COST ESTIMATE REGULATIONS FOR OIL & GAS OPERATIONS

PUBLIC COMMENT SUMMARY AND RESPONSE

Public Comment Period:
November 27, 2023 – December 12, 2023

INTRODUCTION

The following comments, objections, and recommendations were made regarding the proposed Cost Estimate Regulations for Oil & Gas Operations rulemaking action during a public comment period beginning November 27, 2023 and ending December 12, 2023. Over the course of the public comment period, the California Geologic Energy Management Division (CalGEM) received a number of public comments via email. These comments ranged from detailed comments on the proposed requirements to general concerns about impacts of oil and gas operations.

To facilitate the process of reviewing and responding to comments, CalGEM assigned a unique numerical signifier to each comment. This signifier consists of three components: first, a unique code number assigned to each commenter (listed in the table below); second, a separating hyphen; third, a sequential number assigned to each comment from the identified commenter. The chart below lists the code number for each commenter. Within this document, you will find either grouped or individual numerical signifiers, followed by a summary or specific comment, followed by a response (italicized).

COMMENTERS

Number	Name and/or Entity
001	James Bartlett, Rockpoint Gas Storage
002	Lucy Redmond, Pacific Gas & Electric Thomas McMahon, SoCalGas Avideh Razavi, SoCalGas
003	Barbara Sattler, California Nurses for Environmental Health & Justice Kayla Karimi, Center on Race, Poverty, & the Environment Haley Ehlers, Climate First: Replacing Oil & Gas (CFROG) Ben Smith, Greenpeace USA Veronica Wilson, Labor Network for Sustainability Ann Alexander, Natural Resources Defense Council

	Ilonka Zlatar, Oil & Gas Action Network Sakereh Carter, Sierra Club California Woody Hastings, The Climate Center
004	Rock Zierman, California Independent Petroleum Association (CIPA) Megan Schwartz, CIPA
005	Sandra Morey
006	Derek Willshee, Fourstar Resources LLC

ACRONYMS & DEFINITIONS

AACE	Association for the Advancement of Cost Engineering International
BLM	US Bureau of Land Management
CalGEM	California Geologic Energy Management Division, Department of Conservation
CCR	California Code of Regulations
CPUC	California Public Utilities Commission
DOI	US Department of the Interior
EPA	US Environmental Protection Agency
Legislature	Legislature of the State of California
PRA	Public Records Act
PRC	Public Resources Code
SB 551	Senate Bill 551 (Chapter 774, Statutes of 2019)
USDW	Underground Source of Drinking Water
WellSTAR	Well Statewide Tracking and Reporting System

COMMENTS

General Concerns

004-7

Commenter strongly objects to the assumption that the State's costs to plug and abandon wells should be the standard for what operators must submit for their cost estimates to accomplish the same work. Commenter's producer member costs for abandoning wells are lower than the provided estimates even when the operators contract with outside services. We strongly advocate that the State revise the proposed regulation to meet the objective of PRC section 3205.7, the Operator Financial Responsibility Program, rather than erroneously assume that the abandonment of all the wells in the State will fall to the responsibility of CalGEM.

Response: *NOT ACCEPTED. The proposed regulations implement statutory reporting requirements under PRC section 3205.7 to better understand the full costs associated with end-of-life remediation of operators' assets. Understanding the full costs requires that operator specific savings or efficiencies cannot be used to ensure that the cost estimates provide information on the potential cost to the state for doing such work. While operator specific savings or efficiencies cannot be utilized in estimating the operator's liability, to the extent that the operator has documentation supporting a lower cost estimate than what would otherwise be calculated under Method 1, the operator may submit a Method 2 cost estimate.*

004-33
On many fields, operators have been remediating the surface over time and formerly used equipment is no longer on-site requiring removal.

Response: *ACCEPTED. As provided in proposed section 1753, cost estimate reports must include production facilities decommissioning cost estimates for each production facility that has not been decommissioned, according to CalGEM's records, and a site remediation cost estimate for the site of each well that has not been plugged and abandoned, according to CalGEM's records, and the site of each production facility that has not been decommissioned, according to CalGEM's records. If CalGEM records reflect that the equipment is no longer on site or the surface has been remediated, those costs do not need to be included in the cost estimate. Operators may contact CalGEM to update CalGEM's records, as appropriate.*

004-35
We urge CalGEM to form a joint CalGEM/industry working group to discuss proper analysis methods and to share actual cost data. Industry is effectively and efficiently abandoning a vastly larger number of wells each year than CalGEM and it would behoove CalGEM to work cooperatively and collaborate with Industry on the assumptions built into the models in order to gather more accurate cost data.

Response: *NOT ACCEPTED. In November 2021, CalGEM issued Notice to Operators 2021-09 which requested operators voluntarily share data on the costs associated with decommissioning activities to inform these regulations. CalGEM received insufficient submissions from operators to be included in the data that was used as a basis for Method 1. To establish the base numbers CalGEM conducted a comprehensive review and analysis of past well plugging and abandoning, production facility decommissioning work, and site remediation conducted by the state from 2011 to 2020. CalGEM analyzed all costs incurred by the state to plug and abandon each well,*

decommission each production facility, and complete site remediation (i.e., equipment rental rates, service charges, and personnel rates) as reported and invoiced by the contractors. In addition, CalGEM reviewed all pertinent technical and status details about each well, production facility, and site at the time the work was performed, including the well history, geologic information, drilling history, subsurface information, surface and location characteristics, and production facility specifications to determine those characteristics that increase the costs of the work.

006-5
The proposed regulations have been drawn up to reflect large-major operators and not the small operator.

Response: *NOT ACCEPTED. The proposed regulations implement statutory reporting requirements under PRC section 3205.7 to better understand the full costs associated with end-of-life remediation of operators' assets. Understanding the full costs requires that operator specific savings or efficiencies cannot be used to ensure that the cost estimates provide information on the potential cost to the state for doing such work. There is no difference in reporting requirements for small versus large operators.*

Comments on Specific Sections

004-1
The regulation should specifically exempt those wells and facilities that are already covered by the U.S. Bureau of Land Management bonding requirement from the regulation. These wells pose no financial threat to the state.

Response: *NOT ACCEPTED. PRC section 3205.7 requires cost estimates from each operator of an oil and gas well in California and does not afford an exception based on whether or not the well is a financial threat to the state or located on land managed by the BLM.*

004-37
Section 1753(c). The site remediation cost estimate should calculate remediation based on the landowner's requirements for the intended, subsequent land use.

Response: *ACCEPTED. For operators using Method 2 to submit their cost estimates, the proposed regulations afford the operator the opportunity to report the repurposing of wells, production facilities, and associated sites and reduce the cost estimate as applicable. The operator will be required to provide documentation supporting the validity of the values used to calculate the reduction and provided signed*

documentation from the mineral rights or surface rights owner describing the intended repurposing.

004-9
Was section 1753(e), now section 1753(f). This section will require estimated costs for combined well plugging, combined facilities decommissioning and combined site remediation to be presented in a Cost Estimate Summary, yet the format of the requested summary is not specified. Site restoration is not listed as required in the combined costs. Will CalGEM prescribe a format for the Summary? Is site restoration to be included in the combined costs?

Response: *NOT ACCEPTED. The cost estimate summary, which is submitted as part of the cost estimate report, must be submitted in a digital tabular form as required by proposed section 1753, subdivision (g). It can be uploaded into the Well Statewide Tracking and Reporting System (WellSTAR) using the operator financial responsibility form or submitted in a digital tabular form (i.e. an excel spreadsheet). As provided in proposed section 1751, subdivision (f) the cost estimate summary must include combined costs for site remediation. The cost estimate summary must include the total estimated costs from all of the operator's combined well abandonment cost estimates, combined production facility decommissioning cost estimates, combined site remediation cost estimates, and the estimated cost from all of those estimates combined.*

004-10
Was section 1753(f), removed. The Division may require an operator to use Method 2 instead of Method 1 for cost estimating if "conditions suggest Method 1 would substantially underestimate" the cost estimates. How will the Division determine this? Does CalGEM have the personnel with experience to make this determination? Industry has the expertise to make these types of evaluations and complete the work in the most cost-effective manner, CalGEM should not be dictating which method is utilized to estimate costs. The regulation should be amended to require CalGEM to provide substantial evidence of underestimation prior to requiring an operator to submit a report using Method 2, and it should also include a process by which operators may challenge CalGEM's underestimation determination.

Response: *NOT ACCEPTED. The text referenced by Commenter whereby CalGEM could require an operator who had already submitted cost estimates using Method 1 to submit new cost estimates using Method 2 was removed in response to comments received on the Discussion Draft of the regulations. It does not appear in the proposed*

regulations in formal rulemaking. Paragraph 1753, subdivision (f) now deals with the Cost Estimate Summary.

004-11
Section 1753.1(d). Operators will require additional information from CalGEM to comply with a new Cost Estimate Report at the five-year interval as stated in the Discussion Draft. What will be the basis year for determining the oil equivalent per day per well? With the initial report oil equivalent volumes are to be based on calendar year 2021, will the basis for updated production volumes be based on calendar year 2026 (five years hence)? Will the same values be utilized in CalGEM Method 1 unit cost tables be applied in updated submittals?

Response: *NOT ACCEPTED. As provided in proposed section 1753.1, subdivision (d) operators will be required to submit their updated reports five years after their initial report submittal. These updated reports will not be based on a new determination based in production per year but will simply be five years after the initial report was due. The values in Method 1 unit cost tables will not change unless CalGEM updates the regulations via rulemaking.*

004-12
Section 1753.1.1(a)(1). Operators should be able to provide costs that can be supported without the burden of procuring third-party estimates and should be able to reflect savings and efficiencies. As written, this language promotes significantly inflated costs. It is very common that an operator can utilize "economies of scale" if multiple wells, production facilities and surface sites are addressed under the same request for proposal. If using Method 2 operators should be allowed to use their best negotiated costs for estimating all work involved with well plugging, facilities decommissioning and site remediation/restoration for the most accurate cost estimates. Operator costs should at the very least be accepted along-side third party estimates so that the state may accurately understand the value of continued company operations.

Response: *NOT ACCEPTED. While operator specific savings or efficiencies cannot be utilized in estimating the operator's liability, to the extent that an operator has documentation supporting vendor price lists, rig rate reports, and end of well reports, or any other verifiable documentation of applicable costs, those may be used to support a Method 2 filing.*

The ten years of data used by CalGEM to develop the base numbers is a better predictor of what the state costs are likely to be; it is not intended to be representative of operator costs for all active and idle wells in a region. While operator specific savings

or efficiencies cannot be utilized in estimating the operator's liability, to the extent that an operator has documentation supporting a lower cost estimate than what would otherwise be calculated under Method 1, the operator may submit a Method 2 cost estimate. Please see the Basis of Reasoning for Base Costs document, section 2, that was released with the rulemaking, for a discussion on the testing of the cost estimate methodology.

001-2
Section 1753.1.1(b)(2)(H) The language "other verifiable documentation and costs" is vague and allows for requests to be later made which are out of scope. Be specific in what the Division is asking for cost estimates. Remove 'catch-all' language and delete section 1753.1.1(a)(2)(H).

Response: *NOT ACCEPTED. This provision allows operators to submit any documentation that is verifiable for the purpose of documenting cost estimates as reported. It is open ended to provide operators with flexibility in providing documentation that persuasively supports a Method 2 cost estimate report.*

004-14
Section 1753.1.1(b). The information required is duplicative of the information that CalGEM already has at its fingertips in the WellSTAR program. There is absolutely no reason that operators should be required to resubmit information that CalGEM can find with a quick search of its own database.

Response: *NOT ACCEPTED. Operators will not be required to submit data that is already available in CalGEM's records. The regulation defines the process by which CalGEM will request operators submit documentation supporting the reported condition of the well, production facility, or site if those conditions differ from what is available in CalGEM's records. CalGEM must have the ability to request additional information to verify which data are correct in the event the cost estimate submitted by the operator is not supported by CalGEM's records.*

004-15
Section 1753.1.1(c). Commenters strongly advocate that salvage value should be considered in this calculation. It is common for plugging and abandonment bids to include the value of salvageable equipment to greatly reduce or eliminate entirely the cash portion of the cost. Salvaging is a regular and normal part of abandonment and decommissioning procedures, and even under the scenario that the state is doing the plugging and abandonment we would assume that the state would opt for

salvaging/recycling and reuse of materials that have a remaining useful life as opposed to unnecessarily filling our landfills.

Surface properties (owned real estate) must be allowed in estimating costs. If an operator owns the surface the real estate value would be considered and could completely offset all costs.

Response: *NOT ACCEPTED. These regulations implement statutory reporting requirements, under PRC section 3205.7, to better understand the full costs associated with end-of-life remediation of operators' assets. Salvage, scrap, and real estate values are highly speculative and cannot be guaranteed in any specific instance, as such they were not included.*

004-16
Section 1753.2(a). Method of calculating Well Abandonment Costs Estimates by using prescribed estimated well days, section 1753.2(a)(3) and base daily cost rate section 1753.2(a)(4), are questionable and without foundation. Transparency is required in how these "Base" numbers were derived. CalGEM's mandated factors are arbitrary and capricious and will result in higher cost estimates in well abandonments. Basis for determining factors must be provided.

Response: *NOT ACCEPTED. One of the largest factors is the number of days it takes to complete the abandonment process, which is directly reflected by any challenges associated with abandoning a specific well. The Basis of Reasoning for Base Costs document that was released with the rulemaking provides details on the development of these number. As described in that document, CalGEM's dataset is based on ten years of state abandonment contracts.*

004-17
Section 1753.2(a)(1). Information used in the Aggregated Well Score Table is not supported with any reasons, facts or sources. As an example, the deeper the well the higher the Well Score is nonsensical due to the fact in estimating the cost to abandon a well an operator will take total well condition into consideration including the well depth. A higher well score is "double dipping" cost estimating methodology in that depth is already accounted for. All factors used in the Aggregated Well Score Table need further evaluation and transparency to ensure that operators turn in accurate cost estimates and "simulated well costs" (from the CalGEM Excel "Workbook for Cost Estimates") are realistic and not inflated due to baseless factors.

Response: *NOT ACCEPTED. The Basis of Reasoning for Base Costs document, section 2 that was released with the rulemaking provides details on the development of these numbers and a discussion on the testing of the cost estimate methodology. The well depth was found to be relevant to the estimated cost to abandon a well.*

001-1
Section 1753.2(a)(2) Age of Well – the spud date versus re-entry date is not specified. Wells are often re-entered with a new production casing cemented in recent times. The age of the well should be measured from a re-entry date (if applicable) when new production casing was installed.

Response: *NOT ACCEPTED. A well's spud date is the generally accepted method to determine the age of a well. However, Method 2 is designed to allow operators to forego the assumed costs under Method 1 and develop their own site-specific cost estimates, which may be appropriate in the situation described by Commenter, provided the estimates are persuasively supported by detailed documentation, and that the estimates do not include operator specific savings or efficiencies.*

004-18
Section 1753.2.1(a)(2). Base Facility Decommissioning Cost values are presented without any foundation as to what the costs are based on. Transparency is required from CalGEM as to source of the Unit Cost. Accurate cost estimates for facility decommissioning and removal can best be represented as foundational values based on actual costs previously incurred by operators. Basis for Decommissioning Unit Costs need to be provided. Costs that are presented in the table appear to be arbitrary and capricious without any basis stated for the values.

Response: *NOT ACCEPTED. The Basis of Reasoning for Base Costs document that was released with the rulemaking provides details on the development of these numbers and a discussion on the testing of the cost estimate methodology. The base costs provided were developed using ten years of state contracting data and represent actual costs incurred.*

004-19
Section 1753.2.1(a)(3). Parts (A), (B) and (C) of this section present factors to use for Cost of Other Project Components. The percentages presented in these sections are without foundation or source of the percentage. These percentages can vary widely based on economies of scale, expertise available to the operator and region in which the work is being done and will result in inaccurate cost estimates for facility decommissioning. Basis for the factors needs to be provided in the Rules. Where

available actual projected costs for permitting and regulatory compliance, mobilization and demobilization, and project management and engineering should be used. Use of percentage factors will result in erroneous cost estimates.

Response: *NOT ACCEPTED. The Basis of Reasoning for Base Costs document, section 8, that was released with the rulemaking provides details on how the Other Project Components percentages were developed consistent with guidance from the US Environmental Protection Agency (EPA) cost estimating guide and US Department of Interior (DOI) handbook on standard engineering cost estimating procedures.*

004-32
Section 1753.2.1(a)(3)(B). The use of contingency and mobilization and demobilization costs for each individual well causes the site estimates to increase well above producers' actual costs. The basis for determining the cost of mobilization and demobilization should be presented and supported by substantial evidence. It is atypical for industry to pay mobilization or demobilization costs for plugging and abandonment work, therefore, inclusion of this factor in the overall cost is arbitrary.

Response: *Please see the Basis of Reasoning for Base Costs document that was released with the rulemaking, sections 8 and 9 for a discussion on how the Other Project Components and contingency percentages were developed. Production facility decommissioning and site remediation cost estimates include costs for other project components including permitting and regulatory compliance activities, mobilization and demobilization costs, and project management and engineering. These project components are added to the production facility decommissioning and site remediation cost estimates given that there are more unknown variables and complexity compared to well plugging and abandonment operations. The percentages assigned to each project component were referenced from the EPA cost estimating guide and the DOI handbook. The EPA cost estimating guide provides guidelines and concepts to generate cost estimates for environmental cleanup projects including facility and brownfield cleanups. The DOI handbook provides standard engineering cost estimating procedures for reclamation projects. The contingency range used in Method 1 is consistent with the Association for the Advancement of Cost Engineering (AACE) International Class 3 cost estimate given the expected end usage of the estimate, accuracy range and estimating methodology.*

004-38
1753.2.1(a)(3)(C). The basis for determining the cost of project management should be presented and supported by substantial evidence.

Response: *NOT ACCEPTED. The Basis of Reasoning for Base Costs document released with the rulemaking provides a full discussion of how the cost of project management was developed. The project management costs are informed by EPA guidance. Project management and engineering includes costs for such things as project management, engineering design, planning and reporting. Depending upon the cost of the project, EPA recommends the costs for project management will run between 5-10 percent. Based upon the average state abandonment costing approximately $500,000 per contract, EPA guidance recommends that project management accounts for eight percent of the total costs of plugging and abandonment, decommissioning, and site remediation.*

004-3
Section 1753.2.1(a)(4). Regarding the Production Facility Decommissioning Risk Aggregated Score, adding a risk factor to each project does not make sense since the costs that are calculated are already reflective of a worst-case scenario. If a risk factor must be assigned to the calculations, it should be structured to represent the actual cost of the risk more accurately, rather than in a means to simply balloon the total cost. For example, a tank suspected of potential leaks based on age criteria, color, or analytical testing, should be assigned a 2% risk factor, rather than assigning 2% increase to the whole project. When there is a reportable spill or leak, operators are required by law to remove all contaminated soil and clean the area. Therefore, removing a facility at end of life when there has been a reportable spill or leak in prior years would not increase costs by 10% as the risk factor assignment assumes.

Response: *NOT ACCEPTED. As described in the Basis of Reasoning for Base Costs document, the contingency range used in Method 1 is consistent with the Association for the AACE Class 3 cost estimate given the expected end usage of the estimate, accuracy range and estimating methodology. The level of detail from the commentor is more representative of a Class 2 or Class 1 estimate which have a higher maturity level of project definition and requires additional time, resources, and money to prepare and are typically done closer to the actual project commencing, and their value is valid for a shorter period of time due to the everchanging market conditions. With regards to spills or leaks, soil sampling and testing is required to determine the extent of the contamination and confirm if the spills and leaks were properly remediated. The amount of site remediation required can vary greatly, therefore contingency is added to capture this unknown quantity.*

004-20
Section 1753.2.1(a)(4)(A). Back up information needs to be provided to substantiate the points "awarded" for the various characteristics that are presented in the Production

Facility Decommissioning Aggregated Risk Score Table. By mandating the arbitrary points system contingency percentages will unduly drive up the estimated costs to remove and decommission production facilities. Background information needs to be provided to establish that a points system is based on actual circumstances that could impact projected costs.

Response: *NOT ACCEPTED. Please see the Basis of Reasoning for Base Costs document that was released with the rulemaking for a discussion on how the points and other project components were developed.*

The characteristics identified in the risk score table are known to add additional costs to decommissioning, including:

- *The production facility being located in urban areas or sensitive areas where there may be a limitation on work hours, extra permitting, and use of specialized equipment which extends the duration and cost of decommissioning and/or site remediation activities.*
- *The production facility potentially poses a threat to life, health, property, or natural resources such as presence of H_2S where there may be more safety protocols, use of specialized equipment, limitation on work hours which extends the duration and cost of decommissioning and/or site remediation activities.*
- *Reportable spills or leaks at the production facility because there is a risk of soil contamination due to fluid that leaked into the soil.*

Project management and engineering, which includes costs for project management, engineering design, planning and reporting, etc., are estimated to account for 8 percent of the total production facility decommissioning. The EPA guide recommends a percentage ranging from 5-10 percent depending on the size of the project cost. The historical state contracts averaged approximately $500,000 per contract, which the guide indicates should be assigned 8 percent for project management.

Contingency is the amount added to an estimate to account for items, conditions, or events for which the occurrence and effect is uncertain and that experience shows will result in additional cost. The contingency range is consistent with guidelines from the AACE.

004-4
1753.2.1(a)(4)(A) Production Facility Decommissioning Risk Aggregated Score Table. The blanket assignment of high risk factor (10 points or 10% of total cost) for the litany of items included in this table is arbitrary and without merit or clear definition and justification. The assignment of a factor of 10 points to production facilities in

environmentally sensitive areas or urban areas, in an area of geologic hazards or over 50 years old is completely arbitrary and without basis. The actual conditions of the facilities and whether it has been actively used and maintained over the years is a greater indicator of potential risk than simply age or location. In addition, nearly the entire state of California is subject to seismicity and there are not sufficient definitions to make this a reasonable risk or explanation of how this location would contribute to costs. Further, when there is a reportable spill or leak, operators are required by existing law to remove all contaminated soil and clean the area to California Department of Fish and Wildlife and CalGEM specifications. Therefore, removing a facility at end of life where there has been a reportable spill or leak in prior years would not increase costs by 10% as the risk factor assignment assumes.

Response: *NOT ACCEPTED. Contingency is the amount added to an estimate to account for items, conditions, or events for which the occurrence and effect is uncertain and that experience shows will result in additional cost. The characteristics identified in the risk score table are known to add additional costs to decommissioning and site remediation activities, however, are difficult to quantify without detailed engineering, testing and analysis. Some characteristics are known to add more costs than others and are therefore assigned a higher weighting, including:*

- *Being located in urban areas or sensitive areas where there may be a limitation on work hours, extra permitting, and use of specialized equipment which extends the duration and cost of decommissioning and/or site remediation activities.*
- *Well or facility site potentially pose a threat to life, health, property, or natural resources such as presence of H_2S where there may be more safety protocols, use of specialized equipment, limitation on work hours which extends the duration and cost of decommissioning and/or site remediation activities.*
- *Reportable spills or leaks where there is a risk of increased soil contamination due to fluid that leaked into the soil, because despite clean-up after the spill, upon decommissioning additional contaminated soil may be discovered.*

004-5

Section 1753.2.1(a)(4)(A) Production Facility Decommissioning Risk Aggregated Score Table. Commenters take umbrage regarding "unresolved notices of violation at the production facility", given that CalGEM issues notices of violation for such things as vegetation present, faded signs, or chain-link fences requiring repair, none of which would increase the costs of abandoning the facility. Accordingly, this criterion should either be eliminated from the risk factor setting or qualified to only include violations of a certain nature that could actually increase the risks at the facility.

Response: *NOT ACCEPTED. Unresolved notices of violation at a production facility are indicative of larger compliance issues, which indicates a greater risk of conditions increasing the decommissioning cost. To reduce the risk factor, an operator will simply need to come into compliance.*

004-6
Section 1753.2.1(a)(4)(A) The all-encompassing "any other conditions about the production facility that indicate it could potentially pose a threat to life, health, property or natural resources" is entirely vague and undefined. This particular "risk" is one of the highest single point values for increasing costs and lacks any definition or criterion to prevent it from being arbitrarily imposed when running the models.

Response: *NOT ACCEPTED. This requirement is necessary to capture any threats that the production facility may pose that may not be enumerated in the regulation. It is not possible to capture all specific situations where a production facility poses potential threats to life, health, property, or natural resources Indications that the production facility poses such threats provides a limiting-criteria for adding additional "points." CalGEM cannot require additional points be added without specific facts about the facility indicating such a threat.*

004-39
1753.2.1(a)(4)(A). Additional information should be provided to substantiate the points "awarded" for the various characteristics that are presented in the table. By mandating an arbitrary point system, the estimated costs are unduly driven upwards without basis on actual circumstances. The state estimates for decommissioning again ignore the fact that the surface may be owned by the Operator, itself, in many cases, and that the Operator may be able to use the decommissioned facilities for other uses. It is possible to actually have tanks cut up and removed by scrap vendors at little to no cost. In some instances, the surface owner may want a water tank to remain for future use, especially if they have plans to use the surface for agricultural purposes. Used tubing or flowlines can be turned into fencing which can be stronger and require less maintenance than wooden fences. Some existing facilities may also have application for future sequestration projects just as some of the wells may. We assume that the state would prefer a policy of reuse of usable materials over the assumption that all production facility materials would be sent to landfills. Therefore, the model should be revised to reflect this very common practice, which also reduces overall cost of abandonment.

Response: *ACCEPTED IN PART. For operators using Method 2 to submit their cost estimates, the proposed regulations afford the operator the opportunity to report the*

repurposing of wells, production facilities, and associated sites and reduce the cost estimate as applicable. The operator will be required to provide documentation supporting the validity of the values used to calculate the reduction and provide signed documentation from the mineral rights or surface rights owner describing the intended repurposing.

The characteristics identified in the risk score table are known to add additional costs to decommissioning, including being located in urban or environmentally sensitive areas, where there may be a limitation on work hours, extra permitting, and use of specialized equipment which extends the duration and cost of decommissioning, or reportable spills or leaks where there is a risk of increased soil contamination due to an unknown amount of fluid that leaked into the soil.

004-21
1753.2.1(a)(5)(B). Contingency values for Facility Decommissioning Costs are presented without any reasoning or foundation for the percentages presented in the Draft. Utilizing the apparent arbitrary Aggregated Risk Scores in 1753.2.1(a)(4) to determine contingency values will, again, unduly drive-up estimated costs for facility decommissioning. Transparency is needed from CalGEM so that the contingency factors are better understood.

Response: *NOT ACCEPTED. Please see the Basis of Reasoning for Base Costs document, section 9, for a discussion on how the contingency percentage was developed based on the AACE's guidelines for project cost estimates. The contingency range used in Method 1 is consistent with the AACE's Class 3 cost estimate given the expected end usage of the estimate, accuracy range and estimating methodology. The other cost estimate classes were considered but not chosen. Class 2 and Class 1 estimates require additional time, resources, and money to prepare and are typically done closer to the actual project commencing, and their value is valid for a shorter period of time due to the everchanging market conditions. Class 4 and Class 5 estimates have a higher contingency range given the shorter preparation time and wider accuracy range.*

004-40
1753.2.1(a)(5)(B)(ii). The basis for determining the contingency percentage should be presented and supported by substantial evidence.

Response: *NOT ACCEPTED. The Basis of Reasoning for Base Costs, section 9, describes how the contingency percentage was developed based on the AACE Guidelines. The contingency range used in Method 1 is consistent with the AACE's Class 3 cost estimate given the expected end usage of the estimate, accuracy range and estimating*

methodology. The other cost estimate classes were considered but not chosen. Class 2 and Class 1 estimates require additional time, resources, and money to prepare and are typically done closer to the actual project commencing, and their value is valid for a shorter period of time due to the everchanging market conditions. Class 4 and Class 5 estimates have a higher contingency range given the shorter preparation time and wider accuracy range.

004-22
Section 1753.2.2(a)(1). The Base Site Remediation Cost presented in Table (A) of this section lacks transparency in how the Unit Cost values were derived. Many options are available to an operator as to how a site might be remediated/restored. The extent of remediation is dependent on future use of the lands being remediated; it is not known if this was accounted for. Site restoration could also be dictated by terms of the lease that an operator holds. For example, a lessor/surface owner may not want roads or structures removed, it is not apparent that these factors were considered when determining the Unit Costs. Transparency is needed from CalGEM in how the Unit Costs were determined so that it can be better understood if the Unit Costs are reasonable and realistic.

Response: *ACCEPTED IN PART. The Basis of Reasoning for Base Costs document, section 7, that was released with the rulemaking, describes how the site remediation unit costs were calculated. For operators using Method 2 to submit their cost estimates, the proposed regulations afford the operator the opportunity to report the repurposing of wells, production facilities, and associated sites and reduce the cost estimate as applicable, which would include the example provided of a road remaining. The operator will be required to provide documentation supporting the validity of the values used to calculate the reduction and provide signed documentation from the mineral rights or surface rights owner describing the intended repurposing.*

004-23
Section 1753.2.2(a)(2). No basis for the Cost of Other Project Components. Cost of Permitting and Regulatory Compliance will vary widely by location in the state and rural versus urban. Cost of Mobilization and Demobilization will vary widely if economies of scale are utilized. Cost of Project Management and Engineering will vary widely based on location, economies of scale and if an operator could provide this service with their own resources. Transparency in determining the percentages added to the overall cost of remediation is needed to accurately project the three "other" components presented.

Response: *NOT ACCEPTED. The Basis of Reasoning for Base Costs document, section 8, that was released with the rulemaking provides details on how the Other Project Components percentages were developed consistent with guidance from the EPA cost estimating guide and DOI handbook on standard engineering cost estimating procedures.*

004-24
1753.2.2(a)(3)(A). Back up information needs to be provided to substantiate the points "awarded" for the various Characteristics that are presented in the Site Remediation Aggregated Risk Score Table. By mandating the arbitrary points system contingency percentages will unduly drive up the estimated costs to remove and decommission production facilities. Background information needs to be provided to establish that a Points system is shown to be based on actual circumstances that could impact projected costs.

Response: *NOT ACCEPTED. Please see the Basis of Reasoning for Base Costs document that was released with the rulemaking for a discussion on how the points and contingency were developed.*

The characteristics identified in the risk score table are known to add additional costs for site remediation, including:

- *Being located in urban areas or sensitive areas where there may be a limitation on work hours, extra permitting, and use of specialized equipment which extends the duration and cost of site remediation activities.*
- *Well or facility site potentially posing a threat to life, health, property, or natural resources so there may be more safety protocols, use of specialized equipment, limitation on work hours which extends the duration and cost of site remediation activities.*
- *Reportable spills or leaks where there is a risk of increased soil contamination due to an unknown amount of fluid that leaked into the soil.*

Contingency is the amount added to an estimate to account for items, conditions, or events for which the occurrence and effect is uncertain and that experience shows will result in additional cost. The contingency range is consistent with guidelines from the AACE.

004-25
Section 1753.2.2(a)(4). Contingency values for Site Remediation Costs are presented without any backup information for the percentages and appear to be subjective. Utilizing the apparent arbitrary Aggregated Risk Scores in 1753.2.1(a)(3)(A) to determine

contingency values has the potential to increase estimated costs for site remediation/restoration. Transparency is needed from CalGEM so that the contingency factors are better understood.

Response: *NOT ACCEPTED. Please see the Basis of Reasoning for Base Costs document that accompanied the rulemaking, section 9, for a discussion on how the contingency percentage was developed based on the AACE's Guidelines. The contingency range used in Method 1 is consistent with the AACE's Class 3 cost estimate given the expected end usage of the estimate, accuracy range and estimating methodology. The other cost estimate classes were considered but not chosen. Class 2 and Class 1 estimates require additional time, resources, and money to prepare and are typically done closer to the actual project commencing, and their value is valid for a shorter period of time due to the everchanging market conditions. Class 4 and Class 5 estimates have a higher contingency range given the shorter preparation time and wider accuracy range.*

004-26
1753.3.1(a)(10) and 1753.3.2(a)(9). As opposed to an arbitrary contingency percentage mandated by CalGEM operators and their contractors are better equipped to determine a contingency value. Contingency percentages, if any, should be developed and applied by operators in development of the cost estimates for Facility Decommissioning under Method 2.

Response: *NOT ACCEPTED. The contingency range used in Method 1 is consistent with the AACE's Class 3 cost estimate given the expected end usage of the estimate, accuracy range and estimating methodology. The other cost estimate classes were considered but not chosen. Class 2 and Class 1 estimates require additional time, resources, and money to prepare and are typically done closer to the actual project commencing, and their value is valid for a shorter period of time due to the everchanging market conditions. Class 4 and Class 5 estimates have a higher contingency range given the shorter preparation time and wider accuracy range.*

Confidentiality

004-13
Section 17531.1(a)(2)(C, E, F, G, H). Documentation requested under these sections is very specific to each operator as they negotiate the best available pricing that they can. A great potential exists if this pricing information becomes known to the public that the appearance of collusion or price-fixing among operators and service companies is taking place, triggering anti-trust concerns. Confidentiality must be

granted to all operators and service companies if the prescriptive cost documentation is required.

Response: *ACCEPTED IN PART. Proposed section 1753.1.1 has been revised to provide operators a procedure by which to request confidential treatment of information within their cost estimate report, and a timeframe to take appropriate action when CalGEM informs the operator records will be made publicly available. However, prices used should be those prices available to the public and that would be available to the state in an open bidding process and should not include discounts or efficiencies specific to the operator.*

003-4
Commenters appreciate the addition of provisions concerning claims of business confidentiality but are deeply skeptical that any information concerning the condition of idle wells merits confidential treatment – it is beneficial to have a set of rules surrounding such determinations. It is important, however, that any decision about confidentiality be made as openly as the underlying legitimate confidentiality concerns permit. To that end, Commenters request that CalGEM add to the confidentiality provisions a requirement that any confidentiality determination be promptly posted on CalGEM's website, redacted only as necessary to address any specific information determined to be confidential. It is important that at a minimum, the public be aware of the frequency with which confidentiality is being claimed and what grounds are being asserted in support of it.

Response: *ACCEPTED IN PART. Operators are required to submit cost estimates for all their wells, not only their idle wells. While well condition would likely not warrant confidential treatment, trade secret and business information could potentially warrant confidential treatment. Proposed section 1753.1.1 provides that CalGEM will notify an operator in writing regarding CalGEM's determination of if the information designated by the operator does or does not qualify as confidential. These determinations will be made available in WellSTAR. Similarly, to the extent that confidentially is warranted, a redacted version of the cost estimate report will be posted in WellSTAR. CalGEM is working to make that portion of WellSTAR that contains these operator liability reports available to the public.*

Effect on Business

004-8
The regulations' overestimation of the costs of plugging and abandoning wells in California threatens the viability of smaller oil and gas operators, and fails to further the

State's objective of ensuring that operators (and not the State) remain the responsible parties. The proposed Rule presents dollar figures and methodologies that are not realistic and are far from what could be considered industry standards for best engineering practices in estimating costs for plugging wells, decommissioning surface equipment and remediating/restoring surface lands. If the state elects to use the proposed methodologies to re-evaluate bonding regulations in the future based on these inflated costs that are not realistic, smaller operators will be unable to meet the inflated financial obligations with the unanticipated, but certain, consequence being that the state's orphan well count will increase rather than decrease. Overestimating the cost of plugging will tie up capital that would otherwise be used to accelerate plugging of idle wells.

Response: *NOT ACCEPTED. These regulations do not impose additional bonding requirements on operators. The costs associated with complying with these regulations are limited to the cost of complying with completion of the cost estimates. While cost estimates are a factor CalGEM must consider in implementation of CalGEM's bonding authority under PRC section 3205.3, the cost estimate is not determinative of the additional amount of security the operator will be required to file.*

Groundwater Contamination Risk

003-5
Commenters encourage CalGEM as a general matter to continue to collect and integrate data concerning the actual groundwater cleanup costs that can potentially be associated with cleanup of idle wells. Commenters appreciate that the regulations include a risk contingency to address the possibility of groundwater contamination, but given the extremely high costs associated with groundwater cleanup, it is essential that the best data available form the basis for quantifying that contingency.

Response: *NOT ACCEPTED. Under Method 1, if the fluid level in the well is above the base of freshwater or an underground source of drinking water (USDW), additional points are added to the aggregated well score. These additional points are added to reflect that in those instances the costs of abandonment will likely be higher due to a potential risk of contamination]. Similarly, additional contingency is also added if a site has or at one time had a freshwater aquifer underneath because of the potential that a site may cost more to remediated. As identified by Commenter, groundwater contamination is only a potential risk and the costs of clean up are high. Given this, even as more data become available, it is likely not possible to include such costs into Method 1.*

Methodology

004-34
Permitting should be part of the downhole cost estimate and not the costs for site cleanup.

Response: *NOT ACCEPTED. The costs to obtain required permits must be included in both the well abandonment cost estimate and the site remediation cost estimate because permitting is applicable to both.*

004-27
When an operator determines their equivalent barrels of oil per day per well, dividing 2021 assessment volumes by active number of wells, are only producing wells to be used? Include idle wells? Include injection wells?

Response: *ACCEPTED. The regulations were updated from the Discussion Draft to clarify that idle wells are included in the equivalent barrels of oil per day. Operators include all of their wells, except those wells that have been plugged and abandoned, when calculating the total barrel equivalent per day per well. Those operators who were not assessed due to a lack of production, which would include an operator of only injection wells, are included in the first reporting category.*

004-28
Cost Tables presented for plugging operations, facilities removal and remediation appear to be aggregated from previous work done by the State from an unknown set of decommissioning projects. Utilizing the average costs and then applying risk factors will inflate estimated costs. Cost table should present "idle condition" costs and then risk factors applied. This will present more realistic cost estimates.

Response: *NOT ACCEPTED. Cost tables in Method 1 were developed from a "base well" which was identified in each region as a well lacking any specific risk factors. The method then builds upon the base well by adding the risk factors via multiplier to the project so the factors are additional, not duplicative. The well's status as "idle" was not found to be a characteristic that affected the cost of abandonment.*

006-1
Commenter's lease has no fixed oil tanks, it has mobile frac tanks, there is zero $$$$ dollars associated to de-commission my tanks – you need to have a code for no cost. I can sell my tanks and just drive them off the lease zero cost. I have 12 pumping

units, it will not cost me $5-6k each to remove the pumps, that's false information, I can sell these items so the cost code should be zero on the form.

Response: *NOT ACCEPTED. Salvage values or scrap are highly speculative and cannot be guaranteed in any specific instance. Further, even in the event an operator is able to salvage their equipment, there will still be costs associated for removal and disposal.*

006-2
Commenter's leases/pumps do not have any exposure to environmental damages as they are located on land that has no fresh water – you need to have a code for pumps located on land with no fresh water – lost hills is just saltwater.

Response: *ACCEPTED. As provided in section 1753.2.1, if a pump is located on land that does not have a freshwater aquifer, no risk score is added. In other words, the base facility decommissioning costs assume that no freshwater is present, and only if there is does an operator add the appropriate risk score.*

006-3
Commenter has no underground pipes or above ground metal pipes that need removing, all of Commenter's pipes are PVC that can be removed for a couple of thousands of dollars.

Response: *ACCEPTED IN PART. Method 1 assumes that the pipelines being removed are metal. Operators with PVC instead of metal pipes may use Method 2 to report costs, provided their estimate is persuasively supported, differences between the removal of metal and PVC.*

006-4
You are over pricing plugging the wells 10 days at $7k a day making each well $70k to plug on my 2500 foot wells, the maximum cost is $45-50k, that needs to be changed in your documents.

Response: *NOT ACCEPTED. The proposed regulations implement statutory reporting requirements under PRC section 3205.7 to better understand the full costs associated with end-of-life remediation of operators' assets. Understanding the full costs requires that operator specific savings or efficiencies cannot be used to ensure that the cost estimates provide information on the potential cost to the state for doing such work. While operator specific savings or efficiencies cannot be utilized in estimating the operator's liability, to the extent that the operator has documentation supporting a lower cost estimate than what would otherwise be calculated under Method 1, the*

operator may submit a Method 2 cost estimate.

Public Utilities

002-1
Commenters have concerns about the application of the regulations to certain utility assets which are under the jurisdiction of the California Public Utilities Commission (CPUC) and believe these proposed rules are incompatible with existing obligations and mandates under the CPUC's purview. Commenters indicate that it is their understanding that the CPUC and CalGEM established an agreement that their respective responsibilities would be split at the wellhead, giving CPUC general regulatory jurisdiction over utility lines, plants, or systems. Cost estimate reports appear to be beyond the agreed responsibilities for CalGEM and merge into jurisdictional areas held by the CPUC.

Response: *NOT ACCEPTED. PRC section 3205.7 requires "…each operator of an oil or gas well to submit a report that demonstrates the operator's total liability to plug and abandon all wells and to decommission all attendant production facilities, including any needed site remediation…" There is no exception for underground gas storage projects or public utilities. CalGEM retains jurisdiction* even *where that jurisdiction is joint with the CPUC.*

002-2
Commenters, as utilities, are subject to the U.S. Generally Accepted Accounting Principles which set specific accounting methods applicable to the cost estimates related to the decommissioning and retirement of assets. Thus, the utilities recommend the Draft Regulations be consistent with existing cost estimates set by the ARO requirements set by the FASB Statement No. 410-20. An alternative would be for the utilities to submit their Federal Energy Regulatory Commission Form 2 which includes the total costs to retire, filed as part of the General Rate Case (GRC).

Response: *NOT ACCEPTED. The proposed regulations require operators to submit their cost estimates in current dollars and reflect if the state were to have to pay a contractor to perform the work if the operator fails to do so, so that CalGEM may determine if the cost estimate accurately reflects the operator's current total liability consistent with the mandates of PRC section 3205.7, subdivisions (a) and (b). Provided the filings identified by the commenters do not reflect specific savings or efficiencies unique to those operators, but instead reflect the costs that the state would have to pay a contractor to perform the work, those filings may be appropriate to support a Method 2 cost estimate. Cost estimates submitted to comply with these requirements*

may differ from those submitted in a General Rate Case, because of the different reporting requirements.

Repurposing

003-1
Commenters support in principle addressing in regulation the possibility that idle wells can be repurposed to store energy in appropriate and environmentally beneficial ways, and in particular addressing the effect of repurposing on cost estimation. However we note that the available repurposing technologies are widely varied, and our comments should not be interpreted as a blanket endorsement of them. Commenters would encourage CalGEM to carefully scrutinize all available repurposing technologies in the days ahead to ensure that any it sanctions – and in particular allows as a basis for reducing cost estimate – are providing actual carbon benefit and eliminating environmental harm to surrounding communities.

***Response**: ACCEPTED IN PART. CalGEM will review an operator's claim of repurposing to ensure that it complies with the requirements of proposed section 1753.1.1, including the values used to calculate the reduction and signed documentation from the mineral rights or surface rights owner describing the intended repurposing. Such repurposing is contemplated under CCR title 14, section 1776. For example, the landowner may ask that a roadway be left in place. It is appropriate to allow the operator to reduce the cost estimate to reflect that request, because if the state were undertaking the work in that situation, upon landowner request, the road would be left.*

003-2
Commenters suggest that CalGEM provide a definition of repurposing that includes a carbon benefit and elimination of environmental harm associated with idle wells. Commenters does not believe it appropriate for an operator to reduce its plugging and abandonment cost estimate through reference to a technology that will not achieve these basic ends. Commenters recognize that any definition at this point will be highly general, and will need to be fleshed out in the days ahead as the technology matures and CalGEM assesses its appropriate role in overseeing it; but we believe a basic set of parameters at this stage is appropriate and necessary.

***Response**: NOT ACCEPTED. These proposed regulations implement statutory reporting requirements, under PRC section 3205.7, to better understand full costs associated with end-of-life remediation of operators' assets. To the extent repurposing of a well or production facility will reduce the cost estimate, and the operator can provide documentation supporting the validity of the values used to calculate the reduction and provided signed documentation from the mineral rights or surface rights owner*

describing the intended repurposing, such a reduction is appropriate without it being necessary to include a carbon benefit and elimination of environmental harm requirement.

003-3
Commenters are concerned that the current framing would allow operators to claim repurposing as a basis for cost estimation reduction without an actual concrete plan in place to implement such repurposing. Absent a requirement to document an actual plan in place to implement repurposing technology, we fear that the added provisions will become essentially a loophole allowing easy reduction of the estimate amount posing the danger that operators will simply reference a vague possibility of future income as a basis of reducing its estimated costs to near zero. To guard against this eventuality, we recommend that CalGEM require operators asserting a cost estimate reduction based on repurposing present documentation showing that they have entered into a binding contract for repurposing with a hard timeline (i.e. not simply an agreement to deploy such technology at an undefined time in the future), and documenting the purported cost savings. The documentation should include a description of any up-front financial investment that the operator will be required to make, and the reduction calculated with accounting for that investment factored in.

***Response**: NOT ACCEPTED. To reduce their cost estimates to reflect repurposing of a well, production facility, or site, operators will be required to provide documentation supporting the validity of the values used to calculate the reduction and provided signed documentation from the mineral rights or surface rights owner describing the intended repurposing. The signed documentation from the mineral rights or surface owner will provide the documentation necessary for CalGEM to assess the purported repurposing and any associated reduction in the cost estimate.*

Rulemaking Documents

004-29
After reviewing CalGEM's Basis of Reasoning document, commenter gathered data from producer members on the costs of plugging and abandoning wells over the past three years. Based on this review, we found that the CalGEM dataset used to establish the cost estimates is too small to be representative of the active and idle wells in each region. Furthermore, the CalGEM dataset has large data gaps for abandonment costs of wells at common well depths in reach region. In several cases, CalGEM has no well abandonment cost data representing wells at the common depth, particularly in the regions that contain the largest number of active and idle wells. These large data gaps

are the primary reason why the CalGEM cost estimates and model assumptions differ greatly when compared to actual data from our producer members.

Response: *NOT ACCEPTED. Commenter's dataset is focused on its members while CalGEM's dataset is based on ten years of state abandonment contracts. The ten years of data used by CalGEM is a better predictor of what the state costs are likely to be; it is not intended to be representative of operator costs for all active and idle wells in a region. While operator specific savings or efficiencies cannot be utilized in estimating the operator's liability, to the extent that an operator has documentation supporting a lower cost estimate than what would otherwise be calculated under Method 1, the operator may submit a Method 2 cost estimate. Please see the Basis of Reasoning for Base Costs document, section 2, that was released with the rulemaking, for a discussion on the testing of the cost estimate methodology.*

004-30
The largest factor that impacts the abandonment costs is the number of days it takes to complete the abandonment process, which is greatly affected by the well characteristics. However, in considering these factors we find that CalGEM's assumptions on the length of time it would take to complete an abandonment are inaccurate (especially in the Central district). Our dataset found that the median days was four days in contrast to the 10 days that is reflected in the basis of reasoning document and that costs are significantly less than those estimated using the CalGEM Method 1. We urge CalGEM to revise its model to replace the arbitrary multipliers and points assigned to each attribute with a model that allows operators to insert the well characteristics and correct number of days for abandonment. All factors used in the Aggregated Well Score Table need further evaluation and transparency.
Commenter asks CalGEM to revise the regulations to allow for operators to insert the well characteristics and correct number of days for abandonment.

Response: *ACCEPTED IN PART. One of the largest factors is the number of days it takes to complete the abandonment process, which is directly reflected by any challenges associated with abandoning a specific well. However, commenter's dataset is focused on its members while CalGEM's dataset is based on ten years of state abandonment contracts. The ten years of data used by CalGEM is a better predictor of what the state costs are likely to be. While operator specific savings or efficiencies cannot be utilized in estimating the operator's liability, to the extent that an operator has documentation supporting a lower cost estimate than what would otherwise be calculated under Method 1, the operator may submit a Method 2 cost estimate. If using Method 2, an operator may submit a cost estimate supporting a different number of days to perform*

the plugging and abandonment work than would otherwise be calculated under Method 1, assuming such estimate is persuasively supported.

004-31
Commenter finds that many of their producer members costs, including for site cleanup, equipment removal, wellhead removal, and mobilization and demobilization, are lower than that calculated by CalGEM across the board. It is likely that the costs included in the CalGEM estimate include other factors that producers are not including, therefore the Basis of Reasoning should describe what costs CalGEM included in this number and how this could vary.

Response: *NOT ACCEPTED. Commenter's dataset is focused on its members and may contain efficiencies unique to those operators. CalGEM's site remediation calculations are based upon ten years of state abandonment contract data and information provided from waste management facilities regarding disposal rates. Production facility decommissioning and site remediation cost estimates include costs for other project components including permitting and regulatory compliance activities, mobilization and demobilization costs, and project management and engineering. These project components are added to the production facility decommissioning and site remediation cost estimates given that there are more unknown variables and complexity compared to well plugging and abandonment operations. Similarly, the cost for mobilization and demobilization is based upon EPA and DOI guidance on the appropriate percentage given the location of wells in relation to necessary equipment and personnel. Please see the Basis of Reasoning for Base Costs document that was released with the rulemaking, sections 8 and 9 for a discussion on how the Other Project Components and contingency percentages were developed.*

Scope of the Regulations

004-2
Neither CalGEM nor the State of California has the legal authority to force removal of equipment from private properties, and/or require remediation above and beyond the intended future use of the property, where the surface owner does not wish these activities to occur. CalGEM only has the authority to require plugging and abandonment of wells. Further, a surface owner may elect to use tanks or other equipment onsite for other purposes than oil and gas production at the conclusion or surrendering of a lease. The regulation should be revised to reflect that site restoration to pre-development status is at the discretion of the surface owner.

Response: *ACCEPTED IN PART. For operators using Method 2 to submit their cost estimates, the proposed regulations afford the operator the opportunity to report the repurposing of wells, production facilities, and associated sites and reduce the cost estimate as applicable. The operator will be required to provide documentation supporting the validity of the values used to calculate the reduction and provide signed documentation from the mineral rights or surface rights owner describing the intended repurposing.*

Worksheets

004-36
The worksheets posted with the draft regulation are locked and restricted from editing, which restricts operator's abilities to compare their prior actual costs with the state's estimated costs. Commenters request to receive an unlocked copy of the model with worksheets that clearly indicate all of the model assumptions. We also request that the sheets be reformatted to allow for easy printing and hard copy review.

Response: *NOT ACCEPTED. Operators are not required to use the provided worksheets. The worksheets provided are designed to walk the operator through Method 1 calculations and do not need to be unlocked to be used effectively. The worksheets are locked to prevent the formulas from being mistakenly changed during use of the spreadsheet.*

Outside scope

005-1
Commenter would hope that all companies with abandoned wells, not attended to or cleaned up before being abandoned would be required to make sure no oil is leaking into the ocean or into soil or waterways, marshlands or would be in any way harmful to the environment.

Response: *These proposed regulations implement statutory reporting requirements, under PRC section 3205.7, to better understand full costs associated with end-of-life remediation of operators' assets. Requirements associated with wells being maintained in a leak-free condition is outside the scope of these regulations.*