

## **REQUIREMENTS FOR IDLE WELL TESTING AND MANAGEMENT**

### **UPDATED INFORMATIVE DIGEST**

There have been no changes in applicable laws or to the effect of the proposed regulations from the laws and effects described in the Informative Digest in the Notice of Proposed Rulemaking Action published in the California Regulatory Notice Register on July 27, 2018 (Register 2018, No. 30-Z, 07/27/2018).

The Requirements for Idle Well Testing and Management regulations respond to the mandate of Public Resources Code section 3206.1, as well as the Division's broader mandate under Public Resources Code section 3106, by requiring more rigorous testing of idle wells and observation wells, operator evaluations of idle wells, and engineering analyses for idle wells that have been idle for 15 or more years. These regulations will help protect public health and safety, natural resources, and the environment by ensuring that wells do not become a potential conduit for contamination of groundwater, do not dilute hydrocarbon resources, or leak methane into the atmosphere.

These regulations are the result of consideration of extensive public input and consultation with other state regulatory agencies. The Division publicly released a pre-rulemaking draft of regulations in June 2017 and held a public workshop on July 14, 2017. The formal rulemaking process began when the proposed text was publicly noticed on July 27, 2018, initiating a 45-day public comment period that lasted until September 13, 2018. During that public comment period, two public comment hearings were conducted, one in Bakersfield on September 12, and one in Los Angeles on September 13. Revisions to the proposed regulatory text were made available for public comment. A 15-day public comment period on the first revised text of the proposed regulations was held from October 29, 2018 through November 14, 2018. A 15-day comment period on the second revised text of the proposed regulations was held from February 12, 2019 through February 28, 2019. In addition to the formal public comment periods and public hearings, the Division held multiple stakeholder meetings to discuss concerns with the proposed regulations. The second revised text of the proposed regulations was adopted after considering all comments, objections, and recommendations regarding the proposed action.

The revised regulations are consistent in purpose and scope with the original Informative Digest for this rulemaking action. In response to stakeholder comments received, the Division crafted the regulations to be less burdensome and more cost-effective, and equally or more effective to carry out the regulatory purposes discussed in the Informative Digest.

While the revised regulations are consistent in purpose and scope with original Informative Digest, changes were made to sections related to partially plugged wells;

definitions, the idle well inventory and evaluation; the testing of idle wells; pressure testing parameters; the 15- year engineering analysis; casing diagrams; the idle well testing waiver plan, and the requirements for active observation wells. Additionally, new sections were added related to the idle well testing compliance work plan; the idle well management plan; the prioritization of idle wells for testing and plugging and abandonment; and idle wells penetrating a gas storage reservoir. Specifically, the changes are as follows:

#### 1752 - Wells Partially Plugged

- Language was added to clarify that Division approval to partially plug a well must be made in writing
- Language was rewritten to reference the plugging and abandonment sections of existing regulation 1723-1723.3, 1723.7(a)-(f), 1745.1-1745.4, 1745.6-1745.7, and 1745.10
- Reference to isolation with “cement” has been removed to allow for alternative plugging materials
- Language has been added to specify that the required casing pressure test be to the approved effective depth of the well
- Language added to specify timelines for testing of partially plugged wells
- Language added to clarify that partially plugged wells tested under this section are not subject to the testing requirements of Section 1772.1 or the engineering analysis under Section 1772.1.2

#### 1760 - Definitions

- Definitions from the AB 1420, Pipeline Testing and Management regulations were added
- A new definition has been added: “low-priority idle well,” which means an idle well that does not penetrate a USDW, does not indicate any pressure at the surface, is not in an area of known geologic hazards, and is not a critical well, is not an urban well, and does not have an environmentally sensitive wellhead

#### 1772 - Idle Well Inventory and Evaluation

- Newly added requirements: API number and name of well, date the well was spudded, identification of tubing and casing pressures, whether the idle well is located in an area of known geologic hazard, and whether the idle well penetrates freshwater
- The requirement for reporting of mechanical integrity testing has been limited to the results of the most recent testing
- Added language specifying that lack of a USDW must be demonstrated to the Division

- Timing for submission of idle well inventory and evaluation extended to January 31, 2021

#### 1772.1 - Testing of Idle Wells

- Language added to specify that an initial fluid test is not required until 24 months after the effective date of the regulations, regardless of how long the well has been idle
- Language added to clarify that wells known NOT to penetrate a USDW will no longer be subject to fluid level testing
- Language added to clarify that the default assumption will be that the fluid level is above a USDW, if the presence or absence of USDW is not demonstrated
- Language added to specify that a fluid level test showing a fluid level above a USDW triggers a pressure test does not become a requirement until April 1, 2025
- The depth of the required pressure test has been changed to 100 feet measured depth above the uppermost perforation or casing shoe of the deepest cement casing or immediately above the top of the landed liner, whichever is highest
- Pressure testing can be satisfied with a Modified Nitrogen ADA or other testing as approved on a case by case basis (ex. NDT); subsequent testing at 48 months
- Language added to allow operators the ability to conduct passive mechanical integrity tests on low priority idle wells with Division approval and shall repeat every 48 months as long as the well is idle
- The clean out tag shall be performed using open-ended tubing to the current Division-approved depth of the well; a reference has been added to the plugging requirements of 1723 and 1723.1
- The subsection relating to high corrosion that indicated the Division may request an ultrasonic or magnetic flux survey has been removed
- Under remedial requirements for failure to comply with required testing, the option to add a well to the IWMP or waiver plan has been added
- Timelines have been adjusted to require that test results and documentation be submitted to the Division within 60 days, unless the fluid level is above a USDW which is 30 days
- For wells that are infeasible to physically access, a requirement has been added that the well should be plugged and abandoned if it ever becomes possible
- The compliance period has been extended from 4 years to 6 years. The requirement for a compliance work plan has been added, with benchmarks for completion of testing for wells due as of the effective date of the regulations
- Language has been added to clarify the performance standard under which the Division will determine whether to discontinue a waiver for an operator that does not comply with the requirements for managing in inaccessible well

#### 1772.1.1 – Pressure Testing Parameters

- Specifications related to the use of liquid containing additives have been added
- Specifications for Inert Gas Depression Testing and other approved alternatives have been added
- Specifications for recording have been added. Testing must be recorded with a device with an accuracy within 1 percent of test pressure, recording at least once per minute during testing with test results in a digital tabular format; original charts and tables upon request
- Specifications for the use of an analog gauge have been added, the test pressure shall be approximately within the mid-range of the scale of the gauge
- The parameters for a successful test have been changed to allow a pressure test for 30 minutes with 3 percent change; with up to a 10 percent increase for steam wells

#### 1772.1.2 – Engineering Analysis for 15-Year Idle Wells

- The API number, name, and statement of potential future use must now be provided
- The specific data requirement for each reservoir unit has been removed to allow operators to provide the data they believe is relevant to viability
- The casing diagrams may be submitted as flat file data sets
- For data to be applicable to multiple wells they must be within the same field
- The submission date for an Engineering Analysis has been clarified

#### 1772.1.3 – Casing Diagrams

- The spud date has been added as a casing diagram requirement, as well as specifications related to perforation depths, open-hole completions, casing damage, wellbore path measured depth, and graphical casing diagrams.

#### NEW SECTION 1772.1.4 Idle Well Testing Compliance Work Plan

- Section 1772.1.4 has been added to require operators to submit an Idle Well Testing Compliance Workplan to be submitted by June 1, 2019. The Plan would provide a schedule for the completion of the required testing over a six-year period.
- The Plan specifies annual benchmarks that must be completed from April 1, 2020 – April 1, 2025, with at least one well scheduled for testing in each year until initial testing is completed on all the wells covered by the Plan.

- The added Section specifies requirements related to prioritization, Division review, revisions to the Plan, an operator's compliance with the Plan, and the subsequent testing of idle wells after the Plan is completed.

#### 1772.2 – Idle Well Testing Waiver Plan

- Language added to specify that the waiver plan can cover up to 8 years.
- Language added to require that at least 10 percent of the idle wells covered by the plan be scheduled to be plugged and abandoned per year, and all idle wells on the plan must be plugged and abandoned with 8 years.
- Wells on an IWMP will be tracked separately from wells on the waiver plan, but wells on the IWMP will be excluded from testing if they are scheduled for plugging and abandonment; wells to return to service must be tested (modified ADA accepted)
- Wells on the waiver plan must be prioritized according to the prioritization factors 1772.4
- Language added to allow an operator the ability to add additional wells to an additional year of the plan
- A revised testing waiver plan must be submitted no more than six months after an operator transfers or acquires idle wells
- Specification added related to an operator's ability to submit a new plan in the case that an operator fails to adhere to the schedule
- References to Public Resources Code 3208 related to plugging and abandonment, and partial plugging and abandonment in Section 1752 has been added
- The requirement that all wells listed in the plan must be plugged and abandoned in 5 years has been deleted
- The requirement that operators describe prior attempts to remediate the wellbore has been deleted
- The five percent yearly cap on the number of idle wells that can be scheduled for abandonment has been deleted

#### NEW SECTION 1772.3 Idle Well Management Plan

- Section 1772.3 has been added to specify that wells scheduled to be plugged and abandoned as part of an Idle Well Management Plan approved by the Division are not subject to the requirements of Sections 1772.1, 1772.1.1, or 1772.1.2 for that well
- Additions to Section 1772.3 include requirements that operators prioritize the elimination of long-term idle wells based on the considerations listed in Section 1772.4, include notes indicating the basis for prioritizing wells, and the ability of the Division to adjust the order of the idle wells to be eliminated

## NEW SECTION 1772.4 – Prioritization of Idle wells for Testing and Plugging and Abandonment

- New section 1772.4 has been added to include a list of risk factors for idle wells operators are required to use to prioritize wells in the IWMP, waiver plan, and compliance work plan; factors include:
  - status as critical well, in an urban area or with an environmentally sensitive wellhead
  - location in area of known geologic hazard
  - pressure in the casing or tubing at the surface, or the well is open to the atmosphere
  - surface obstacles preventing access
  - downhole issues making reactivation or plugging and abandonment difficult
  - fluid level above the base of freshwater or USDW
  - age of the idle well
  - other indications of threat to life, health, property or natural resources
  - operational or economic efficiencies that may be achieved by ordering work in a particular manner
- Added clarification that the Division may adjust the order of the operator's plan based on these factors

## 1772.5 Requirements for Active Observation Wells

- Subsection (a) requiring a fluid level test, has been deleted
- Language added to specify that testing must be completed in accordance with Section 1772.1.1 unless such testing has been conducted on the well in the past 5 years
- The depth of the required pressure test has been changed to 100 feet measured depth above the uppermost perforation or casing shoe of the deepest cement casing or immediately above the top of the landed liner, whichever is highest
- Language added to specify that in addition to any other penalty or remedial requirement imposed by the Division, within 12 months of failing to successfully complete testing under this section the operator must bring the well into compliance to the satisfaction of the Division, or schedule the well for plugging and abandonment under an approved Idle Well Management Plan or an approved Testing Waiver Plan
- Language added to specify timelines for testing of active observation wells
- Language related to wells overdue for testing at the effective date of the regulations has been deleted
- Language related to Division witnessing has been deleted

- Language requiring compliance “to the satisfaction of the Division” has been removed

NEW SECTION 1772.7 – Idle Wells Penetrating a Gas Storage Reservoir

- Section 1772.7 has been added to clarify that an idle well subject to the mechanical integrity testing requirements of Section 1726.6, is not subject to the requirements of Sections 1772.1, 1772.1.1, 1772.1.2, or 1772.5 for that well.