

REQUEST FOR INFORMATION
ACID TREATMENT DATA REPORTING
FOR

**THE DEVELOPMENT OF UPDATES TO THE CALIFORNIA GEOLOGIC ENERGY
MANAGEMENT DIVISION'S ACID TREATMENT REPORTING REGULATIONS**

The Department of Conservation, California Geologic Energy Management Division (CalGEM) is seeking stakeholder input on opportunities to strengthen regulations related to acid treatment data reporting as required by Public Resources Code (PRC) section 3213, as amended by [Senate Bill 406](#) (Stern, chapter 727, statutes of 2021) (SB 406). Information gathered from this Request for Information (RFI), as well as additional discussions with stakeholders, will guide future actions, which may include building upon the existing regulatory framework for well maintenance to address issues identified by CalGEM and other key stakeholders related to acid treatment reporting.

This document outlines CalGEM's objectives with this RFI and some discussion questions to aid CalGEM in information and data-gathering. Members of the public are encouraged to provide input on how best to accomplish these goals. Suggestions about a specific regulatory approach, comments on objectives, and answers to general discussion questions are most useful if they are supported by discussion of the value and benefits of the approach. References to specific wells, published data, and research is highly encouraged.

Submission of Written Comments

Written submissions can be provided through August 31, 2022, by email at: CalGEMRFI@conservation.ca.gov or by mail

at: Department of Conservation
Attn: Acid Treatment Disclosure RFI
715 P Street, MS 1907
Sacramento, CA 95814

Written comments received during the comment period will be reviewed and considered to inform the potential modification of requirements related to acid treatment data reporting.

Contact Information

If you have any questions regarding the process for this public comment period, please contact the Office of Legislative and Regulatory Affairs, at: (916) 322-3080 or CalGEMRFI@conservation.ca.gov.

BACKGROUND

Effective January 1, 2022, SB 406 amended PRC section 3213, modifying the existing requirement for a well history to include reporting of acid treatment data. The statute now requires a well history to include all acid treatment data of any amount. This amendment provides the opportunity for CalGEM to explore strengthening the acid treatment data reporting regulations and identify any issues that may need to be addressed.

The current requirements for reporting acid treatment data are found in California Code of Regulations, title 14, section 1777.4. Under the current regulation, operators are required to report to CalGEM within 60 days of completing an operation on a well that involves emplacing any fluid containing acid. The operators have two options for reporting. The default option requires the operator to report the treatment of each individual well within 60 days of each operation. The second option allows the operator to request annual submission of acid treatment data under an approved aggregated plan for repeat acid treatments, provided that the acid treatments clearly do not meet the definition of well stimulation treatment. The data for an approved aggregate plan are submitted annually by the operator at the end of the calendar year.

More information related to the well maintenance reporting requirements can be found on CalGEM's website ([Well Maintenance](#)). The acid treatment data reported under the Well Maintenance is also available for public viewing on the WellSTAR website ([WellSTAR - Well Maintenance](#)). The data disclosed for each of the reporting methods (single well vs. aggregated) is provided in the Appendix.

The objectives of this RFI are to:

- Understand the various uses and benefits of currently reported acid treatment data.
- Identify additional information that could be valuable for acid treatment reporting.

- Identify the best-available science for reporting on fluids containing acids used in well operations.
- Explore possible ways to implement new requirements in Public Resources Code section 3213 for the reporting of well treatments containing acid.

QUESTIONS FOR DISCUSSION

1. What are the various uses and benefits of the current acid treatment disclosure data reported by operators?
2. What gaps exist, or what additional information or data, if any, should be added to the current reporting requirements for acid treatment data? Please describe the value or utility this additional information or data would provide.
3. Are there any recent scientific papers or research that should be reviewed and considered related to the use of acid treatments in wells?
4. What information could CalGEM provide on its website to help the public understand the issue of acid treatments better?
5. How could CalGEM's public information website be improved in providing this data to the public?
6. Are there any updates that should be made to the current database of acid treatments used in oil and gas operations in California to be comprehensive for research and public transparency?
7. How should any disclosure requirements be updated, improved, augmented, or otherwise changed over time?
8. Should the requirements for the default reporting option by single well and the annual aggregated plan reporting be updated to ensure consistent data is being collected for both methods?

Appendix

Well Maintenance Disclosure fields:

Currently, the following information are collected and disclosed under the acid treatment data reporting.

Aggregate Data

Field	Description
<u>Operator Name</u>	Operator name as recognized by the Division.
<u>Operator Code</u>	Division issued code of operator submitting aggregated maintenance data.
<u>Aggregate Plan ID Number</u>	Division issued ID number for approved aggregated plan.
<u>API 8</u>	8 digit API number without the "04" state code, assigned by the Division of Oil, Gas, and Geothermal Resources (Division). No Hyphens
<u>API Extension</u>	Two digit drill extension code for the given API.
<u>Well Number</u>	Well number designated by the operator that appears in Division Records. Include lease name if applicable.
<u>Field Name</u>	Areal extent of the underground accumulation of oil and gas (California Code of Regulations [CCR] Title 14 Section 1760). Submission should contain only a single field per workbook.
<u>Reporting Start Date</u>	Start date of the reporting period of aggregated report.
<u>Reporting End Date</u>	End date of the reporting period of aggregated report.
<u>Chemical Name</u>	Name of chemical used in routine maintenance.
<u>Purpose</u>	Purpose of chemical used in routine maintenance.
<u>Applications in Reporting Period</u>	Number of times chemical was applied to the indicated well during the reporting period.
<u>Volume/Mass for Reporting Period</u>	Total volume or mass of chemical was applied to the indicated well during the reporting period.
<u>Units (gal/lb)</u>	Indicate if the total reported quantity of chemical is in gallons or pounds using drop down.

Single Well Maintenance Data

Field	Description
<u>API-10</u>	All API-10 values associated to the Operator that do not have a status of Plugged & Abandoned.
<u>Wellbore Code</u>	All Wellbore Codes associated to the selected API-10
<u>Maintenance Operation Start Date & Time</u>	The date and time treatment began being applied to the well.
<u>Reason Filing</u>	Acid, Pressure, Both
<u>Operation Purpose</u>	Purpose for the Well Maintenance operation.
<u>Other Describe</u>	If "Other" was selected for "Operation Purpose" use this area to specify the operational purpose of the treatment.
<u>Interval Porosity</u>	The ratio of the volume of void space to the total volume of the formation in the treatment interval. Enter the minimum porosity of treated zone.
<u>Did Acid Reach Formation?</u>	Yes, No, No Acid
<u>Interval Porosity Source</u>	Source of Interval Porosity
<u>Other Describe</u>	If "Other" or "Other Literature" was selected for "Interval Porosity Source" use this area to provide additional information about the source of the porosity value.
<u>Field Code</u>	The Field Code associated with the Wellbore.
<u>Area Code</u>	The Area Code associated to the selected Field Code.
<u>Pool</u>	The Pool Code associated to the selected Area Code.
<u>Treated Zone Top MD (ft)</u>	The measured depth to top perforation within the treated zone (or to the bottom of casing/tubing if fluid is not exiting perfs).
<u>Treated Zone Bottom MD (ft)</u>	The measured depth to bottom perforation within the treated zone (or to the bottom of the intended treatment interval if fluid is not exiting perfs).

Field	Description
<u>Treated Zone Top TVD (ft)</u>	The true vertical depth to top perforation within the treated zone (or to the bottom of casing/tubing if fluid is not exiting perfs).
<u>Treated Zone Bottom TVD (ft)</u>	The true vertical depth to bottom perforation within the treated zone (or to the bottom of the intended treatment interval if fluid is not exiting perfs).
<u>Treated Zone Wellbore Diameter (in)</u>	The size of the drill bit diameter, in inches, to three decimal places, used in the treated zone. Convert all fractions to decimals. If the hole was widened after the original drill use the larger value. E.g. If a 7" bit was used in the treatment zone, but later at that same depth the well was under reamed to 9-5/8" then enter 9.625 in this cell.
<u>Net Feet Perfs (ft)</u>	The total net feet of open perforations within the treated zone.
<u>Total Fluid Volume (gal)</u>	The volume, in gallons, of all fluid containing acid placed into the well during the operation.
<u>Total Raw Acid Volume (gal)</u>	The volume, in gallons, of raw acid mixed and placed in the well.
<u>Acid Volume Per Treated Foot (gal/ft)</u>	The gallons per treated foot of fluid containing acid placed in the well.
<u>Acid Name</u>	The Name of the acid being used. For example "Hydrochloric acid" or the additive name as indicated on its Material Safety Data Sheet (MSDS) for example, "CRO1001".
<u>Max Treatment Rate (bpm)</u>	The maximum rate which treatment was pumped in barrels per minute (bpm).
<u>Bottom Hole Pressure (psi)</u>	The calculated pressure at the top of the perforations in the treated interval. This should take into account the fluid in the well, the depth, and the surface injection pressure.
<u>Fracture Gradient (psi/ft)</u>	Fracture gradient of the formation being treated. You must enter a value here if ANY fluid reaches the formation. If no fluid, of any type, reaches the formation, enter "0".

Field	Description
<u>BHP Calculation</u>	The Bottom Hole Pressure formula (with values) used to calculate the BHP indicated in the form (to the top perforation). Example: Surf injection pressure (1200psi) + hydrostatic (750psi) - friction (250psi) = BHP (1700psi).
<u>Well Maintenance Determination Request ID</u>	Document ID's of Accepted Well Maintenance Determination Requests