

SB 1137 First Implementation Regulations

Economic Impact Assessment (EIA)

1. SUMMARY OF ECONOMIC IMPACT ASSESSMENT

The proposed SB 1137 First Implementation Regulations would have limited economic impact on California's oil and gas (OG) industry and no noticeable consequences to the state economy as the statutory requirements established under Senate Bill 1137 (Gonzalez, Chapter 365, Statutes of 2022) (SB 1137) are the baseline and there are few economic impacts that flow directly from the regulations. The economic impact of the regulations is summarized as follows:

- The proposed regulations will result in the following additional direct costs -
 - The proposed regulations specify additional information OG operators must submit with a notice of intention (NOI) to demonstrate compliance with statutory requirements
 - The proposed regulations establish requirement for OG operators to provide notice of new production facilities to demonstrate compliance with statutory requirements
 - The proposed regulations specify information OG operators must submit to demonstrate with a location is within a health protection zone
- Total direct costs to OG operators would be approximately \$459,000 in the first and second years after the proposed regulations are effective ("Year 1" and "Year 2"). This analysis is explained in Section 3.
- The proposed regulations will result in the following fiscal costs to the Department of Conservation's California Geologic Energy Management Division (Division)
 - The Division must verify and process additional information operators must submit with a Notice of Intention (NOI) to demonstrate compliance with statutory requirements

- The Division must verify and process operators' notices of new production facilities to demonstrate compliance with statutory requirements
- The Division must verify and process information operators must submit to demonstrate with a location is within a health protection zone
- Total fiscal costs to the Division would be approximately \$677,000 in both Years 1 and 2. This analysis is explained in Section 3.
- Given California's Gross State Product (GSP) of about \$3.9 trillion, the direct costs to OG operators and fiscal costs to the Division are negligible relative to California's economy.¹
- With estimated 2024 nominal \$USD revenues of \$5.1 billion for the top five operators in California, there would be virtually no impact on the creation or elimination of jobs within California, no impact on the expansion of businesses within the state, no impact on the creation of new businesses or the elimination of existing businesses within the state, and no impact on the ability of businesses within the state to compete with businesses in other states.
- Although not quantified in this analysis, there are potential qualitative benefits from the proposed regulations. The benefits include improved health and welfare of California residents, improved OG worker safety, and reducing the probability of environmental damage from OG operations in the state. These impacts are addressed in Section 4. With the statute as the baseline, these impacts are limited.
- The proposed regulations would not have significant economic impacts on individuals, businesses, or the government.

2. PURPOSE OF PROPOSED REGULATIONS

SB 1137 was codified into law in September of 2022 as Public Resources Code (PRC) sections 3280 to 3291. Emergency regulations were promulgated shortly thereafter. The emergency regulations include California Code of Regulations,

¹ State of California Department of Finance, "Gross State Product," <https://dof.ca.gov/forecasting/economics/economic-indicators/gross-state-product/>.

title 14, Sections 1765 to 1765.10. The goal of this rulemaking is to implement permanent regulations that replace the emergency regulations before they expire, implementing the same applicable statutory provisions of SB 1137.² SB 1137 and the subsequent emergency regulations were intended to address harmful impacts from OG operations in health protection zones (HPZs) in California. HPZs are defined as the area within 3,200 feet of sensitive receptors, which are defined in PRC section 3280 to include sites such as residences, education resources, business open to the public, and health care facilities. SB 1137 established statutory restrictions and requirements to address public health and environmental issues associated with OG production. For example, the bill prohibits the Division from approving NOIs that are associated with OG production within an HPZ, with limited exceptions such as when approval of the NOI is needed to prevent or respond to a threat to public health, safety, or the environment. (PRC, § 3281.)

In February of 2023, a referendum on SB 1137 qualified for the ballot, which suspended the effect of the applicable statutes, as well as the implementing regulations and the Division's implementation activities. In October of 2023, the Secretary of State certified the petition as Referendum #1940, which was expected to appear on the November 5, 2024, General Election ballot. The referendum's sponsors later withdrew it in June 2024, and the provisions of SB 1137 became effective. In late August, the Legislature passed Assembly Bill (AB) 218 (Ch.1002, Stats. 2024), which extended certain timeframes in SB 1137 to compensate for delayed implementation caused by the referendum.

Every operator is required to submit a sensitive receptor inventory and map to the Division by July 1, 2025, and provide updates to the inventory and map annually thereafter, as provided, and requires the Division to make all current sensitive receptor inventories and maps publicly available on its internet website. (PRC, § 3285.) This is the baseline requirement from the statute; the regulations only result in direct costs or fiscal impacts above that baseline to the extent that the regulations establish additional requirements beyond what is expressly required by statute.

There are several important statutory requirements that are not within the scope of these regulations but are likely to be addressed in future rulemaking.

² Throughout this EIA, "Section" is referencing a section of these proposed regulations unless otherwise specified.

Beginning in July 2026, all OG production facilities or wells with a wellhead within an HPZ are required to comply with specified health, safety, and environmental requirements for wells and production facilities located within an HPZ. (PRC, § 3282.) Operators with a production facility or well with a wellhead within an HPZ are also required to submit a leak detection and response plan, as provided, to the Division by July 1, 2028, and the Division is required to provide approval or notice of deficiency of such plan by July 1, 2029, and require implementation of the plan by July 1, 2030. (PRC, § 3283.)

Section 3 of this EIA lists some of the many requirements that operators must currently abide by as a result of SB 1137. Largely influenced by the statutes, the majority of the proposed regulations simply facilitate and reinforce these statutory requirements operators are already required to comply with. The costs associated with compliance with the statutes are not analyzed here. However, there are aspects of the proposed regulations that will create additional compliance actions for both OG operators and the Division. Section 3 will explain the minimal differences between the statute and proposed regulations and then will provide a justification for estimating an additional cost or not.

3. DIRECT COSTS TO OPERATORS AND FISCAL COSTS TO DIVISION

The OG industry in California consists of about 226 active operators. This figure was determined by calculating the number of operators who have produced at least some oil in 2024.³ Of these 226 operators, 73 percent of total oil production is produced by the five largest operators.⁴ The proposed regulations will create additional action steps pertaining to activities that could facilitate continued oil production. Therefore, it is reasonable to infer that the proposed regulations will mainly affect the few largest operators in the industry in terms of oil production.

To observe how the proposed regulations would affect the five largest OG operators, the analysis estimated the 2024 annual revenues from each operator's California operations. These were calculated by multiplying reported barrels of oil (bbl) monthly production by the price of bbl attained from

³ Source: Internal analysis utilizing WellSTAR Data for the year 2024. The year 2024 was chosen for the analysis because it is the most recent complete calendar year at the time of this writing. <http://wellstar-internal.conservacion.ca.gov/General/PublicDownloads/Index>

⁴ Ibid.

California Midway-Sunset monthly data.⁵ This method captures the fluctuations in the price of oil throughout the year to provide a more accurate estimate.

It is worth noting that simply presenting an OG operator's revenue may be misleading. For example, OG operators have many operating expenses that cut into their profit margins. However, it is useful to note the magnitude of annual revenue for the top OG operators relative to the impact of the proposed regulations. Table 1 displays the 2024 total production share percentage from the top five operators and their estimated annual revenues in 2024.

Table 1 - 2024 Oil Production Share % and Estimated Revenue (\$USD) by Operator

Operator	Production Share Percentage⁶	2024 Annual Revenue in CA (Nominal \$USD)
Chevron U.S.A. Inc.	26%	\$1.8 Billion
Aera Energy LLC	25%	\$1.8 Billion
Sentinel Peak Resources California LLC	9%	\$596 Million
Berry Petroleum Company LLC	7%	\$483 Million
California Resources Elk Hills LLC	7%	\$462 Million
Total	73%	\$5.1 Billion

There are three components of the proposed regulations that will result in direct costs to OG operators and fiscal costs to the Division as shown in Tables 2 and 3. Costs throughout this analysis were estimated by discussing with subject matter experts within the Division how the proposed regulations will create additional action steps that exceed the costs imposed by statute. The remaining portion of Section 3 provides a brief description of each regulation section and then presents a justification for calculating an economic cost or not.

⁵ <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=F005006143&f=M>

Note: For the three months with missing oil price data, the average from the preceding two months were utilized.

⁶ Production share percentage was calculated by dividing each operator's annual oil production by the total amount of oil production in the industry.

Table 2- Direct Costs to Operators

	Proposed Regulation	Year 1	Year 2
1765.3.	Additional Requirements for a Notice of Intention	\$291,571	\$291,571
1765.5.	Required Notice for New Production Facilities	\$77,066	\$77,066
1765.9.	Determination that a Location is Not within a Health Protection Zone	\$90,429	\$90,429
	Total	\$459,066	\$459,066

Table 3- Fiscal Costs to Division

	Proposed Regulation	Year 1	Year 2
1765.3.	Additional Requirements for a Notice of Intention	\$426,686	\$426,686
1765.5.	Required Notice for New Production Facilities	\$97,791	\$97,791
1765.9	Determination that a Location is Not Within a Health Protection Zone	\$152,911	\$152,911
	Total	\$677,388	\$677,388

3.1 Section 1765. Scope and Purpose

Proposed Section 1765 simply states the scope and purpose of the proposed regulations. There are no associated direct costs to OG operators or fiscal costs to the Division.

3.2 Section 1765.1. Definitions

Proposed Section 1765.1 provides definitions to be used throughout the proposed regulations. There are no associated costs.

3.3 Section 1765.2. Measuring Distances

The guidance in this section sets standard requirements for how distance is measured, and therefore, does not create any additional costs.

3.4 Section 1765.3. Additional Requirements for a Notice of Intention

Proposed Section 1765.3 provides operators with requirements to abide by when submitting an NOI for a well under three different scenarios: when the work will

be conducted outside an HPZ, when it will be conducted inside an HPZ, and in the context of development for nonfossil fuel production and injection and related uses. Most of the Section 1765.3 requirements are already required by PRC section 3281, subdivision (b), but additional specifications in the regulation will result in some direct costs.

Scenario 1 - When submitting an NOI for a location outside an HPZ, PRC section 3281, subdivision (b) requires that operators must provide a statement certifying that the operator has confirmed, and the Division has verified, that there are no sensitive receptors located within 3,200 feet of the wellhead location. The statute is silent about what information the statement must contain.

Proposed regulation Section 1765.3, in subdivision (a), repeats the statement required by statute (in PRC section 3281 (b)) but additionally directs the operator to follow Section 1765.9, subdivision (a), regarding the content necessary for the Division to verify the statement.

For existing wells outside of an HPZ, operators should have already developed a Section 1765.9 statement demonstrating that there are no sensitive receptors within 3,200 feet.⁷ The work involved to create that statement is discussed in Section 1765.9 below (Section 3.13 of the EIA). When repurposing the Section 1765.9 statement for an NOI, the operator will simply have to reverify that the information is still complete and accurate- it is assumed that any time spent and costs to reverify the information are negligible. A sensitive receptor could have been newly built or otherwise established since the previous Section 1765.9 statement was submitted.

For a new well that the operator claims is outside an HPZ and for which there is no previous Section 1765.9 statement, the operator is required to develop and submit a Section 1765.9 statement. The work involved to create that statement is discussed in Section 1765.9 below (Section 3.13 of the EIA). Once the statement is developed, the operator can repurpose the statement (with any updates) for the operator's next annual inventory required by PRC section 3285 and CCR Section 1765.6.

⁷ (CCR, §§ 1765.6(a)(3).)

Scenario 2 – When submitting an NOI for a location inside of an HPZ, PRC section 3281, subdivision (b), requires an operator to submit a sensitive receptor inventory and map.

PRC section 3285 requires operators to submit annual inventories and maps each July 1, and a statement based on their sensitive receptor inventory that provides the operator's determination as to whether their wellheads and production facilities are located within 3,200 feet of a sensitive receptor.

The proposed regulation repeats the statutory requirement that the operator submit an inventory and map with the NOI. For an NOI for an existing well in an HPZ, the section 3285 required inventory and map should already exist and provide the necessary information. Under SB 1137, PRC section 3285, operators would have already submitted a sensitive receptor inventory and map including the distance from each sensitive receptor to the well or wellhead.⁸ Operators would already have extensive inventories and maps of their wells and wellheads which are to be updated annually with information no more than 90 days old.

Similarly, the proposed regulations state that when an operator submits an NOI for a well with a wellhead within an HPZ, they must identify any sensitive receptor and provide information in a sensitive receptor inventory under Section 1765.7 and a sensitive receptor map under Section 1765.8. Also, operators must identify the type, purpose, and size of production facilities in association with the NOI. However, under PRC section 3285 operators are required to submit and maintain inventories and maps of their wells, wellheads, and production facilities. These statements provide information about the production facility and other equipment. Section 1765.3 of the proposed regulations therefore does not create an additional economic burden for wells within an HPZ.

For a new well in an area not previously identified as an HPZ, the operator may have to create an inventory and map, but this is required by statute in PRC section 3281, subdivision (b), and would also have to be created by the operator for PRC Section 3285 compliance.

Therefore, the regulation does not create any additional inventory or mapping costs for operators when submitting an NOI inside an HPZ.

⁸ See PRC Section 3285, <https://law.justia.com/codes/california/code-prc/division-3/chapter-1/article-4-6/section-3285/>.

Compared to the statutory requirements, one area of additional requirements for operators under the proposed regulations is the statement of the basis required in Section 1765.3, subdivision (b)(3) for the Division to approve the NOI under PRC section 3281, subdivision (a). PRC section 3281, subdivision (a) sets forth three exceptions for approving an NOI. When the statement of basis to approve the NOI is either to comply with a court order (PRC section 3281(a)(2)) or to plug and abandon a well (PRC section 3281(a)(3)), a mere statement in the NOI will suffice and does not create additional costs for operators.

However, compared to SB 1137, when the basis for approving the NOI is that the work contemplated in the NOI is necessary to prevent or respond to a threat to public health, safety, or the environment (PRC section 3281, subdivision (a)(1)), Section 1765.3(c) prescribes seven categories of required content for the operator to provide in the statement. For example, operators must submit a description of the threat, a description and characterization of the magnitude of the risks and harms associated with the threat. Operators must also provide data or engineering studies demonstrating the existence of the threat and the magnitude of potential harms. Operators must discuss alternatives and explain how the proposed operations will reduce or eliminate the threat. These actions are more specific and additional to what is expressly required by statute and there are associated direct costs and fiscal impacts.

The Division utilized available data and calculated that 71 NOIs for an environmental concern have been received since June 28, 2024. At the time of this writing in April 2025, the analysis divided 365 days by the number of days observed in the sample to estimate that operators will annually submit about 89 NOIs for an environmental concern. A longer observed period was not available and it is worth noting that data from June 2024 to April 2025 could potentially be biased due to not accounting for a full calendar year. However, the analysis estimates annual submissions with the data available.

For direct costs to operators, Division staff familiar with the process estimate that preparing a statement of basis for an NOI for a public health and safety or environmental concern within an HPZ would take a petroleum engineer 24 hours and a lawyer four hours per NOI submitted. Utilizing wage rates from the Occupational Employment and Wage Statistics (OEWS), the analysis determined that the median wage that includes both salary and benefits is \$113 for a

petroleum engineer and \$146 for a lawyer.⁹ Total direct costs to operators in both Years 1 and 2 therefore amount to \$292,000.

For the fiscal costs associated with this Section 1765.3 the subject matter experts determined that the Division must verify and process these NOIs submitted for public health and safety or environmental concern. It is assumed that new employees would not be hired, rather the additional work would be absorbed by the current staffing levels after the legislative BCP is implemented. The Division determined that per NOI submitted, it would take an associate oil and gas engineer 16 hours at \$120 per hour, a senior oil and gas engineer eight hours at \$137 per hour, an attorney IV four hours at \$130 per hour, the District Deputy four hours at \$147 per hour, and the State OG Supervisor four hours at \$171 per hour.¹⁰ Total fiscal costs in both Years 1 and 2 are \$427,000. Due to proposed Section 1765.3 (d), the Division may waive some or all requirements of subdivision (c). Therefore, it is likely that the estimated direct and fiscal costs associated with Section 1765.3 are inflated.

Scenario 3 – When submitting an NOI for development for nonfossil fuel production and injection and related uses, PRC section 3281.5 states that the restrictions and requirements of SB 1137 do not apply. Proposed Section

⁹ The latest data from the Bureau of Labor Statistics are for the year 2024 at the time of this writing. Wage data from 2024 will be used throughout the analysis.

The petroleum engineer wages can be found here, <https://data.bls.gov/oes/#/industry/211000>

The lawyer wages can be found here,
<https://data.bls.gov/oes/#/industry/211000>

The analysis also determined that wages and salaries only account for about 70.5% of an employee's total expenses for a private company.
https://www.bls.gov/news.release/ecec.t01.htm#ect_table1.f.1

The analysis took the median wage estimates from OEWS and divided them by 70.5% to calculate the total expenses that include benefits such as leave, insurance, retirement, etc. This methodology was used for all direct costs throughout the analysis.

¹⁰ Wages for the Division were calculated by taking the midpoint between the lower and higher scales in each respective profession's pay grade. The midpoint was the method used to best mimic the median values that the OEWS provides. Once the midpoint values were calculated, they were then implemented into an internal spreadsheet that factors in benefits, equipment, and other operating expenses associated with state employees. The hourly wages calculated here are used throughout the analysis.

The CalHR pay scales used for each profession can be found here,
[https://www.calhr.ca.gov/Pay Scales Library/PS_Sec_15.pdf](https://www.calhr.ca.gov/Pay%20Scales%20Library/PS_Sec_15.pdf)

<https://www.calhr.ca.gov/Documents/exempt-pay-scale.pdf>

SB 1137 First Implementation Regulations

Economic Impact Analysis

Page 10 of 17

1765.3(b)(3)(B) requires that operators submit a statement with the NOI indicating that Section 3281.5 applies. The Division determined that costs associated with verifying these statements would be negligible from an economic perspective for both operators and the Division.

Lastly, Section 1765.3, subdivision (e), specifies requirements for operators to adhere to for wells within an HPZ with planned work involving drilling. Under this scenario, the proposed regulations state that operators shall comply with Section 1765.4 and Section 1765.4.1. The following two sections explain why 1765.3, subdivision (e), does not create additional economic costs for operators or the Division.

3.5 Section 1765.4. Water Sampling and Testing

Proposed Section 1765.4 provides guidelines for operators to abide by before commencing work that requires an NOI under PRC Section 3203 within an HPZ. For example, the proposed regulations require operators to notify the Division of the completion of notice required under Section 1765.4.1. Thorough documentation of water testing quality is also required. However, SB 1137 already requires operators to provide the Division documentation of their efforts to contact property owners and tenants about water quality testing under PRC Section 3284. In addition, PRC Section 3284 requires operators to perform water testing and analysis to be submitted to the State Water Resources Control Board and the appropriate regional water quality control board. Economic costs are therefore associated with the requirements in statute, and any additional compliance action required under the proposed regulations would be minimal from an economic perspective.

3.6 Section 1765.4.1. Notice to Property Owners and Tenants

Proposed Section 1765.4.1 simply provides operators guidance on how to comply with Section 1765.4. Much of the section is provided in the statute, PRC section 3284. The regulations are slightly more specific than the statute, but the additional specifications likely would not impact cost estimates. For example, the regulations are more specific about submission requirements, formats, and acceptable modes of delivery. The additional specificity is intended to create a benefit for operators as they would have access to a detailed list of requirements which would remove ambiguity when preparing documentation.

3.7 Section 1765.5. Required Notice for New Production Facilities

Proposed Section 1765.5 provides guidelines on how operators must notify the Division prior to new construction or operation of new production facilities in HPZs, containing information specified in proposed Section 1765.5.1. This section is more specific about compliance than the statute and prompts additional costs for the operators and the Division.

For example, operators must submit a New Production Facility Notice (NPFN) that provides an accurate point location for the new facility, including latitude and longitude coordinates. According to Section 1765.5.1, if the facility will be in an HPZ, operators must identify a sensitive receptor that places the facility in an HPZ.

Division staff familiar with the process conservatively predict that OG operators statewide might submit six NPFNs per month. Annually, the analysis assumes that about 72 NPFNs would be submitted in Years 1 and 2. The analysis acknowledges that operators may be preparing documentation for several purposes such as: the facility is associated with an NOI approved by the Division under PRC section 3281, subdivision (a), or the facility is necessary to protect public health and safety. (PRC, § 3281(b).)

The Division considered numbers that would be representative of these possibilities and determined that a mechanical engineer would spend about 12 hours and a lawyer would spend about two hours per NPFN submitted.¹¹ If applied to the entire production facility population in California, total direct costs to operators would be about \$136,000 in Years 1 and 2. However, Section 1765.5 is only applied to facilities within an HPZ. Of all production facilities in California, the Division has estimated that 56.5 percent of them are within an HPZ.¹² Therefore, multiplying the \$136,000 total by 56.5 percent results in direct costs of \$77,000 in Years 1 and 2.

Fiscally, the Division must process and verify the 72 NPFNs submitted annually. The subject matter experts in the Division estimate that it would require eight

¹¹ The mechanical engineer wages can be found here, <https://data.bls.gov/oes/#/industry/211000>

The lawyer wages can be found here, <https://data.bls.gov/oes/#/industry/211000>

¹² The Division estimated the HPZ population from a data query from an internal database.

hours from an Associate Oil and Gas Engineer, four hours from a Senior Oil and Gas Engineer, two hours from an Attorney IV, two hours from a District Deputy, and two hours from the State Oil and Gas Supervisor per NPFN.¹³ If applied to all production facilities in California, total fiscal costs for Section 1765.5 amount to \$173,000 in Years 1 and 2. However, fiscal costs amount to \$98,000 in Years 1 and 2 after multiplying by the HPZ population percentage.

3.8 Section 1765.5.1. Contents of a New Production Facility Notice

Proposed Section 1765.5.1 simply provides the specific requirements that operators must abide by when submitting a new production facility notice for Section 1765.5. There are no associated costs, but similarly to Section 1765.4.1, there may be qualitative benefits as the proposed regulation provides a certain path for compliance.

3.9 Section 1765.6. Annual Submission of Sensitive Receptor Inventory and Map

Proposed Section 1765.6 addresses requirements for operators for the annual submission of a sensitive receptor inventory and sensitive receptor map as required under PRC section 3285. The statute requires operators to annually update their sensitive receptor inventory and map to the Division and the economic costs associated with it are already captured by the statute. The proposed regulations provide technical specifications for making the required submission and do not create direct costs for this section. Although proposed Section 1765.6, subdivision (a)(3) states that operators must submit a statement for wellheads and production facilities outside of the HPZ, the discussion for this requirement is highlighted in 3.13 of the EIA.

3.10 Section 1765.7. Content and Format Specifications for Sensitive Receptor Inventories

Proposed Section 1765.7 simply provides the guidelines for operators to submit sensitive receptor inventories. There are no direct costs associated with this section.

¹³ The analysis utilizes the same hourly wage rates for state employees that were used in Section 1765.3.

3.11 Section 1765.8. Content and Format Specifications for Sensitive Receptor Maps

Proposed Section 1765.8 simply provides the guidelines for operators to submit sensitive receptor maps. There are no direct costs associated with this section.

3.12 Section 1765.9. Determination that a Location is Not Within a Health Protection Zone

Proposed Section 1765.9 provides guidelines for operators to demonstrate that a location is not within an HPZ, and as discussed above, this requirement is potentially triggered when submitting an NOI (Section 1765.3(a)) and during annual inventory and map submittals (Section 1765.6(a)(3)).

This proposed regulation requires operators to submit a statement identifying features such as buildings, areas open to the public for outdoor recreation, and other potential sensitive receptors within 3,200 feet of the location. Once this statement is received, the Division must review and decide if the location is within an HPZ. It is worth noting that under proposed Section 1765.9 (c), the Division is only obligated to review 30 percent of the statements submitted in response to Section 1765.6(a)(3) for completeness and accuracy. Therefore, the fiscal costs associated with the section are likely to be conservative, and the actual costs may only be 30 percent of what is calculated below.

To understand the costs posed by Section 1765.9, the analysis must estimate the number of statements that the Division may receive in Years 1 and 2. Without the proposed regulations being effective, robust data is not available. However, the Division utilized available data and calculated that 966 NOIs have been received since June 28, 2024. At the time of this writing in April 2025, the analysis divided 365 days by the number of days observed in the sample to estimate that operators will annually submit about 1,184 statements. Although statements across operators are dependent upon various factors, the subject matter experts determined each statement would take operators about 30 minutes in Years 1 and 2 to prepare and submit. They also estimated that the duties to submit a statement would be distributed between a technician, land manager, and a petroleum engineer.¹⁴ In addition to this 30-minute review distributed

¹⁴ Wages for a Surveying and Mapping Technician,
<https://data.bls.gov/oes/#/industry/211000>

across the three positions, it was estimated that a surveyor would spend 30 minutes per statement to oversee office work and leading a crew in field work. Some operators may have a surveyor on staff, but it is likely that many operators would have to contract this work which is generally a higher wage. The analysis therefore conservatively uses the 90th percentile estimate that the OEWS provides.¹⁵ Total direct costs to operators in Year 1 amount to \$90,400 in both Years 1 and 2.

The Division estimated that for about 90 percent of the 1,184 total annual submissions, it would only take 20 minutes for an associate oil and gas engineer to review and decide if a location is within an HPZ or not. However, for more complex determinations, 10 percent of the submissions would require about eight hours distributed across an attorney IV, associate oil and gas engineer, senior oil and gas engineer, and a GIS technician.¹⁶ Fiscal costs associated with Section 1765.9 amount to \$153,000 in Years 1 and 2.

3.13 Section 1765.10. Underground Gas Storage Facilities in the Health Protection Zone

Proposed Section 1765.10 simply states that underground gas storage wells and facilities are not subject to this article, consistent with PRC section 3281, subdivision (d).

4. BENEFITS OF PROPOSED REGULATIONS

The proposed regulations may provide various benefits to the health and welfare of California residents, worker safety, and the state's environment. Due to the lack of data and information on the implementation of the proposed regulations, this section will discuss only qualitative benefits. For example, the proposed regulations provide operators with more transparent guidelines to

Wages for a Petroleum Landman:

https://www.glassdoor.com/Salaries/petroleum-landman-salary-SRCH_KO0,17.htm

Wages for a Petroleum Engineer:

<https://data.bls.gov/oes/#/industry/211000>

¹⁵ Median wage statistics are used elsewhere throughout the analysis.

¹⁶ Wages for the GIS technician are not included in the CalHR sheet, so a Research Data Specialist I wage was chosen instead.

https://www.calhr.ca.gov/Pay%20Scales%20Library/PS_Sec_15.pdf

abide by for compliance. The regulations are more specific than the statute, - particularly for proposed Sections 1765.3, 1765.5, and 1765.9, which provide operators with guidelines for submitting an NOI, notification to neighbors with requests for water sampling, and how they must notify the Division prior to new construction of a new production facility. As discussed in Section 3 of this EIA, providing clear action steps for compliance with the statutory requirements reduces confusion for operators and aids in the understanding of what is necessary to comply. This would potentially save time for operators by creating a more systematic approach. However, this benefit is speculative and difficult to quantify.

The additional costs that operators will endure for Sections 1765.3, 1765.5, and 1765.9 will likely generate public health benefits. For Section 1765.3, requiring operators to thoroughly document the risks and harms associated with the threat to public health, safety, or the environment will allow the Division to identify potential risks of OG operations and better identify trends and problematic OG fields in the state. This will in turn allow the Division and operators to improve decision making and worker safety. The improved decision making could also reduce potential public health or environmental damage. Although potentially substantial, these benefits are theoretical and therefore beyond the scope of this analysis to quantify.

Section 1765.5 requires operators to submit NPFNs and have the Division verify these notices prior to construction of various equipment which also provides the state with qualitative benefits. The three sections with associated economic costs of the proposed regulations present the Division with an opportunity to locate all new production facilities and ensure proper documentation of this equipment is conducted systematically. Again, this allows the Division to identify trends and make better decisions overseeing the OG industry in California. Apart from decision making, Section 1765.5 will help ensure compliance with PRC section 3281's restriction on new production facilities within an HPZ, and therefore the proposed regulation furthers the statutory purpose of protecting public health, safety, and the environment. Therefore, there are invaluable benefits for the Division to have a reliable and updated inventory of all equipment pertaining to OG operations in an HPZ.

4.1 MACROECONOMIC IMPACT OF PROPOSED REGULATIONS

The proposed regulations would have minimal impact on California's economy from a macroeconomic perspective. There would be an annual direct cost impact of \$410,000 for OG operators, and \$677,000 for the Division. However, relative to California's annual GSP of over \$3 trillion, the proposed regulations would have a miniscule effect. The costs highlighted in Section 3 of this EIA are to be spread across the OG operators who will apply for NOIs or notify the Division of a new production facility. Due to their oil production volume, the five operators in Table 1 are most likely to endure a significant share of these costs. The proposed regulations would marginally decrease OG productivity because operators have a finite amount of resources and would need to expend time and money to comply. However, the additional requirements would likely not prompt OG operators or the Division to hire new positions solely dedicated to the regulation's compliance. Therefore, it is also assumed that the proposed regulations would not create new businesses, eliminate existing businesses in the state of California, or significantly affect California's economy.

5. CONCLUSION

The proposed regulations would create an additional economic burden for OG operators and for the Division. The analysis estimates that it would cost OG operators about \$459,000 annually and the Division \$677,000 to comply with the proposed regulations. However, the proposed regulations would not significantly impact California's economy, the creation or elimination of jobs, existing businesses, or the expansion of businesses currently doing business in California. The proposed regulations would likely affect operators in California that produce the highest volume of oil. With direct costs of about \$459,000 per year spread out across these operators, it is reasonable to conclude that the regulations would not affect individuals, jobs, or businesses in California. Although speculative and difficult to quantify, the proposed regulations will potentially bring benefits by furthering the statutory purposes of SB 1137 of improved health and welfare of California residents, improved worker safety, and reducing the probability of environmental damage from OG operations in the state.