PHMSA UNDERGROUND NATURAL GAS STORAGE (UNGS) CA GEM PROGRAM EVALUATION – CY2021 CONDUCTED 6/27-7/01/2022 & 7/25-29/2022

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TOTAL PROGRAM EVALUATION POINTS	93.5 of 95 (113)

	A – PROGRESS REPORT AND PROGRAM DOCUMENTATION REVIEW THIS SECTION ANALYZES ACCURACY AND COMPLETENESS OF ANNUAL PROGRESS REPORT	SCORE
1	Accuracy of Jurisdictional Authority and Operator/Inspection Units Data – Progress Report Attachment 1 (Yes= 1 point, No= 0 Points, NI=.5 point) Comments: Yes. Attachment 1 is consistent with internal records and with attachment 3 & 8.	1
2	Review of Inspection Days for accuracy – Progress Report Attachment 2 (Yes= 1 point, No= 0 Points, NI=.5 point) Comments: Yes. Attachment 2 is shown in hours. Last year's problem with charging office time here has been corrected. This is actual Field time.	1
3	Accuracy verification of Operators and Operators Inspection Units in State – Progress Report Attachment 3 (Yes= 1 point, No= 0 Points, NI=.5 point) Comments: Yes. Attachment 3 is consistent with internal records.	1
4	Accuracy verification of Compliance Activities – Progress Report Attachment 5 (Yes= 1 point, No= 0 Points, NI=.5 point) Comments: Yes. Attachment 5 is consistent with internal records.	1
5	Were UNGS program files well-organized and accessible? - Progress Report Attachment 6 (Yes= 2 points, No= 0 Points, NI=1 point) Comments: Yes. Attachment 6 is consistent with internal records.	2
;	Was employee listing and completed training accurate and complete? – Progress Report Attachment 7 (Yes= 1 point, No= 0 Points, NI=.5 point) Comments: NI, 0.5 of 1 points. Attachment 7 had errors concerning Inspector classification and a corrected Attachment 7 was submitted.	0.5
7	Verification of Part 192 and 199 Rules and Amendments – Progress Report Attachment 8 (Yes= 1 point, No= 0 Points) Comments: Yes. Most items not yet adopted. Is a 60106 program.	1
3	List of Planned Performance - Did State describe accomplishments on Progress Report in detail – Progress Report Attachment 10 (Yes= 1 point, No= 0 Points, NI=.5 point) Comments: Yes. Attachment 10 items were well described.	1
)	General Comments: David Shabazian, Department of Conservation, Director's Office, 715 P Street, MS 1900, Sacramento, CA 95814. Emily Reader, UNGS Program Manager, CalGEM, Patrick Gaume, Evaluator. UNGS PROGRESS REPORT REVIEW score is 44 of 50; 6-point reduction due to being a 60106 Program: No incidents were reported in UNGS for 2021. Part A scored 8.5 of 9 points. See A2 for deduction.	9

B – PROGRAM INSPECTION PROCEDURES Does State Inspection Plan include procedures that address the following elements?		
1	(See Guidelines Section 5.1) Does State have written inspection procedures?(Yes= 2 points, No= 0 Points, NI=1 point) Comments: Yes. Title is 'CalGem UNGS Safety Grant Program Procedures Manual' (SM).	2
2	Standard Inspections Do Standard Inspection procedures give guidance to State inspectors that insure consistency for inspections conducted by the State? The following elements should be addressed at a minimum. (Review of Procedures, Records, or Field Items to complete a PHMSA UNGS IA Question Set (RESERVOIR or CAVERN) – 2019.12.31)	2
	 Pre-Inspection Activities Inspection Activities Post Inspection Activities (Yes= 2 points, No= 0 Points, NI=1 point) Comments: Yes, See Section 3. Most items are included in 'General Inspection Plan' 	Ζ
3	 Integrity Management Inspections Do Integrity Management Inspection procedures give guidance to State inspectors that insure consistency for inspections conducted by the State? The following elements should be addressed at a minimum. (Integrity Testing and Maintenance: Observing Integrity Testing (Tubing, Casing, Cement), reservoir integrity monitoring, & FLIR Camera inspections.) Pre-Inspection Activities Inspection Activities Inspection Activities Post Inspection Activities(Yes= 2 points, No= 0 Points, NI=1 point) Comments: Yes, See Section 3. Most items are included in 'General Inspection Plan' 	2
4	 Design, Testing, and Construction Inspections Do Design, Testing, and Construction Inspection procedures give guidance to State inspectors that insure consistency for Inspections conducted by the State? The following elements should be addressed at a minimum. (Review of procedures, records, and field activities to complete PHMSA UNGS IA Question Set (RESERVOIR or CAVERN CONSTRUCTION) – 2019.12.31. Inspection activities for well design, drilling and completion activities, well workover, reservoir maintenance/repair activities, and abandonment (Plugging and cementing), temporary abandonment, and restoration.) Pre-Inspection Activities Inspection Activities Post Inspection Activities Yes 1 point, No= 0 Points, NI=.5 point) Comments: Yes, See Section 3. Most items are included in 'General Inspection Plan'. Note 	1

5	Wellhead Inspections Do Wellhead Inspection procedures give guidance to State inspectors that insure consistency	1
	for Inspections conducted by the State? The following elements should be addressed at a minimum.	
	Pre-Inspection Activities	
	Inspection Activities	
	Post Inspection Activities	
	(Yes= 1 point, No= 0 Points, NI=.5 point)	
	Comments: Yes, See Section 3. Most items are included in 'General Inspection Plan'. Note Section 3.2.5.	
6	Drug and Alcohol Inspections	
	Do Drug and Alcohol Inspection procedures give guidance to State inspectors that insure	
	consistency for Inspections conducted by the State? The following elements should be addressed at a minimum. (Using AI to complete the federal Comprehensive Drug and Alcohol	
	program (Form 3.1.11). Includes time conducting joint inspections with other agencies for this	
	type of inspection.)	1
	Pre-Inspection Activities	T
	Inspection Activities	
	Post Inspection Activities	
	(Yes= 1 point, No= 0 Points, NI=.5 point)	
	Comments: Yes, See Section 3. Most items are included in 'General Inspection Plan'. Note Section 3.2.10.	
7	Does inspection plan address inspection priorities of each inspection unit, based on the following elements?	
	 Length of time since last inspection (Within five-year interval per inspection unit) Operating history of operator/unit and/or location (includes leakage, incident, Integrity Testing, and compliance activities) 	
	 Type of activity being undertaken by operators in inspection units (i.e. construction) 	
	 Locations of operator's inspection units being inspected - (Geographic area, Population Density, etc.) 	5
	 Process to identify high-risk inspection units considering integrity threats 	
	Are inspection units broken down appropriately?(Yes= 5 points, No= 0 Points, NI=1-4 points)	
	Comments: Yes, See Section 3. Note Section 3.1 & 3.1.1.	
8	General Comments: Part B scored 14 of 14 points.	1 /
		14

	C – PROGRAM PERFORMANCE	
1	Was ratio of Total Inspection Person-Days to Total Person-Days acceptable? (Chapter 4.2)	
	A = Total Inspection Person Days (Attachment 2) B = Total Inspection Person Days Charged to the program (220 x Number of Inspection person years from Attachment 7) Ratio = A/B If Ratio >= .38 then score = 5 points. If Ratio < .38 then score = 0 points. (Yes= 5 points, No= 0 Points) Comments: YES. 5 of 5 points awarded. 3913.7/8/(220*4.64)=0.479, >0.38 okay.	5
2	Has each Inspector and Program Manager fulfilled the TQ Training Requirements? (See Guidelines	
	Appendix C for requirements and Chapter 4.3.1)	
	(Yes= 5 points, No= 0 Points, NI=1-4) Comments: Yes. 54 inspectors have taken the UNGS Course and others are scheduled for the course.	5
3	Does State use the PHMSA Inspection Assistant (IA) program to document inspections?	
	(Yes= 2 points, No= 0 Points, NI=1 point)	2
	Comments: Yes. IA is used.	2
4	Did records and discussions with Program Manager indicate adequate knowledge of PHMSA	
	program and regulations? Chapter 4.1,8.1	
	(Yes= 2 points, No= 0 Points, NI=1 point)	1
	Comments: NI, 1 of 2 points. The Program Manager is in her 2 nd year to the PM position this year but is supported by fully trained staff.	
5	Did State respond to PHMSA's Evaluation Letter within 60 days and correct or address any	
	noted deficiencies? Chapter 8.1	
	(Yes= 2 points, No= 0 Points, NI=1 point)	2
	Comments: Yes. The Evaluation letter was sent on Dec 6th and the CalGEM response was sent on Jan 27th. All deficiencies were addressed.	
6	Did State inspect all types of operators and inspection units in accordance with time	
	intervals established in their written procedures? Chapter 5.1	
	(Yes= 5 points, No= 0 Points, NI=1-4 points)	5
	Comments: Yes. Every operator is visited every year. CALGEM is coordinating with CPUC for the D&A inspections.	
7	Did State Inspection form(s) cover all applicable code requirements addressed on Federal	
	Inspection form(s)? Chapter 5.1	-
	(Yes= 2 points, No= 0 Points, NI=1 point)	2
	Comments: Yes. IA is used for all inspections. CPUC also uses IA so most of the D&A inspections are found in IA under CPUC. Advised that the CalGEM Inspector needs to be listed as an	
	inspector if it is to count as a joint inspection.	
8	Did State complete all applicable portions of inspection forms?	
	(Yes= 2 points, No= 0 Points, NI=1 point)	2
	Comments: Yes. The inspections are in IA and complete.	Z
9	Has the State reviewed Operator Annual reports, along with Incident reports, for	
	accuracy and analyzed data for trends and operator issues?	
	(Yes= 2 points, No= 0 Points, NI=1 point)	2
	Comments: Yes. Annual reports are being reviewed and records of the review can be seen in	

10	Is the State verifying operators are conducting drug and alcohol tests required by regulations? This should include verifying positive tests are responded to in accordance with program. 49 CFR 199	
	(Yes= 2 points, No= 0 Points, NI= 1 point)	2
	Comments: Yes. Started participating with CPUC for HQ inspections that included D&A inspections.	
11	Does the State have a mechanism for communicating with stakeholders regarding the inspection and enforcement program? (This should include making enforcement cases available to public). (Yes= 1 points, No= 0 Points, NI=.5 point) Comments: Yes. CA is a full disclosure State, almost everything is available on the public website.	1
12	Did State execute appropriate follow-up actions to Safety Related Condition Reports (SRCR)?	
	(Yes= 1 points, No= 0 Points, NI=.5 point)	NA
	Comments: NA. no SRC in 2018 – 2021. There was one in 2022.	
13	Did the State participate in/respond to surveys or information requests from PHMSA?	
	(Yes= 1 points, No= 0 Points, NI=.5 point)	1
	Comments: Yes. CalGEM is very responsive to PHMSA requests.	
14	Did the State forward any potential waivers/special permits to PHMSA for review prior to issuing them to operators?	
	(Yes= 1 point, No= 0 Points, NI=.5 point)	NA
	Comments: NA. no waivers have been requested. Procedures are in place.	
15	If the State has issued any waivers/special permits for any operator, has the State verified conditions of those waivers/special permits are being met? This should include having the operator amend procedures where appropriate.	
	(Yes= 1 point, No= 0 Points, NI=.5 point)	NA
	Comments: NA. no waivers have been requested. Procedures are in place.	
16	General Comments: Part C scored 30 of 31 points. C4 was NI. C12, 14, & 15 were NA.	30

	D – COMPLIANCE ACTIVITIES	
1	 Does the State have written procedures to identify steps to be taken from the discovery to resolution of a probable violation? Chapter 5.1 Procedures to notify an operator (company officer) when a noncompliance is identified (60105 States) Procedures to routinely review progress of compliance actions to prevent delays or breakdowns Procedures regarding closing outstanding probable violations (Yes= 4 points, No= 0 Points, NI=1-3 points) Comments: Yes. See Section 3.2.7, 3.2.11, 3.2.15, 3.2.16, 3.2.17. 	4
2	 Did the State follow compliance procedures (from discovery to resolution) and adequately document all probable violations, including what resolution or further course of action is needed to gain compliance? Chapter 5.1 Were compliance actions sent to company officer or manager/board member if municipal/government system (60105 States)? Document probable violations Resolve probable violations Routinely review progress of probable violations (Yes= 4 points, No= 0 Points, NI=1-3 points) Comments: Yes. Information was forwarded to PHMSA, Eastern Region, for several compliance actions. 	4
3	Did State within 30 days of the end of an inspection conduct a post-inspection briefing with the owner or operator of the UNGS facility inspected outlining any concerns identified during the inspection? (Yes= 2 points, No= 0 Points, NI=1 point) Comments: Yes. Exit briefings were given on the last day of every inspection.	2
4	Did State within 90 days, to the extent practicable, provide the owner or operator with written preliminary findings of the inspection? (Yes= 2 points, No= 0 Points, NI=1 point) Comments: Yes. An email is usually sent within a day of the verbal Exit briefing, and a more formal email is sent later. See Section 3.2.17.	2
5	Did the State issue compliance actions for all probable violations discovered (60105 States)? (Yes= 2 points, No= 0 Points, NI=1 point) Comments: NA. All items of Concern and UnSat were submitted to PHMSA.	NA
6	Did compliance actions give reasonable due process to all parties? Including "show cause" hearing if necessary (60105 States). (Yes= 2 points, No= 0 Points) Comments: NA. 60106, and the process is in place, See Section 3.2.7, 3.2.11, 3.2.15, 3.2.16, 3.2.17.	NA

7	Is the Program Manager familiar with State process for imposing civil penalties (60105 States)? (describe any actions taken)	
	(Yes= 2 points, No= 0 Points, NI=1 point)	
	Comments: NA. 60106, The Program Manager is aware of the process. Several civil penalties have been issued on the E&P side of CalGEM's jurisdiction.	NA
8	Were civil penalties considered for repeat violations, violations which can't be corrected by other means, or violations resulting in incidents	
	(60105 States)? (Yes= 2 points, No= 0Points, NI=1 point)	NA
	Comments: NA, CalGEM is a 60106 Partner. Recommendations were submitted to PHMSA.	
9	Can the State demonstrate it is using their enforcement fining authority for safety violations	
9	Can the State demonstrate it is using their enforcement fining authority for safety violations (60105 States)? (Yes= 1 point, No= 0 Points, NI= .5 point)	
9		NA

	E – INCIDENT INVESTIGATIONS	
1	Does the State have written procedures to address State actions in the event of an incident? (Yes= 2 points, No= 0 Points, NI=1 point) Comments: Yes. See Section 3.2.8.	2
2	Does State have adequate mechanism to receive and respond to operator reports of incidents, including after-hours reports? (Yes= 2 points, No= 0 Points, NI=1 point) Comments: Yes. See Section 3.2.8 and Section 16.	2
3	Did the State keep adequate records of Incident notifications received? (Yes= 2 points, No= 0 Points, NI=1 point) Comments: Yes, 1 incident was received in 2018, the record is in place.	2
4	If onsite investigation was not made, did State obtain sufficient information from the operator and/or by other means to determine the facts to support the decision to not go on-site? _{Chapter 6} (Yes= 1 point, No= 0 Points, NI= .5 point) Comments: NA, no incidents in 2020, Procedure is to do on-site investigations.	NA
5	 Were all incidents investigated, thoroughly documented, and with conclusions and recommendations? Observations and document review Contributing Factors Recommendations to prevent recurrences where appropriate (Yes= 3 points, No= 0 Points, NI=1-2 points) Comments: NA, no incidents in 2020, Procedures are in-place. 	NA
6	Did the State initiate compliance action for violations found during any incident investigation? (60106 States forward violations to PHMSA) (Yes= 1 point, No= 0 Points) Comments: NA, there have been no violations found to date with incident investigations.	NA
7	Did the State assist the Region Office or Accident Investigation Division (AID) by taking appropriate follow-up actions related to the operator incident reports to ensure accuracy and final report has been received by PHMSA? (validate report data from operators concerning incidents and investigate discrepancies) Chapter 6 (Yes= 1 point, No= 0 Points, NI= .5 point) Comments: NA, no requests have been received, CalGEM is willing to Partner anytime.	NA
8	Does State share lessons learned from incidents with PHMSA? (Yes= 1 point, No= 0 Points) Comments: Yes. Incidents would be shared with PHMSA.	1

9	General Comments: Part E scored	points. Part E scored 7 of 7 points. 4 questions, E4-E7, were
	NA.	

	F – DAMAGE PREVENTION	
1	Did the State inspector verify UNGS operators are following their written procedures pertaining to notification of excavation, marking, positive response and the availability and use of the one call system? (API 1171 Section 11.10 Public Awareness and Damage Prevention) (Yes= 2 points, No= 0 Points, NI=1 Point) Comments: Yes. The CA Underground Facilities Safe Excavation Board is the Lead Organization for Damage Prevention. CalGEM participates with CPUC for Operator HQ inspections and addresses D&A, Damage Prevention, and OQ there. The California Underground Facilities Safe Excavation Board was created by the state's Dig Safe Act (2016). It is the primary state agency for California's compliance with the nine elements of the PIPES Act of 2006. The Safe Excavation Board is part of CAL FIRE, which is a PHMSA safety grant state agency partner.	2
2	Did the State encourage and promote practices for reducing damages to all underground facilities to its regulated companies? (Common Ground Alliance Best Practices, support excavation damage prevention legislation, etc.) (Yes= 2 points, No= 0 Points, NI=1 Point) Comments: Yes. Damage Prevention is a common subject of conversation when meeting with Operators, and all parties know that Damage prevention is emphasized.	2
3	General Comments: Part F scored 4 of 4 points.	4

G – FIELD INSPECTIONS		
1	Operator, Inspector, Location, Date and PHMSA Representative Comments: PG&E Company, opid 15007, Michael Brooks, HQ inspection Lead, & Ben Goldstone - Engineering Geologist, Field Inspector for McDonald Island, At McDonald Island, CA & Virtual, 6/27 – 7/1/22, Patrick Gaume. PG&E HQ inspection & Inspection of McDonald Island facility, #88724. See '22-235006_PGE_Los_Medanos' in IA.	
2	Was the operator or operator's representative notified and/or given the opportunity to be present during inspection? (Yes= 1 point, No= 0 Points) Comments: Yes, for HQ & Field portions, Estimate 15 PG&E personnel total.	1
3	Did the inspector use an appropriate inspection form/checklist and was the form/checklist used as a guide for the inspection? (Yes= 2 points, No= 0 Points, NI=1 Point) Comments: Yes. 94 UNGS questions & the 18 Section-114 questions for UNGS from IA were used. Field portion I observed focused on 4 questions, 9, 56, 75, & 82 at McDonald Island.	2
4	Did the inspector thoroughly document results of the inspection? (Yes= 2 points, No= 0 Points, NI=1 Point) Comments: Yes, for both the HQ & Field portions.	2
5	Did the inspector check to see if the operator had necessary equipment during inspection to conduct tasks viewed? (Yes= 1 point, No= 0 Points) Comments: Yes, for both the HQ & Field portions.	1
6	Did the inspector adequately review the following during the field portion of the State Program Evaluation? Procedures Records Field Activities/Facilities Other (please comment) (Yes= 2 points, No= 0 Points, NI=1 Point) Comments: Yes, the inspection included Procedures, Records, and Observations/Field.	2
7	Did the inspector have adequate knowledge of the UNGS safety program and regulations? (Evaluator will document reasons if unacceptable) (Yes= 2 points, No= 0 Points, NI=1 Point) Comments: Yes, 10 CalGEM staff participated, and all demonstrated knowledge of the UNGS Safety Program.	2
8	Did the inspector conduct an exit interview? (If inspection is not totally complete the interview should be based on areas covered during time of field evaluation) (Yes= 1 point, No= 0 Points) Comments: Yes, for McDonald's Island Field, no violations found; an exit interview for the day's work was performed. The HQ inspections discovered 29 questions with Concerns or Unsatisfactory results.	1

9	 During the exit interview, did the inspector identify probable violations found during the inspections? (if applicable) (Yes= 1 point, No= 0 Points) Comments: Yes, for McDonald's Island Field, the day's work was reviewed, all was in order, no violations were found. The HQ inspections discovered 29 questions with Concerns or Unsatisfactory results. Details can be found in the IA record. 		
10	General Comments:		
	 What did the inspector observe in the field? (Narrative description of field observations and how inspector performed) 		
	 Best Practices to Share with Other States - (Field - could be from operator visited or State inspector practices) 	12	
	• Other		
	Field Observation Areas Observed (check all that apply)		
	viewed included, P&A markers, site security, Valve locks, status of field facilities, pressure valves, bolts and flanges, paint and atmospheric corrosion, Unique facility structures to accommodate grounds at 15' below sea level, a well plugging job that was in progress, Tailgate Safety Meetings that addressed 100 degree days, snakes, and wasps. Reviewed DOT procedures concerning work that was planned for the day. Reviewed blowout procedures applicable to the plugging job. Reviewed well cellars, flange pressure ratings, noted Kildeer birds and set green markers to protect their nests per endangered species procedures. Reviewed logging plans and procedures relative to the day's work, including the radioactive source, and the wellhead lubricator to control possible leaks while logging. No Best Practices were observed for the Field, but sound practices were being followed concerning the day's work.		

H - 60106 AGREEMENT STATE (if applicable)		
1	Did the State use the current federal inspection form(s)? (Yes= 1 point, No= 0 Points, NI=.5 point) Comments: Yes. IA is used and appropriate questions are selected.	1
2	Are results documented demonstrating inspection units were reviewed in accordance with State inspection plan? (Yes= 1 point, No= 0 Points, NI=.5 point) Comments: Yes. Standard Inspections are planned to be completed every 2 years, not to exceed 3 years. D&A inspections will match with CA PUC not to exceed 5 years.	1
3	 Were all probable violations identified by State referred to PHMSA for compliance action? (NOTE: PHMSA representative has discretion to delete question or adjust points, as appropriate, based on number of probable violations; any change requires written explanation.) (Yes= 1 point, No= 0 Points, NI=.5 point) Comments: Yes. All Concerns and UnSat findings are referred to PHMSA. 	1
4	Did the State immediately report to PHMSA conditions which may pose an imminent safety hazard to the public or to the environment? (Yes= 1 point, No= 0 Points, NI=.5 point) Comments: Yes. It would be immediately reported to PHMSA. And is in CalGEM procedures. See Section 3.2.1.	1
5	Did the State give written notice to PHMSA within 60 days of all probable violations found? (Yes= 1 point, No= 0 Points, NI=.5 point) Comments: YES. CalGEM uses IA so probable violations are available to PHMSA upon entry into the system.	1
6	Did the State initially submit adequate documentation to support compliance action by PHMSA on probable violations? (Yes= 1 point, No= 0 Points, NI=.5 point) Comments: Yes. CalGEM refers all Concerns and UnSat to PHMSA with documentation uploaded into IA.	1
7	General Comments: Part H scored 6 of 6 points.	6