SB 463: Chemical Inventory and Root Cause Analysis Regulations

PUBLIC COMMENT SUMMARY AND RESPONSE – FIRST REVISED TEXT

Public Comment Period:
September 5 – September 20, 2024

INTRODUCTION

The following comments, objections, and recommendations were made regarding the proposed Underground Gas Storage SB 463: Chemical Inventory and Root Cause Analysis Regulations rulemaking action during a public comment period beginning September 5, 2024, and ending September 20, 2024. Over the course of the public comment period, the California Geologic Energy Management Division (CalGEM) of the Department of Conservation (Department) received five public comments via email. These comments ranged from support and opposition of the regulations to general concerns about underground gas storage operations and suggested modifications to the regulations.

To facilitate the process of reviewing and responding to comments, the Department assigned a unique numerical signifier to each comment. This signifier consists of three components: first, a unique commenter number assigned to each commenter (listed in the table below); second, a separating hyphen; and third, a sequential number assigned to each comment from the identified commenter. Within this document, you will find either grouped or individual numerical signifiers, followed by a comment summary or a specific comment repeated verbatim, followed by the Department's response (italicized). Comments are grouped by subheadings indicating similar comment topics.

INDIVIDUAL COMMENTERS

Commenter Number	Name and/or Entity
001	Lucy Redmond, Pacific Gas & Electric
002	Tom McMahon, SoCalGas
003	Richard Bratkovich
004	Joseph Goldstein
005	Helen Bruner

ACRONYMS

API RP	American Petroleum Institute Recommended Practice
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
CalGEM	California Geologic Energy Management Division
CARB	California Air Resources Board
CCR	California Code of Regulations
CPUC	California Public Utilities Commission
EPA	Environmental Protection Agency
ERP	Emergency Response Plan
FAQ	Frequently Asked Questions
IPR	Inflow Performance Relationship
NTO	Notice to Operators
OSHA	Occupational Safety and Health Administration
PHMSA	Pipeline & Hazardous Materials Safety Administration
PG&E	Pacific Gas & Electric Company
PRC	Public Resources Code
RMP	Risk Management Plan
SoCalGas	Southern California Gas Company
SSSV	Subsurface Safety Values
UGS	Underground Gas Storage

COMMENTS

General

005-1

No gas storage underground is the safe amount.

***Response*:** NOTED. *Other California state agencies determine whether and which UGS facilities are needed to meet the energy needs of California. CalGEM is responsible for ensuring the safe operation of these facilities and has proposed these regulations to help ensure that these facilities continue to operate safely.*

001-20
Commenter respectfully requests that the Division continue to hold joint operator workshops during the rulemaking process as well as prior to any implementation of the regulations, to provide instruction and clarity on any final regulations. We anticipate that such workshops would also benefit the Division by providing insight into operators' implementation progress and create a forum to discuss opportunities for clarification and incorporate lessons learned from the last six years of implementation. An initial workshop was held with operators in 2018 as the Underground Storage Regulations §1726, were being drafted, and it was helpful to better understand the intent of the regulations and align on implementation.

Response: *ACCEPTED IN PART. CalGEM has met with operators throughout this regulation process. As implementation proceeds, if need for a workshop arises, CalGEM will schedule one. Additionally, operators may submit questions regarding compliance with these regulations to CalGEM's UGS Program team.*

01-21
Commenters encourage the division to use Notice to Operators (NTO) to provide clarification of any final regulation, similar to PHMSA-issued Frequently Asked Questions (FAQs) to provide guidance on common issues.

Response: *ACCEPTED IN PART. Where there are specific questions, the operators should contact CalGEM directly. CalGEM may consider issuing written guidance where there are common questions and will issue a Notice to Operators if needed.*

Definitions

001-1

Commenter indicates that this is an important opportunity to refine the proposed language to align with standard industry terminology and practices. To promote a common understanding of the regulations amongst operators and the Division, and to provide consistency with the requirements of partner agencies, Commenter reiterates its recommendation to include a definition for the term "abnormal operating conditions". We recommend defining the term in alignment with 49 Code of Federal Regulations (CFR) Section 192.12 via American Petroleum Institute (API) standards (incorporated by reference by 49 CFR Section 192.7) to further clarify the regulatory language and applicability. Using API language would facilitate consistent usage and interpretation by storage operators who rely on the term "Abnormal Operating Conditions "to report events and incidents to other state and federal agencies. This will promote consistency across operators' various gas groups, including the groups that support them (such as investigation and compliance teams).

Recommended Definition: "Abnormal Operating Conditions" has the meaning as defined in 49 CFR Section 192.12, API RP 1171 Functional Integrity of Natural Gas in Depleted Hydrocarbon Reservoirs and Aquifer Reservoirs, Section 3.1.1 (incorporated by reference into 49 CFR Part 192 by Section 192.7), or any of the Safety-Related Conditions defined in 49 CFR Section 191.23.

Response: *NOT ACCEPTED. The new RMP requirement adds retention and review of safety related conditions, incidents, abnormal operating conditions, near misses and other related event tracking. A definition for abnormal operating conditions is not needed as it is defined in federal statute and regulation. Operators create a protocol for evaluating and maintaining a record of changed based on the events they are already reporting to CalGEM, PHMSA, CPUC, OSHA and other entities. The term abnormal operating conditions is provided in a list of examples of types of local, state and federal reporting the operator maybe subject to and is not meant to be an exhaustive list.*

001-2

Commenter indicates that this is an important opportunity to refine the proposed language to align with standard industry terminology and practices.

To promote a common understanding of the regulations amongst operators and the Division, and to provide consistency with the requirements of partner agencies, Commenter reiterates its recommendation to include a definition for the term "well control fluid". Commenter suggests the term "well control fluid" in lieu of "kill fluid" in section 1726.4.3 to better capture the intent of the regulation and avoid ambiguous language. We understand "well control fluids" to be a more accurate and appropriate term. Additionally, "kill fluid" often refers to fluid used in response to a well control event. Thus, the use of "kill fluid" may not broadly capture the intent of the regulation and we submit that "well control fluid" would be a better alternative.

Recommended Definition: "Well Control Fluid" means fluids commonly referred to as "well kill fluids" used in response to controlling a blowout, or fluids used during well maintenance and intervention for well control during planned work activities.

Response: *NOT ACCEPTED. Some instances of kill fluid have been updated to well control fluid where the more general term is appropriate. In the places where kill fluid was retained, it was used to specifically mean fluid used in response to a well control event and is the appropriate term for the context. Section 1726.4.3(d)(3) was modified to say "… if well control fluids are used to kill the well in response to a leak..." This clarification will separate the well kill fluids from fluids used in routine well maintenance and intervention during planned work activities, consistent with PRC section 3181.5(b).*

001-3
Commenter indicates that this is an important opportunity to refine the proposed language to align with standard industry terminology and practices. To promote a common understanding of the regulations amongst operators and the Division, and to provide consistency with the requirements of partner agencies, Commenter reiterates its recommendation to include a definition for the term "anomaly". These terms are not defined. The lack of a clear or consistent definition has created ambiguity and differing interpretations of what the term "anomaly" means. Commenter proposes a definition for anomaly to strengthen the current rules and allow for consistent interpretation by operators and regulatory staff alike. Although features may be present on casing

inspective surveys, there may not be active threats that require mitigation, and wall thickness remains within allowable limits for expected loading conditions. The definition of anomaly for a noise and temperature log is similar; however, noise and temperature anomalies are not defined by a casing thickness measurement, but rather, an actionable deviation from expected curves because some features are expected due to lithological changes or fluid movement within other subsurface zones.

Recommended Definition: "Anomaly", "Anomalous" or "Anomalies" means a feature or features identified that pose a threat to the integrity of a well as identified on a casing inspection log such that an action must be taken to mitigate a significant present or potential hazard to public health and safety, property, or the environment.

Response: *NOT ACCEPTED. CalGEM applies the common definition of anomaly: something that deviates from expected. Commenter's proposed definition is more limited and would exclude from evaluation deviations from the expected that need to be considered.*

001-4
Commenter indicates that this is an important opportunity to refine the proposed language to align with standard industry terminology and practices. To promote a common understanding of the regulations amongst operators and the Division, and to provide consistency with the requirements of partner agencies, Commenter reiterates its recommendation to include a definition for the term "blowout". Comment proposes that that term be defined similarly to that used by CARB in Cal. Code Tit. 17 §§95667(a)(3) and (a)(33). Because operators must report leaks and blowouts to CalGEM and CARB, consistent terminology across agencies removes ambiguity as to what constitutes a "blowout" and clarifies the urgency and level of severity for which a leak is reportable and agency notifications are required. The use of consistent terminology across regulatory reporting reduces ambiguity and uncertainty.

Recommended Definition: Blowout means the uncontrolled flow of gas, liquids, or solids (or a mixture thereof) from a well to the surface.

Response: *NOT ACCEPTED. A definition is not needed for blowout which is used in a limited context consistent with Commenter's recommended definition.*

001-5

Commenter indicates that this is an important opportunity to refine the proposed language to align with standard industry terminology and practices. To promote a common understanding of the regulations amongst operators and the Division, and to provide consistency with the requirements of partner agencies, Commenter reiterates its recommendation to include a definition for the term "uncemented casing". The term is not defined, which can create ambiguity and differing interpretations of its meaning. We believe this definition would eliminate ambiguity that could arise out of different approaches for determining cemented condition. Ideally this would allow greater consistency among operators so that compliance is more closely aligned. Furthermore, the definition clarifies that the corrosion potential of uncemented casing should be by its nature dissimilar from the corrosion potential of cemented casing.

Recommended Definition: "Uncemented casing" means the portion of casing is a well that cement is determined not to be present based on a volumetric analysis of its placement.

Response: *NOT ACCEPTED. Uncemented casing includes all casing that may be uncemented regardless of whether or not a determination has been made if cement is present based on a volumetric analysis. Additionally, there are other methods for determining quality and location of cement which the commenter's definition excludes.*

001-6

Commenter recommends revising the definition of "absolute open flow" to the recommended definition provided. Commenter found the use of "withdraw" to be confusing. Commenter also recommends striking the last sentence because it appears to be a descriptor rather than a requirement. The additions outline what is needed to develop IPR relations and determine the absolute open flow potential of a well.

Recommended Definition Changes: …The absolute open flow potential is the theoretical rate at which the well would flow against a theoretical atmospheric backpressure at surface. ~~withdraw gas at zero flowing bottom hole pressure. The reservoir fluid composition and behavior of the fluid phase under flowing conditions determine the shape of the curve.~~

Response: *ACCEPTED IN PART. The end of the second to last sentence was modified as suggested. The final statement is a descriptor as is appropriate in a definition.*

1726.3 Risk Management Plans

001-7
1726.3(d)(7) Commenter appreciates the Division proposing a change of terminology to align with industry definitions. Commenter understands this section of code to mean that where a reportable condition exists, operators will be required to define the protocol investigating risk-related conditions. Recommend adoption of a definition for "abnormal operating condition".

Response: *ACCEPTED IN PART. Operators will be required to define the protocol for investigating events they are already reporting to CalGEM, PHMSA, CPUC, OSHA and other entities, but a definition for abnormal operating condition is not needed as it is commonly understood definition.*

003-1
There should be a law or regulation that says that any well for an underground gas storage facility should have a shut off valve at the bottom of the well. If such a valve had been operable at SoCalGas Aliso Canyon, the blowout that occurred there would have been a minor event lasing less than one hour instead of 4 months.

Response: *NOT ACCEPTED. Subsurface safety valves are additional downhole equipment that are subject to failure and could require additional entry into the well which increases risk. Thus, they should be used only when they are necessary and not as a default for every well.*

003-2
The SoCalGas analysis of earthquake risk is flawed. Earth movement can sever gas pipelines as demonstrated in the Palos Verde peninsula recently. Many other things can cause a major leak such as human error, over pressurization, corrosion, etc.

Response: *NOT ACCEPTED. This comment is specific to content in SoCalGas RMP documentation, which is out of the scope for this rulemaking. The scope of this rulemaking is well chemical inventory development and reporting, and what is needed to address the root causes identified in the Blade Energy Partners "Root Cause Analysis of the Uncontrolled Hydrocarbon Release from Aliso Canyon SS-25," (Blade RCA) on the 2015 leak at the Aliso Canyon gas storage facility. Existing regulations require analysis and mitigation of hazards and threats such as earthquakes, major leaks, and human error. Corrosion evaluation, mitigation, and monitoring requirements are also enhanced in this regulation.*

004-1
The SoCalGas study S-POS 002 has severe shortfalls to its conclusions based on their own assumptions within the report. The report if fraught with fallacious premises that allow their conclusion that the seismic risks to the now open field are relatively low and can be managed over the life of the facility. An evaluation of their report and its data actually indicates a 7% probability of failures worse than the blow out at Aliso Canyon 6 years ago. Because of those assumptions, and the fact that they completed and published their report ostensibly with Division concurrent and approval, the rigor of CalGEM oversight may have been compromised due to the interpretational allowances within the original text of CCR, Title 14, section1726.3. Both of these points can be easily accommodated by incorporating my suggested rewording of SB 463.

Recommendations for language changes to 1726.3 include installation of subsurface shutoff valves at each well head and that any safety study would have to show they were NOT required. The intent there was to give your office the substantiation of a requirement for maximum safety. I also suggested that you put in text to assure your office carefully reviewed at strategic checkpoints that the forthcoming safety report was based on careful development of facts and their interpretation, which would force a bias toward safety first.

Recommended edits:
1726.3(d)(2) that there be a requirement to locate subsurface shut-off valves at the well tube base interface with the facility storage points, and an evaluation will be conducted to determine whether employment of such valves is not required.

1726.3(d)(2): That said evaluation will document and report to the Department and require pre-approval of methodology, premises, ground rules, basic third-party data, and intended use. Such report will have its results retroactively applied if necessary. Department review and approval will be applied at various strategic development points of this report, at status meetings, and at completion.

1726.3(a) For each underground storage project, the operator shall submit a project specific Risk Management Plan and schedule including technical and status reviews and milestones during preparation, to the Division for review and approval, of both the preliminary material and the final report.

Response: *NOT ACCEPTED. The comment regarding SoCalGas study S-POS 002 is specific to content in SoCalGas RMP documentation, which is out of the scope of this rulemaking. Existing RMP requirements already require evaluation of whether to employ surface and/or subsurface automatic or remote-actuated safety valves. Subsurface safety valves are not necessary in every well, can fail, and as extra downhole equipment could require additional entry into the well, which increases risk. The recommended changes, including those relating to RMP development and timing of CalGEM's review, are not relevant to well chemical inventory development or reporting, and are not needed to address the root causes identified in the Blade RCA on the 2015 leak at the Aliso Canyon gas storage facility.*

1726.3.1 Emergency Response Plan

001-8
1726.3.1(c)(5) Commenter recommends the language be revised to "assumptions and summary of outputs" instead of "data and models," as this

aligns with the data that operators can provided. "Assumptions and a summary of outputs" can be provided upon request, but availability of "data and models" to be furnished to the Division may be difficult to comply with because operators may depend or have depended on vendors whose software and models are proprietary and unavailable to operators. Therefore, operators may be unable to make such models available to the Division because operators do not possess the software or models themselves or may be prevented by law from sharing them.

To the extent that "data and models" is not revised to "assumptions and a summary of outputs" it would also be helpful to clarify the meaning of "made available" because although the language could mean something like an in-person presentation of data and models at the operator's offices, it is also broad enough to purport to require the operator to send the model to the Division by mail or electronic file transfer. To avoid potential ambiguity in the future, we propose an alternative would be to specify that the model would be made available for inspection at the operators' office.

Response: *NOT ACCEPTED. Data and modeling underlying an IPR will be maintained by the operator but provided to CalGEM upon request. Data includes anything used to create the resulting well specific well control plans, including assumptions. Where requested, the data utilized to create the well control plans and model would likely qualify as interpretive data under PRC section 3234(d), but under CCR section 1997.1, operators must submit a request to have the data treated as confidential at the time the records are submitted.*

001-9
1726.3.1(c)(16) Commenter recommends that the language be revised to require operators to establish a "protocol" to contact the Division regarding the testing of chemicals of concern and timing of testing. Use of "protocol" instead of "engagement" is consistent with other language in 1726 requiring operators to develop protocols used to designate an action that would follow. We have also proposed the addition of the word "feasibility" to allow for the possibility that testing may not be safe depending on the nature of the emergency. "To the Division's satisfaction" is also proposed to be deleted because we are not sure what it means (i.e., whether it applies to the type of engagement outlined

in the plan or the timely testing is complete, or both, or whether operators should expect to receive express approval from the Division), and based on our understanding of the intent of the regulation, it does not appear to be necessary as long as the regulation provides that testing must be completed "timely".

Recommended edit: "…The plan shall provide protocols to contact ~~for engagement with~~ the Division to discuss the feasibility and timing of testing ~~ensure testing is completed~~.

Response: *ACCEPTED IN PART. The "to the Division's satisfaction" text has been deleted. The methods and procedures required by this section are part of the RMP, which already requires CalGEM's review and approval.*

As used, engagement means to discuss. The procedures to be developed about monitoring, sampling, and testing should include a procedure for the operator to engage in a dialogue with CalGEM during an emergency about where, when, and how monitoring, sampling, or testing should occur. Each emergency may present unique challenges and whether monitoring, sampling, or testing is feasible may not be an issue in every emergency. CalGEM should be involved to validate that appropriate monitoring, sampling, or testing is likely to yield meaningful results and is performed in a safe, timely, manner and location.

001-10
1726.3.1(d) Commenter appreciates the Division aligning the emergency response plan timeline with CPUC emergency response plan cycles that allow for reviews once every calendar year, not to exceed 15 months (because these plans are included as part of the corporate emergency response structure). We do recommend striking "after key personnel changes" because we do not think such changes should trigger an update to the emergency response plan. In addition, we understand that the intent of this regulation is to ensure that the operator stays current on its emergency response plan. Management of change practices already require that operators manage key personnel changes and training/onboarding to ensure continuity.

Additionally, we submit that having "key personnel changes" trigger reviews and updates may lead to ambiguity. For example, this language could be interpreted as requiring reviews and updates when personnel leave for short periods for vacation or other personnel matters. Key personnel changes would only impact the plan in that contact lists updates that are managed apart from the plan protocol. If the Division is focused on ensuring key personnel are aware of their responsibilities regarding emergency response, Commenter suggests the language be reviewed to require evidence of training and awareness be maintained that demonstrates key personnel are informed of their duties.

Recommended changes: The operator shall review and update the emergency response plan ~~after key personnel changes, and~~ at least once per calendar year…input on the emergency response plan. Records confirming key personnel were trained on the emergency response plan must be maintained.

Response: *NOT ACCEPTED. Personnel need to know what tasks they are responsible for doing and need to be assigned to specific roles and responsibilities within the ERP. As such, key personnel are a core component of the ERP that must be informed and trained on their duties. Contact information for key personnel may be maintained as a separate document, but specific people should be named in the plan for each role so that CalGEM knows who is responsible for which tasks in an emergency and the list of responsible parties can be verified. Records confirming that they were trained on emergency response are already required and expected to be maintained to show compliance with the RMP. (CCR §1726.3(d)(13))*

1726.3.2 Corrosion Evaluation, Mitigation & Monitoring

001-11
1726.3.2(a)(1)(A)
Commenter recommends reworking the intent as the current draft reads as if the casing has corrosivity. As worded it is implied that the casing corrodes itself rather than some environmental factor causing it. Commenter believes the intent of the Division could be captured by removing the word "corrosivity".

Response: *ACCEPTED. CalGEM removed the word "corrosivity" from this section and rephrased the text to "the likelihood of its casings to corrode."*

001-12
1726.3.2(a)(1)(B) and (C) Commenter notes and appreciates the Division having made proposed changes to this section. We do renew our request for a common definition for anomaly. We suggest combining 1726.3.2(a)(1)(C) with (B) as modification by the Division could be accomplished by combining both of these subdivisions. The lack of definition for anomaly or anomalies has caused unnecessary uncertainty and disagreement in the past, and we are hopeful that differing interpretations can be avoided in the future.

Recommended edits: The well's corrosion rate and detected anomalies (mechanically induced or manufacturing), as determined under Section 1726.6, subdivision (a)(2) or other logs or tests.

Response*: NOT ACCEPTED. Providing examples of the sources of anomalies is not necessary for the context of this section and implies that anomalies are only mechanically induced or manufactured when corrosion is a major source of anomalies in well casings. Additionally, the distinction between (B) and (C) is helpful to the reader in understanding that casing wall thickness testing must always be included in the evaluation as well as additional other testing. To make this distinction clearer, we have added the word "other" to (C).*

001-13
1726.3.2(a)(1)(E)(i) and (ii) Commenter recommends using the term "corrosivity" without the qualifier "anticipated". Commenter does not know exactly what is meant by "anticipated." What is or is not "anticipated" tends to differ from person to person. For example, reasonable people could disagree over whether the word means something that is expected to occur, or whether it's merely possible that something could occur. Therefore, we would prefer that this word be eliminated to avoid unnecessary uncertainty and ambiguity.

Response: *NOT ACCEPTED. In lieu of drilling a new well or punching hole in casing, we expect that an operator will use available historical information to calculate the anticipated corrosivity of wellbore and formation fluids and solids.*

Direct measurement is preferred when available, such as when a new well is drilled, but calculations are acceptable when direct measurement is not available.

001-14
1726.3.2(b)(2) Commenter recommends replacing the word "include" with the word "consider".

Response: *NOT ACCEPTED. At minimum, operators should evaluate the corrosion prevention and mitigation strategies listed. Changing "include" to "consider" would make evaluation of those strategies optional.*

002-1
1726.3.2(a)(1)(A) The text in this subsection "corrosivity of its casings" appears to imply that the well casing material itself is corrosive. Because corrosivity, or the environment that could cause corrosion in a well, is addressed further in subsection 1726.3.2(a)(1)(E)(i) and (E)(ii), Commenter recommends that this subsection be modified to capture what the evaluation of corrosion risk shall consider.

Recommended edits: Evaluation of the well's components including tubular integrity and the configuration ~~and corrosivity~~ of the well casing. ~~of its casings~~

Response: *ACCEPTED IN PART. CalGEM removed the word "corrosivity" from this section and rephrased the text to "the likelihood of its casings to corrode." The recommended edit is not accepted because it would eliminate an important element of the corrosion risk assessment.*

1726.4.3 Gas Storage Well Chemical Inventory

001-15
Commenter recommends requiring that chain-of-custody documentation be maintained and available for audit as necessary; submission of chain-of-custody testing documentation will add additional administrative burden without apparent reductions to risk or safety. We expect it will also conflict with privacy laws and sharing of personnel and vendor names and information that would

require confidential treatment. In Commenter's experience, chain-of-custody documentation can be extensive; we recommend revising to avoid unnecessary administrative burden for the operator and the Division.

Response: *NOT ACCEPTED. The chain of custody documentation is an important part of a lab report and provides information necessary to confirm that indicated sampling procedures consistent with testing methods were followed. Historically, CalGEM has received these reports without modification. Phone numbers and personal emails may be redacted.*

001-16
1726.4.3(c)(3) and (d) Commenter proposes the sequencing for proposals and baseline sampling be revised to allow operators a period of 12 months following the submission of the protocol. If the Division plans to opine on the protocol, then Commenter recommends the 12-month period to perform baseline sampling begin when CalGEM accepts the operator's protocol to ensure alignment on the approach and reduce any waste or rework that would result.

Recommended edits: …as soon as practicable but no later than [OAL to insert date 12 months <u>following the submission of a protocol per 1726.4(d)</u>. ~~from effective date of the regulation before submitting to the Secretary of State.]~~

Response: *NOT ACCEPTED. CalGEM has already extended the period for testing from 6 months to 12 months and does not believe that additional time is needed. The majority of the testing required is for BTEX and metals, tests which are routinely performed at laboratories in less than a month. Additionally, the baseline testing is only one component of the well chemical inventory. Any delay experienced for a given baseline test should not delay submittal of all other data required in a Well Chemical Inventory.*

001-17
1726.4.3(d) Commenter recommends striking "and adhere" because compliance is implied with the requirement, and it appears unnecessary to reiterate that adherence is expected. Commenter recommends "for review" be removed and the requirement of submission be simplified.

Recommended edits: The operator shall develop ~~and adhere to~~ a protocol for maintain and providing to the Division a Gas Storage Well Chemical Inventory submitted by [OAL to insert date six months after effective date before filing with Secretary of State] to the Division ~~for review~~ with the baseline testing in 1726.4.3(c)(3) and that protocol shall meet the following requirements…

Response: *NOT ACCEPTED. CalGEM's regulations occasionally reference adherence to developed protocols and processes to emphasize the importance of compliance even though compliance is clearly expected in the requirement.*

001-18
1726.4.3(d)(2) Commenter recommends the addition of the word "Current" to clarify that the Division wishes to have current samples of storage gas injected into or withdrawn from storage annually.

Recommended edits: Current storage gas presence and composition….

Response: *NOT ACCEPTED. Section 1726.4.3(d)(2) references the existing requirement within the data requirements of section 1726.4(a)(6)(E), which requires "Analysis of the gas injected, submitted to the Division on an annual basis." It is commonly understood that the annual submission requirement requires evaluation of the gas injected on an annual basis and not resubmission of stagnate data annually.*

001-19
1726.4.3(d)(6) Commenter recommends that the requirement for resubmission of the entire chemical inventory along with well summaries for permitted work be eliminated. It appears unnecessary because the majority of data would remain unchanged as permitted work is completed during a calendar year. This requirement appears to unnecessarily increase the operators' administrative burden and increase the Division's electronic storage requirements.

Commenter also suggests clarifying that that the updated submission process occurs on a well-by-well basis. As written the regulation might be read to require resubmission for the entire Chemical Inventory list upon each and every well

rework. WE suggest revising the language to require submission of updates to the chemical inventory list on a per well basis so that the submission is separated from the well summary. Additionally the uploading process to the public WellSTAR database is likely to be separate for the well summary and the chemical inventory list.

Recommended edits: The protocol should require the operator to provide the Gas Storage Well Chemical Inventory on a well-by-well basis to the Division…also call for submittal of an updated Gas Storage Well Chemical Inventory ~~on a well by well basis~~ to the Division…

Response: *ACCEPTED IN PART. The well chemical inventory section has been updated to use the plural of inventories to reflect the intent that well chemical inventories are developed and maintained on a well-by-well basis. However, no change has been made to the triggers for requiring well chemical inventories for each well. Submission of an updated inventory after permitted well work helps ensure that the inventory for that well is current and on file in the event of a reportable leak.*

002-2
1726.4.3(c) Commenter seeks flexibility to perform baseline analytical testing including Radon-222 testing to optimize the use of resources and costs associated with the new requirements. Commenter recommends that the Division reevaluate the timelines for baseline testing including testing for Radon-222 and the submission of the protocol mentioned in subsection 1726.4.3(d) Given the additional timing constraint associated with the testing for Radon-222 as stated in subsection 1726.4.3(c)(1)(A). Commenter recommends that the Division allow operators 12 months from the time of submission of the Gas Storage Well Chemical Inventory protocol, for completion of baseline and Radon-222 testing.

Response: *NOT ACCEPTED. Operators are encouraged to reach out to CalGEM proactively if they would like to review portions of their testing protocol with CalGEM prior to final submission, including questions about specific baseline testing. Most tests can be completed in less than a month, and because the baseline Radon-222 testing is a single component of the inventory, it should not*

be used as justification to delay public access to all other well chemical information by an additional six months.