SB 463: Chemical Inventory and Root Cause Analysis Regulations

PUBLIC COMMENT SUMMARY AND RESPONSE – SECOND REVISED TEXT

Public Comment Period: December 5 – December 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 December 5, 2024, and ending December 20, 2024. Over the course of the public comment period, the California Geologic Energy Management Division (CalGEM) of the Department of Conservation (Department) received ten 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	Kevin Walsh
002	Lynne Sykes
003	Robert Nace
004	Rich Henderson
005	Karen Ashikeh
006	David Perry
007	Alfredo Martin Romo
008	David Bezanson
009	Joni Spiers
010	Lucy Redmond, Pacific Gas & Electric (PG&E)

ACRONYMS

CalGEM California Geologic Energy Management Division

CARB California Air Resources Board
CCR California Code of Regulations

CPUC California Public Utilities Commission
EPA U.S. 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

UGS Underground Gas Storage

COMMENTS

General

001-1, 002-1, 003-1

Please protect the earth over the profits of rich people. If it's not good, stop it. Cut pollution!

Response: ACCEPTED IN PART. CalGEM prioritizes protecting public health, safety, and the environment in its oversight of underground gas storage (UGS), while working to help California achieve its climate change and clean energy goals. However, the suggested prohibitions and undertakings are not within the scope of the present rulemaking, which is focused on well chemical inventory development and reporting, and what is needed to address the root causes identified in the Blade RCA on the 2015 leak at the Aliso Canyon gas storage facility.

004-1

Where is the financial responsibility? In particular if a company becomes insolvent during a repair?

Response: NOT ACCEPTED. Financial responsibility for UGS is outside the scope of this rulemaking, which is focused on well chemical inventory development and reporting, and what is needed to address the root causes identified in the Blade RCA on the 2015 leak at the Aliso Canyon gas storage facility. CalGEM has other statutes and regulations that would apply, and other state entities also have financial responsibility requirements.

005-1

Commenter notes that there should be no change to regulations that assure the structural or operational safety or integrity of oil and gas well management, that is based on insufficient staff time or the competency, time limitations or ability of current staff. Further, a robust, competent, and able staff should be available at all times to take action to monitor these facilities and to handle problems day or night.

Response: ACCEPTED. The proposed regulations supplement existing UGS requirements for the safe operation of UGS wells, projects, and facilities. There are no changes contemplated that would compromise safety or integrity, or based on insufficient staff time or competency; competent and able staff available.

005-2

Commenter recommends the use of alarm systems to signal changes in either unit integrity or changes in composition of materials stored in units in use and in abandoned wells should be operational, paid for by oil and gas producers and manned with staff of sufficient size and proficiency to monitor wells, ongoing daily and beyond 7-year limits, as long as the systems are in use and for abandoned units.

Response: NOT ACCEPTED. Existing integrity monitoring requirements recommend and operators are using, CalGEM approved, operating supervisory control and data acquisition (SCADA) systems, with automatic computer alarm notification, at operator expense. Operator staffing levels, staff qualifications and training are also addressed elsewhere, primarily in risk management plan requirements. Further requirements are outside the scope of this rulemaking, which is focused on well chemical inventory development and reporting, and what is needed to address the root causes identified in the Blade RCA on the 2015 leak at the Aliso Canyon gas storage facility.

005-3

Commenter notes that the basic requirements for any existing or planned oil, gas, or chemical storage facilities for safety as a foundation of operations and for public safety over time, accounting for risks like flooding and earthquakes, should not be modified and should be monitored for emerging problems, ongoing even if facilities are no longer being used for storage or other use.

Response: ACCEPTED IN PART. The proposed regulations are focused on UGS, and like existing requirements, aim to protect life, property, public health and safety, and environmental quality, including mitigating greenhouse gas emissions associated with UGS projects. Existing RMP requirements include consideration of and mitigation for risks like flooding and earthquakes and

require ongoing monitoring for emerging problems, and additional regulations address facility decommissioning. None of those requirements are being altered by this rulemaking.

006-1, 007-1

Implement SB 463: immediately! Let's do it.

Response: ACCEPTED IN PART. The Department acknowledges these comments in support of this rulemaking. This rulemaking to provide needed transparency and information about the chemicals to which the public may be exposed in the event of a release from a gas storage well and to enhance existing underground gas storage (UGS) regulations for operator detection, investigation, evaluation, and mitigation of well integrity issues.

Statutory requirements of SB 463 are already being implemented. The rulemaking is subject to California Administrative Procedures Act requirements for public participation and timing, but it is anticipated that the regulations will become effective in 2025 if approved by the Office of Administrative Law.

008-1

Commenter states that the rulemaking proposal would increase industry revenue, and that a long list of outstanding regulatory considerations need to be resolved and in accordance with CEQA, EPA, NEPA, DOE and BLM guidelines. Further, that drafting these regulations, in collaboration with other state and federal agencies, will make CalGEM a pioneering hero for industry and the public.

Response: NOT ACCEPTED. This rulemaking effort was directed by the California Legislature when it enacted SB 463 and is not expected to increase industry revenue. The scope of this rulemaking is focused on well chemical inventory development and reporting, and what is needed to address the root causes identified in the Blade RCA on the 2015 leak at the Aliso Canyon gas storage facility. Other regulatory considerations and consultation inconsistent with that specified in SB 463 are outside of that scope.

008-2

Commenter recommends that the regulations specify which gasses are included in the regulation and state that other gasses are not permitted under this regulation. Also specify the technologies and sources that may be used to obtain these gasses. Include regulations for storage of solids and powders in this current regulation or future regulations.

Response: NOT ACCEPTED. These regulations are interpreted in the context of a larger existing regulatory framework. CCR section 1726.1 defines underground gas storage project, specifying that the rules applicable to UGS projects apply to the injection and withdrawal of natural gas into an underground reservoir for the purpose of storage. PRC section 3007 defines "gas" to mean "any natural hydrocarbon gas coming from the earth. Natural gas is primarily comprised of methane. Injection composed primarily of carbon dioxide would not be considered hydrocarbon storage. Carbon dioxide sequestration, and storage of solids and powders not entrained in or incidental to the storage of this rulemaking.

008-3

CalGEM is advised to defer finalization of regulations entailing pipelines until PHMSA finalizes its regulations.

Response: NOT ACCEPTED. The proposed regulations are focused on gas storage wells, not pipelines.

008-4

Commenter states that effective mitigation begins with monitoring emissions and encourages CalGEM to work with industry to improve their LDAR protocols and refine standards. Further, that CalGEM should establish or contract with an independent monitoring service that can verify quantities of emissions using manual OGI devices, drones, and satellites, and states that industry reports or estimates are unacceptable. CalGEM should require continuous monitoring equipment wherever feasible, require leak repair within one month from detection, and not let extreme weather events delay established inspection schedules. Inspections should be required within and outside of HCA areas.

Require quarterly inspections of all infrastructure, including underground storage sites. More frequent inspections of pipelines in areas of seismic faults may be prudent.

Response: ACCEPTED IN PART. Although CalGEM's purposes include reduction and mitigation of greenhouse gas emissions associated with the development of hydrocarbon and geothermal resources, and CalGEM regulations require operator integrity monitoring and leak reporting and repair, emissions monitoring is outside the scope of this rulemaking. The scope of the proposed regulations is focused on well chemical inventory development and reporting, and what is needed to address the root causes identified in the Blade RCA on the 2015 leak at the Aliso Canyon gas storage facility.

The California Air Resources Board (CARB), the primary state agency responsible for actions to protect public health from the harmful effects of air pollution, also has existing leak detection, inspection, and repair requirements. CalGEM does not believe that third party monitoring is necessary. CalGEM staff conduct inspections of wells and entire UGS facilities, both announced and unannounced, and do not rely entirely on operator self-reporting.

008-5

Commenter states that over 70% of CO2 emitted into the atmosphere is from combustion of fossil fuels. This industry should be responsible for all costs of capture, distribution, and multi-century. The EPA, BLM, and CalGEM should assess fees for oversight services, inspections, and independent data storage. Fees and fines for noncompliance should increase annually at a pace that will incentivize the fossil industry to transition to clean energy. Assess each company and require each to post an indemnity bond to cover future liabilities from emissions. Also require industry associations (e.g. WSPA) to post back-up bonds to cover liabilities of failed operators. The number of government and private cases filed against the fossil industry for exacerbating climate change is increasing annually. Without sufficient indemnity bond reserves, smaller firms may not be able to pay damages. If fugitive emissions of CH4 subside, industry will retain more of its product and realize increased revenue from greater sales volumes. The sum of costs and fines from your regulations must exceed this increased sales revenue. This is one of the policies needed to expedite the

transition to clean energy. The fossil industry has vast resources that are suitable for profitable generation and storage of clean energy.

Response: NOT ACCEPTED. California levies assessments annually on oil and gas operators, and on UGS operators to cover the cost of CalGEM surveillance over those facilities. There are also minimum bonding requirements and recent legislation has added new provisions for CalGEM to require further bonding from operators. The additional requirements that commenter requests are outside the scope of this rulemaking which is focused on well chemical inventory development and reporting, and what is needed to address the root causes identified in the Blade RCA on the 2015 leak at the Aliso Canyon gas storage facility.

008-6

Operators of capture and storage vaults should not receive LCFS, Cap & Trade, or federal tax credits for capture and storage because neither capture nor storage have been proven effective or cost-effective in peer-reviewed scientific research. Several decades of research have revealed that manufacturer and industry claims about CO2 capture and storage efficacy are hyperbolic and unreliable.

Response: NOT ACCEPTED. CalGEM does not have authority to provide or jurisdiction over LCFS, Cap-and-Trade or federal tax credits.

008-7

Both venting and flaring should be prohibited. Both emit CH4, though the volume is greatest from venting. Each emits Toxic Air Contaminants. Industry should be required to install gathering lines at wells. Then they could capture methane and sell it for a profit.

Response: NOT ACCEPTED. The UGS facilities to which the proposed regulations apply do not flare or vent methane.

008-8

Commenter provides a decision tree to analyze costs and benefits of underground storage of carbon dioxide using carbon capture and storage

techniques. Verify that your regulations are justified by economic criteria. The current externalized costs of fossil fuel use totals hundreds of \$billions annually in the US. Use the Social Cost of Carbon calculated by the EPA in 2024 at a discount rate of 1.5% or lower for CO2, CH4, and N2O. The costs should include consequences of emissions in all three Scopes. Funds invested in mitigation in earlier years provide greater benefits than investments made in later years. The Return on Investment is higher in part due to prevention of more intense climate change, which forces us to spend more on adaptation and mitigation.

Response: NOT ACCEPTED. CalGEM prioritizes protecting public health, safety, and the environment in its oversight of UGS, but the economics and social costs of carbon dioxide storage are outside the scope of this rulemaking which is focused on well chemical inventory development and reporting, and what is needed to address the root causes identified in the Blade RCA on the 2015 leak at the Aliso Canyon gas storage facility.

008-9

The EPA has long used 1.4% as their estimate of fugitive emissions of CH4 from the methane infrastructure. Recent research reveals that the percentage is far higher. Collaborate with EPA to establish standards that set progressively lower caps annually. Prioritize the super-emitters first. Conduct similar research for CO2 pipelines.

Response: NOT ACCEPTED. CARB is the primary state entity that sets emissions standards and CARB partners with US EPA and other agencies to address emissions. Establishment or reduction of existing emissions standards is outside the scope of this rulemaking, which is focused on well chemical inventory development and reporting, and what is needed to address the root causes identified in the Blade RCA on the 2015 leak at the Aliso Canyon gas storage facility.

008-10

Commenter states that there is a high degree of consensus within the scientific community that it is best to rapidly phase out use of fossil fuels. The climate lag between emissions reduction and cooling of the atmosphere is 38 years. The lag is longer for ocean temperatures.

Policies that diminish fugitive emissions are only effective if the saved GHGs are never sold to end users for combustion or used in ways that entail escape into the atmosphere. Combustion by consumers (e.g. in building appliances) has the same emissions profile as flaring. Estimating the percent of fugitive emissions annually for at least a century is critical for cost to benefit analyses, maintenance projections, and assessment of public health impact Most economists concur that the transition to clean energy must include policies that curtail supply (not merely demand). It is far more economical to diminish emissions via regulation instead of using capture and multi-century storage.

Consider the following in collaboration with other agencies. An immediate ban on permit approval of new wells, distribution infrastructure, refineries, fossil ports (e.g., LNG), and fossil power plants should be instituted. This has no economic cost for industry or taxpayers. It decreases the risk of industry being burdened with stranded assets. It immediately slows the annual rise in the Social Cost of Carbon from domestic production - saving \$billions annually. It will incentivize industry to scale up clean energy generation and storage.

Response: NOT ACCEPTED. Existing UGS regulations for operator detection, investigation, evaluation, and mitigation of well integrity issues aim to protect life, property, public health and safety, and environmental quality, including mitigating greenhouse gas emissions associated with UGS projects. However, the suggested prohibitions and undertakings to phase out fossil fuel use, consider cost benefits of its use, and transition to clean energy are not within CalGEM's authority nor the scope of this rulemaking. This rulemaking is focused on well chemical inventory development and reporting, and what is needed to address the root causes identified in the Blade RCA on the 2015 leak at the Aliso Canyon gas storage facility.

009 - 1

Commenter is an Aliso Canyon gas blowout victim writing to urge the CPUC to shut down the Aliso Canyon Gas Storage Facility. The gas blowout destroyed commenter's family's health, home and comfortable lifestyle in 2015/16. Lives were turned upside down after the family dog died of sudden unexplained organ failure/platelet disorders, the family developed terrifying unexplained

health symptoms shortly after and then lost their home/everything else as a result of the disaster.

"My own long term gas leak health effects are extremely painful, my losses could not be more substantial, it feels as if my family's lives were sacrificed for SoCalGas (SCG) executives and shareholders gains. We know experts determined the facility is no longer needed to meet energy needs. California met half its grid and non-grid electricity demand with just solar, wind, hydroelectric and geothermal electricity. With its current pace of growth it should approach 100% by 2030 and the need for fossil gas use in the State will continue to rapidly decline, the large amount of gas does not need to be stored at Aliso Storage Facility. 100 top scientists, public health and environmental experts agree and have also called for the shut down of the facility. It's counterproductive for Aliso Canyon to remain open indefinitely with no closure date in sight when California should be leading the way by transitioning to clean, renewable energy and phase off of fossil energy storage. Furthermore the Gas Facility poses additional risks being on an earthquake fault line and is a fire hazard. The residents/pets, wildlife, environment of the San Fernando Valley and our planet deserve better so I urge you to please shut down Aliso Canyon Gas Storage Facility."

Response: NOTED. The question of the future of the Aliso Canyon Gas Storage Facility as part of Southern California's energy infrastructure is not within CalGEM jurisdiction or this rulemaking but has been considered in a separate proceeding by the CPUC. The CPUC public website provides information about its December 2024 decision establishing a path to reducing and eliminating reliance on Aliso Canyon.

010-1

Commenter recommends additional definitions to align to existing industry terminology and clarify intent of regulations as the underground gas storage rulemaking progresses pursuant to SB 463, it is also 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

definitions for the following terms as commented on in prior comments. By defining these terms, the Division would improve clarity, reference existing rules and avoid duplicative or conflicting regulations, and provide a common understanding for the regulated community:

- Abnormal operating conditions
- Well control fluids
- Anomaly
- Blowout
- Uncemented casing

Response: NOT ACCEPTED. The term abnormal operating conditions is already adequately defined in relevant federal law at 49 CFR section 192.803 and to further define it would create confusion. A definition is not needed for the other terms. For well control fluid, some instances of kill fluid have been updated to well control fluid where the more general term is appropriate. "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; this is the common dictionary definition. Blowout is used in a limited context consistent with the commonly understood definition. Uncemented casing includes all casing that may be uncemented. These definitions are commonly understood and are not needed in the regulations.

010-2

In comments on clarification and creation of new protocols, Commentor provides suggested language on the chain of custody documentation and that the documentation be made available to the Division upon request or inspection. Commenter views providing the documentation as an administrative burden that requires uploading several hundred pages of chain of custody documentation— for the baseline inspection alone, into the WellStar system and subsequently thereafter, but it does not reduce safety risk. This would be an unnecessary expense that provides no benefit to ratepayers or taxpayers. This documentation is a requirement for operators to maintain and could be furnished at audit or upon request without the administrative burden or cost for extra computing memory over time on the State's system.

Response: NOT ACCEPTED. It is unclear what hundreds of pages of documentation the operator anticipates. Chain of custody documentation is usually several pages attached to a laboratory report. 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.

010-3

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.

010-4

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. CalGEM may consider issuing written guidance where there are common questions and will issue a Notice to Operators if needed. Where operators have specific questions, operators should contact CalGEM directly.

010-5

Commenter encourages the Division to communicate the proposed regulations and coordinate with the CPUC, PHMSA - Office of Pipeline Safety, and CARB to help ensure adoption of terminology consistent across agencies and that avoids reporting of similar requirements.

Response: ACCEPTED. As part of this rulemaking, CalGEM consulted with the CPUC, PHMSA and CARB about the proposed regulations. Those agencies have also had an opportunity to provide comments during the formal rulemaking and have not raised concerns about consistency or duplication.

010-6

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 provide. "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.

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 may qualify as interpretive data under PRC section 3234, subd. (d). Under CCR section 1997.1, operators must submit a request to have the data treated as confidential at the time the records are submitted.

010-7

Commenter understands that the intent of this regulation is to ensure that the operator and relevant personnel stay current on operator's emergency response plan and to this effect, management of change practices require operators to manage key personnel changes, onboarding, and sufficient

training to ensure continuity. Thus, Commenter recommends striking "after key personnel changes" because with the aforementioned safety standards in place, it would be duplicative, redundant, and unnecessary to trigger an update to the emergency response plan based exclusively on personnel changes. In other words, instead of effectuating the intent of the regulation—to ensure the operator and personnel stay current on the emergency response plan—the regulation would require operators to complete an unnecessary task. This would introduce an unnecessary expense for operators that ultimately gets passed to ratepayers, and does not provide additional safety or risk benefit(s) to the ratepayers. If the focus of the Division is to ensure key personnel are aware of their responsibilities regarding emergency responses, Commenter suggests the language be revised to require that evidence of training and awareness be maintained demonstrating 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. Key personnel are a core component of the ERP and need to know what tasks they are responsible for performing and to what specific ERP roles and responsibilities they are assigned. 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, subd. (d)(13).)

010-8

1726.3.2(a)(1)(E) Commenter recommends consistent terminology be applied; in the text, the term "corrosivity" is used plainly and with qualifiers such as "anticipated." It is not clear what is meant by "anticipated," and therefore, Commenter believes the term is ambiguous and speculative. Because the term is ambiguous, it is subject to interpretation. For robust statutory construction and to avoid language that lends itself to multiple interpretations, Commenter

recommends striking the word "anticipated" to avoid confusion or a point of subjectivity. For example, lawmakers, operators, and regulators might differ on the level of "anticipation" required. In order to establish an "anticipated" corrosivity, the regulation could be interpreted to require operators to make assumptions regarding environmental conditions and constant levels of constituents to speculate about a potential corrosion rate. However, Commenter would argue that because such an interpretation would require operators to speculate regarding conditions outside their control, "anticipated corrosivity" would be limited to providing an analysis of the presence of constituents that are known to be corrosive in nature. These types of interpretative differences should be avoided.

Response: NOT ACCEPTED. In lieu of drilling a new well or punching hole in casing, CalGEM expects an operator to use available information to calculate the 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.

010-9

1726.4.3 (c)(3): 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 that the 12-month period to perform baseline sampling begin when CalGEM accepts the operator's protocol. This would ensure alignment on the approach and reduce any waste or rework that could result.

Recommended edits: ...as soon as practicable but no later than 12 months following the submission of a protocol per 1726.4(d).

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 required testing is for BTEX and metals, tests which are routinely completed by laboratories in less than a month. Additionally, the baseline testing is only one component of the well chemical inventory. Although all testing should be completed timely, delay for a given baseline test should not

delay submittal of all other data required in a Gas Storage Well Chemical Inventory.

010-10

1726.4.3(d)(6): Commenter recommends that the requirement for resubmission of the full chemical inventory and well summaries for permitted work be removed. The majority of data would remain unchanged as permitted work is completed during a calendar year and this requirement would unnecessarily increase the administrative burden for operators, as well as increase the Division's electronic storage requirements. Commenter also suggests clarifying that the update submission process occurs on a well-by-well basis. As written, the regulation might be interpreted to require resubmission of 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.