicitation, review of vendor catalogs and websites. Additional markup factors are applied to the composite price to account for contractor overhead costs. Another useful tool is the RS Means Data Manual publication. An email is received asking about a potential increase in either material or labor cost. The manual gives a quick reference to costs in different zip codes in each state.



Who: Washington's Pollution Liability Insurance Agency (PLIA) doesn't currently have an extensive process for developing rates.

When: WA PLIA updates these rates every 1-3 years.

How: For the Loan and Grant and Heating Oil Insurance programs, markup is limited to 20% and there is a requirement for all travel costs to be under the state per diem requirements (hotel and mileage). Charges for PPE are limited to \$20/site to avoid overcharging of items such as hard hats and steel toed boots. Beyond that, the costs for the initial site investigation and planning work are capped. For Gasoline and Diesel sites in the Loan and Grant program, total costs are capped at \$150,000, and for HO sites the cap is \$7,000.

Challenges Encountered by States:

The eleven states highlighted in this guide have successfully created and administered cleanup rates. With this success, some challenges have been encountered. Setting a consistent and fair way to compensate for tank cleanups can be a challenging task because of site specific obstacles, potential large plume sizes, and high dollar remedial actions, while maintaining State Fund solvency. While this should be straight

forward; the myriad of ways costs can be incurred and submitted for reimbursement can complicate the process.

Challenges on whether to use a time and materials approach versus competitive bidding is a common starting point. Of course, allowable rates could be set up as unit rates instead of reimbursing via time and materials or competitive bidding. After setting up a structure and rates when time and materials or unit rates are being used gives rise to another challenge; how to adjust the rates and how often should rate adjustments be made? If rates are not set and adjusted in a competitive and transparent way, contractors that are willing to do the work may be lost.

If competitive bidding is being used, adjusting rates may not be necessary (competitive bidding should adjust costs automatically) but there will be a need to set criteria for defining what is considered competitive. How many bids are needed? How much variation in the bid totals is allowed? When are bid amendments allowed?

Another major challenge states encounter is if markups should be allowed, and should markups be allowed on all charges? What percentage for a markup is allowed and should it be just one percentage or would different percentage rates for different types of work be a better approach?

Markups are allowed by most, but not all, of the responding states. Those that do allow markups had various percentages and thresholds that are allowed. Some states used more than one percentage depending on the work being done (and/or amount being reimbursed) and some used not to exceed amounts.

Since each state's compensation method has positive and negative aspects it was common to see states often incorporate more than one method. It should be noted that incorporating input from stakeholders is critical for maintaining transparency in the process, and provides an avenue for those affected by each state's program to provide input.

Michigan reported that one challenge in establishing rates is determining what is a reasonable cost for an activity. The cleanup program Remediation and Redevelopment Division works on audits and managers only have three opportunities to complete a review: the Initial Assessment Report, the Final Assessment Report, and the Closure Report. Because of the variability that [Part 213](#) allows, each consultant operates differently and approaches cleanups in their own way. Whether it is groundwater sampling, soil gas sampling, or report generation, each contractor has their own process and charges differing amounts. How does the program establish a set rate for an activity when the time to complete that activity varies?

Illinois reported a challenge that added on extras (gloves, bailers, rope for bailers, etc.) are routinely disputed. A rate of \$25 /day for these incidentals has been adopted to avoid ongoing issues.

Virginia reported a challenge that pre-approval of work plans is strongly recommended, but not a specific requirement.

Conclusion and Next Steps:

The ASTSWMO Tanks Subcommittee and FR Task Force thanks everyone that participated in the survey which gathered this information. We hope this guide is valuable to assist states with updating their current processes or to develop a new process. Please let us know if your state has anything to add to or change in this document. The FR Task Force will now be looking into expanding this guide to include states that update their rates every three to five (or more) years, as well as states that update on an as-needed basis.

Document Resources

Colorado:

[Petroleum Storage Tank Fund](#)

[Reasonable Cost Guidelines](#) (RCG)

Idaho:

[Idaho Petroleum Storage Tank Fund \(PSTF\)](#)

Michigan:

[Michigan Underground Storage Tank Authority \(MUSTA\)](#)

[Schedule of Costs](#)

[Ineligible Cost List](#)

[Professional Descriptions](#)

[324.21510b Itemized corrective actions; schedule of costs.](#)

Montana:

[Petroleum Tank Release Compensation Fund](#)

North Carolina:

[UST Trust Fund Branch](#)

[Reasonable Rates Documents](#)

Ohio:

[Ohio Petroleum Underground Storage Tank Release Compensation Board](#)

Tennessee:

[Division of Underground Storage Tanks](#)

[Reimbursement Guidance Document](#)

Utah:

[Utah Petroleum Storage Tank Fund](#)

[Not to Exceed](#)

[Cost Guidelines](#)

Virginia:

[Petroleum Storage Tank Fund Program](#)