

# COST ESTIMATE REGULATIONS FOR OIL AND GAS OPERATIONS

## PRELIMINARY DISCUSSION DRAFT

### CALIFORNIA CODE OF REGULATIONS, TITLE 14

### DIVISION 2. DEPARTMENT OF CONSERVATION

### CHAPTER 4. DEVELOPMENT, REGULATION, AND CONSERVATION OF OIL AND GAS RESOURCES

#### Subchapter 2 Environmental Protection

#### **Article 1. General**

#### **§ 1753. Cost Estimate Report Requirements**

(a) The operator of a well shall submit a Cost Estimate Report to the Division in a digital tabular format according to the due dates specified in section 1753.1 and the Cost Estimate Report shall include all of the following:

- \_\_\_\_\_ (1) Well Abandonment Cost Estimates;
- \_\_\_\_\_ (2) Production Facility Decommissioning Cost Estimates;
- \_\_\_\_\_ (3) Site Remediation Cost Estimates; and
- \_\_\_\_\_ (4) Cost Estimate Summary.

(b) A Well Abandonment Cost Estimate shall consist of the cost to plug and abandon each of the operator's wells.

(1) For onshore wells, the operator may use Well Abandonment Cost Estimate Method 1, as specified in section 1753.2, or Well Abandonment Cost Estimate Method 2, as specified in section 1753.3.

(2) For offshore wells, the operator shall use Well Abandonment Cost Estimate Method 2, as specified in section 1753.3.

(c) A Production Facility Decommissioning Cost Estimate shall consist of the cost to decommission each of the operator's production facilities;

(1) For onshore wells, the operator may use Production Facility Decommissioning Cost Estimate Method 1, as specified in section 1753.2.1 or Production Facility Decommissioning Cost Estimate Method 2, as specified in section 1753.3.1.

(2) For offshore wells, the operator shall use Production Facility Decommissioning Cost Estimate Method 2, as specified in section 1753.3.1.

(d) A Site Remediation Cost Estimate shall consist of the cost to remediate each of the operator's well sites and each of the operator's production facility sites;

(1) For onshore wells, the operator may use Site Remediation Cost Estimate Method 1, as specified in section 1753.2.2, or Site Remediation Cost Estimate Method 2, as specified in section 1753.3.2

(2) For offshore wells, the operator shall use Site Remediation Cost Estimate Method 2, as specified in section 1753.3.2.

(e) A Cost Estimate Summary shall provide the 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.

(f) Notwithstanding the provisions in subdivision (a), the Division may require an operator to submit a Cost Estimate Report using Method 2 as specified in sections 1753.3, 1753.3.1, and 1753.3.2 if environmental, well, or production facility conditions suggest Method 1 would substantially underestimate the cost to plug and abandon the operator's wells, decommission attendant production facilities, or remediate the well sites and production facility sites. These conditions include but are not limited to unique geologic hazards, extreme access issues, inaccessibility due to construction, or failed past attempts to abandon the well or decommission the production facility.

### **§ 1753.1. Due Dates for Cost Estimate Reports**

(a) Operators shall submit a Cost Estimate Report as follows:

(1) By no later than October 1, 2023: for all operators who were assessed, in accordance with Public Resources Code section 3413, based upon production of less than 0.8 barrels of oil equivalent per day per well for calendar year 2021. Operators who were not assessed due to lack of production shall report with this group.

(2) By no later than July 1, 2024: for all operators who were assessed, in accordance with Public Resources Code section 3413, based upon production of an average from 0.8 to 3.5 barrels of oil equivalent per day per well for calendar year 2021.

(3) By no later than July 1, 2026: for all operators who were assessed, in accordance with Public Resources Code section 3413, based upon production of an average of more than 3.5 barrels of oil equivalent per day per well for calendar year 2021.

(b) For Cost Estimate Reports submitted within the deadlines specified in subdivision (a), operators may omit cost estimates associated with offshore wells and facilities but shall submit a Cost Estimate Report that includes cost estimates associated with offshore wells and facilities by July 1, 2027. If the operator of offshore wells or facilities did not submit an initial Cost Estimate Report within the deadlines specified in subdivision (a) because the operator only operates offshore wells and facilities, then the operator must submit a Cost Estimate Report that includes cost estimates associated with offshore wells and facilities by July 1, 2027.

(c) Operators that operated no wells or production facilities in calendar year 2021 but become the operator of a well before April 1, 2026, shall submit a Cost Estimate Report no later than July 1, 2026. Operators that operated no wells or production facilities before April 1, 2026, but became the operator of a well after that date shall submit their Cost Estimate Report within 90 days of becoming the operator of a well.

(d) Operators shall submit a new Cost Estimate Report five years from the date of submission required under subdivisions (a), (b), and (c) and every five years thereafter.

(e) For the purposes of this section, “barrel of oil equivalent” means one barrel of oil or 6,000 cubic feet of gas.

**§ 1753.1.1 Requirements for Cost Estimates**

(a) For operators using Method 2 when submitting a Well Abandonment Cost Estimate, as specified in section 1753.3, a Production Facility Cost Estimate, as specified in section 1753.3.1, or a Site Remediation Cost Estimate, as specified in section 1753.3.2, the operators shall:

(1) Have the cost estimate reflect the estimated costs for a third party to do the required work and shall not reflect savings or efficiencies specific to the operator; and

(2) Provide documentation supporting the validity of the values used to calculate the cost estimate. Acceptable documentation includes, but is not limited to:

(A) Well and facility data;

(B) Well status reports;

(C) Documented costs expended for work on comparable wells;

(D) Published vendor price lists available to the public;

(E) Estimates and quotes from contractors and service professionals;

(F) Rig rate reports;

(G) End of well reports from abandonment of comparable wells; and

(H) Other verifiable documentation of applicable costs.

(b) Regardless of whether an operator is using Method 1 or Method 2 when submitting a Well Abandonment Cost Estimate, as specified in sections 1753.2 and 1753.3, a Production Facility Decommissioning Cost Estimate, as specified in sections 1753.2.1 and 1753.3.1, or a Site Remediation Cost Estimate, as specified in sections 1753.2.2 and 1753.3.2, upon request by the Division, the operator shall submit documentation to verify the number, location, and relevant conditions of the wells, production facilities and sites associated with those wells and production facilities. Such documentation might include, but is not limited to, photographs, plot maps, and casing diagrams.

(c) Regardless of whether an operator is using Method 1 or Method 2 when submitting a Well Abandonment Cost Estimate, as specified in sections 1753.2 and 1753.3, a Production Facility Decommissioning Cost Estimate, as specified in sections 1753.2.1 and 1753.3.1, or Site Remediation Cost Estimate, as specified in sections 1753.2.2 and 1753.3.2, operators shall not reduce the cost estimate by the estimated salvage value of equipment or materials.

**§ 1753.2. Well Abandonment Cost Estimate Method 1**

(a) Well Abandonment Cost Estimates calculated by operators using Method 1 shall be calculated by multiplying the Estimated Well Days from subdivision (a)(3) by the Base Daily Cost Rate from subdivision (a)(4) and the Well Abandonment Cost Estimate shall specify all the following information for each well:

(1) The Aggregated Well Score. The Aggregated Well Score shall be determined by identifying the characteristics of the well, points assigned to those characteristics, as listed in the Aggregated Well Score Table in subdivision (a)(1)(A), and summing those points.

(A) Aggregated Well Score Table.

<u>Characteristics</u>	<u>Points</u>
<u>Well depth</u>	
<u>0 feet to 1,000 feet</u>	<u>0</u>
<u>1,001 feet to 3,000 feet</u>	<u>4</u>
<u>3,001 feet to 5,000 feet</u>	<u>7</u>
<u>Greater than 5,000 feet</u>	<u>10</u>
<u>Number of casing strings</u>	
<u>0 – 2 casing strings</u>	<u>0</u>
<u>3 – 4 casing strings</u>	<u>4</u>
<u>5 casing strings and above</u>	<u>8</u>
<u>Age of well</u>	
<u>Age 0 to 25 years</u>	<u>0</u>
<u>Age 26 to 50 years</u>	<u>3</u>

<u>Characteristics</u>	<u>Points</u>
<u>Age greater than 50 years</u>	<u>5</u>
<u>Well location &amp; environment</u>	
<u>Critical well as defined by Section 1720, well located within a city limit, or well is located in an urban area as defined by Section 1760.</u>	<u>10</u>
<u>Environmentally sensitive wellhead as defined in Section 1760</u>	<u>7</u>
<u>Area of known geologic hazard including subsidence, landslide, or history of damage to the well from seismicity</u>	<u>5</u>
<u>Surface obstacles preventing access such as buildings, structures, surface-use, roads, irrigation systems, and terrain</u>	<u>5</u>
<u>Well condition</u>	
<u>Unknown well condition</u>	<u>25</u>
<u>Whether the well has pressure in the casing or tubing at the surface, or whether the well is open to the atmosphere;</u>	<u>5</u>
<u>Inadequate casing or inadequate tubing integrity</u>	<u>6</u>
<u>Junk or other downhole issues such as stuck rods, packer, scales in casing, or fish that require special tools for intervention.</u>	<u>9</u>
<u>Fluid level is above the base of freshwater or USDW</u>	<u>5</u>
<u>Additional risk factors</u>	
<u>History of environmental spill or leaks</u>	<u>5</u>
<u>Presence of H2S or CO2 production</u>	<u>5</u>
<u>Maximum Potential Aggregated Well Score</u>	<u>85</u>

(2) The Well Score Multiplier. The Well Score Multiplier shall be determined by selecting the Well Score Multiplier from the Well Score Multiplier Table in subdivision (a)(2)(A) corresponding to the Aggregated Well Score calculated under subdivision (a)(1).

(A) Well Score Multiplier Table.

<u>Aggregated Well Score</u>	<u>Well Score Multiplier</u>	<u>Aggregate Well Score</u>	<u>Well Score Multiplier</u>	<u>Aggregated Well Score</u>	<u>Well Score Multiplier</u>	<u>Aggregated Well Score</u>	<u>Well Score Multiplier</u>
<u>0-10</u>	<u>1.00</u>	<u>24</u>	<u>1.18</u>	<u>42</u>	<u>1.40</u>	<u>58</u>	<u>1.70</u>
<u>11</u>	<u>1.01</u>	<u>26</u>	<u>1.20</u>	<u>44</u>	<u>1.43</u>	<u>60</u>	<u>1.75</u>
<u>12</u>	<u>1.03</u>	<u>28</u>	<u>1.23</u>	<u>46</u>	<u>1.45</u>	<u>62</u>	<u>1.80</u>
<u>14</u>	<u>1.05</u>	<u>30</u>	<u>1.25</u>	<u>48</u>	<u>1.48</u>	<u>64</u>	<u>1.85</u>
<u>16</u>	<u>1.08</u>	<u>32</u>	<u>1.28</u>	<u>50</u>	<u>1.50</u>	<u>66</u>	<u>1.90</u>
<u>18</u>	<u>1.10</u>	<u>34</u>	<u>1.30</u>	<u>51</u>	<u>1.53</u>	<u>68</u>	<u>1.95</u>
<u>20</u>	<u>1.13</u>	<u>36</u>	<u>1.33</u>	<u>52</u>	<u>1.55</u>	<u>70-85</u>	<u>2.00</u>
<u>22</u>	<u>1.15</u>	<u>38</u>	<u>1.35</u>	<u>54</u>	<u>1.60</u>		
		<u>40</u>	<u>1.38</u>	<u>56</u>	<u>1.65</u>		

(3) The Estimated Well Days. The Estimated Well Days shall be calculated by multiplying the Base Well Days by the Well Score Multiplier from subdivision (a)(2). The Base Well Days shall be determined based upon the region in which the well is located as follows:

- \_\_\_\_\_ (i) 9 days for a well located in the Northern Valley region;
- \_\_\_\_\_ (ii) 14 days for a well located in the Northern Coastal region;
- \_\_\_\_\_ (iii) 20 days for a well located in the Southern region; and
- \_\_\_\_\_ (iv) 13 days for a well located in the Inland region.

(4) The Base Daily Cost Rate. The Base Daily Cost Rate shall be determined based upon the region in which the well is located as follows:

- \_\_\_\_\_ (i) \$7,700 per day for a well located in the Northern Valley region;
- \_\_\_\_\_ (ii) \$7,500 per day for a well located in the Northern Coastal region;
- \_\_\_\_\_ (iii) \$6,000 per day for a well located in the Southern region; and
- \_\_\_\_\_ (iv) \$3,750 per day for a well located in the Inland region.

(b) For the purposes of subdivisions (a)(3) and (a)(4), the region shall be determined as follows:

(1) The Northern Valley region is that area including the Counties of Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Glenn, Humboldt, Lake, Lassen, Madera, Marin, Mariposa, Mendocino, Merced, Modoc, Mono, Napa, Nevada, Placer, Plumas, Sacramento, San Francisco, San Joaquin, San Mateo, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tuolumne, Yolo, Yuba, and the area of Fresno County north of the line described in subdivision (e)(5)(A) and north and west of the line described in subdivision (e)(5)(B) below.

(2) The Northern Coastal region is that area including the Counties of Monterey, San Benito, Santa Barbara, Santa Clara, Santa Cruz, Ventura, the area of San Luis Obispo County west and south of the line described in subdivision (b)(6), and the area of Los Angeles County west and north of the line described in subdivision (b)(7).

(3) The Southern region is that area including the Counties of Imperial, Inyo, Orange, Riverside, San Bernardino, San Diego, and the area of Los Angeles County south and east of the line described in subdivision (b)(7).

(4) The Inland region is that area including the Counties of Kern, Kings, Tulare, and that area of Fresno County south of the line described in subdivision (b)(5)(A) and south and east of the line described in subdivision (b)(5)(B), and the area of San Luis Obispo County east and north of the line described in subdivision (b)(6).

(5) The lines dividing the Northern Valley region and the Northern Coastal region are as follows:

(A) The line beginning at the border of Merced County with Fresno County east along the base of Township 11 South to the border of Fresno County with Madera County.

(B) The line beginning at the border of Madera County with Fresno County at Township 13 South Range 16 East Section 21 east along the base of Section 21 to the southeast corner of Section 22, then north along the eastern boundary of Section 22 to the border of Fresno County with Madera County.

(6) The line dividing the Northern Coastal region and the Inland region is that line beginning at the border of San Luis Obispo County with Kern County at the Northwest



Corner of Township 32 South Range 21 East, then south in between Township 32 South Range 21 East and Township 32 South Range 22 East to the base of Township 12 North Range 26 West, then east along the base of Township 12 North to the border of San Luis Obispo County with Kern County.

(7) The line dividing the Northern Coastal region and the Inland region is that line beginning at the northern border of Los Angeles County with Kern County, following the line separating Range 14 West and Range 15 West southward to the southern border of Township 2 North Range 14 West, then west along the southern boundary of Township 2 North to the border of Los Angeles County with Ventura County.

**§ 1753.2.1. Production Facility Decommissioning Cost Estimate Method 1**

(a) Production Facility Decommissioning Cost Estimates calculated by operators using Method 1 shall be calculated by summing the Base Facility Decommissioning Cost from subdivision (a)(2), the Cost of Other Project Components from subdivision (a)(3), and the Contingency Cost from subdivision (a)(5) and the Production Facility Decommissioning Cost Estimate shall specify all the following information for each of the operator's production facilities:

(1) The Leases. The name of the lease where the production facility is located.

(2) The Base Facility Decommissioning Cost. The Base Facility Decommissioning Cost shall be calculated by identifying the Production Facility Type from the Production Facility Decommissioning Unit Costs Table in subdivision (a)(1)(A) and multiplying by the associated Unit Cost.

(A) Production Facility Decommissioning Unit Costs Table

<u>Production Facility Type</u>	<u>Unit Cost</u>
<u>Per tank (&gt;10,001 bbl)</u>	<u>\$159,804</u>
<u>Per tank (5,001 - 10,000 bbl)</u>	<u>\$104,564</u>
<u>Per tank located in an urban area as defined in Section 1760</u>	<u>\$104,564</u>

<u>Production Facility Type</u>	<u>Unit Cost</u>
<u>Per tank (2,500 - 5,000 bbl)</u>	<u>\$65,312</u>
<u>Per tank (&lt;2,499 bbl)</u>	<u>\$19,149</u>
<u>Per vessel</u>	<u>\$12,621</u>
<u>Per linear foot of above-ground pipelines</u>	<u>\$30</u>
<u>Per linear feet of buried pipelines</u>	<u>\$12</u>
<u>Per metric ton of electrical vaults and equipment</u>	<u>\$390</u>
<u>Per cubic foot of asphalt and concrete</u>	<u>\$10</u>
<u>Per Pump</u>	<u>\$4,386</u>
<u>Per Compressor</u>	<u>\$4,386</u>
<u>Per square foot of buildings on site</u>	<u>\$30</u>

(3) The Cost of Other Project Components. The Cost of Other Project Components shall be calculated by summing the costs of Permitting and Regulatory Compliance, Mobilization and Demobilization, and Project Management and Engineering.

(A) Permitting and Regulatory Compliance. The cost of Permitting and Regulatory Compliance shall be determined by multiplying the Base Facility Decommissioning Cost from subdivision (a)(2) by five percent.

(B) Mobilization and Demobilization. The cost of Mobilization and Demobilization shall be calculated by multiplying the Base Facility Decommissioning Cost from subdivision (a)(2) by five percent.

(C) Project Management and Engineering. The cost of Project Management and Engineering shall be calculated by multiplying the Base Facility Decommissioning Cost from subdivision (a)(2) by eight percent.

(4) The Production Facility Decommissioning Aggregated Risk Score. The Production Facility Decommissioning Aggregated Risk Score for each production facility shall be determined by identifying the characteristics of the production facility, points assigned to those characteristics, as listed in Production Facility Decommissioning Aggregated Risk Score Table in subdivision (a)(2)(A), and summing all of the applicable points for the production facility.

(A) Production Facility Decommissioning Aggregated Risk Score Table

<u>Characteristics</u>	<u>Points</u>
<u>Production facility is environmentally sensitive, as defined, or is located in a sensitive area or urban area, as defined in Section 1760</u>	<u>10</u>
<u>Any other conditions that potentially pose a threat to life, health, property, or natural resources</u>	<u>10</u>
<u>History of spills or leaks</u>	<u>10</u>
<u>Original land type has freshwater aquifer underneath</u>	<u>5</u>
<u>Production facility location is in an area of known geologic hazards including subsidence, landslides, or seismicity</u>	<u>5</u>
<u>Surface obstacles preventing access such as buildings, structures, surface-use, roads, irrigation systems, terrain</u>	<u>5</u>
<u>Age of production facility is greater than 50 years</u>	<u>5</u>
<u>Notices of violation that are unresolved exist for the production facility</u>	<u>5</u>
<u>Maximum Potential Aggregated Risk Score</u>	<u>55</u>

(5) The Contingency Cost. The Contingency Cost shall be calculated by multiplying the Base Facility Decommissioning Cost from subdivision (a)(2)(A) by the Contingency Percentage.

(A) Operators may group production facilities and determine the Contingency Cost by multiplying the total Base Facility Cost under subdivision (a)(2)(A) for all the production facilities in the group by the appropriate Contingency Percentage. When operators group production facilities in this way, when determining the Aggregated Risk Score under subdivision (a)(4), any characteristic that is identified for a production facility in that group, must be applied to the entire group.

(B) The Contingency Percentage shall be determined based upon the Aggregated Risk score calculated under subdivision (a)(4) as follows:

(i) The Contingency Percentage shall be 10% if the Aggregated Risk Score is less than 10 points.

(ii) The Contingency Percentage shall be 20% if the Aggregated Risk Score is between 10 and 19 points.

(iii) The Contingency Percentage shall be 30% if the Aggregated Risk Score is 20 points or greater.

### **§ 1753.2.2 Site Remediation Cost Estimate Method 1**

(a) Site Remediation Cost Estimates calculated by operators using Method 1 shall be calculated by summing the Base Site Remediation Cost from subdivision (a)(1), Other Project Component Costs from subdivision (a)(2), and the Contingency Cost from subdivision (a)(4), and each Site Remediation Cost Estimate shall specify all the following information for each of the operator's well sites and each of the operator's production facility sites:

(1) The Base Site Remediation Cost. The Base Site Remediation Cost shall be calculated by identifying all of the operator's Cost Elements using the Well Site and Production Facility Site Remediation Unit Costs Table in subdivision (a)(1)(A), multiplying by the associated Unit Cost, and summing all of those costs.

(A) Well Site and Production Facility Site Remediation Unit Costs Table

<u>Cost Element</u>	<u>Unit Cost</u>
<u>Site remediation per tank (&gt;10,001 bbl)</u>	<u>\$120,309</u>
<u>Site remediation per tank (5,001 - 10,000 bbl)</u>	<u>\$54,345</u>
<u>Site remediation for any tank located in an urban area as defined in Section 1760</u>	<u>\$54,345</u>
<u>Site remediation per tank (2,500 - 5,000 bbl)</u>	<u>\$21,450</u>
<u>Site remediation per tank (&lt;2,499 bbl)</u>	<u>\$6,549</u>
<u>Site remediation per vessel</u>	<u>\$6,549</u>
<u>Site remediation per wellhead</u>	<u>\$10,158</u>
<u>Site remediation per total cubic feet of sumps</u>	<u>\$3.86</u>
<u>Site remediation per total cubic feet of auxiliary holes</u>	<u>\$3.86</u>
<u>Site remediation per well cellar</u>	<u>\$8,540</u>
<u>Total cubic yards of refuse, trash, debris on site to be removed and disposed</u>	<u>\$137</u>
<u>Total cubic feet of access roads that must be removed and restored under Section 1776, subdivision (d)</u>	<u>\$2.25</u>

(2) The Cost of Other Project Components. The Cost of Other Project Components shall be calculated by summing the costs of Permitting and Regulatory Compliance, Mobilization and Demobilization, and Project Management and Engineering.

(A) The cost of Permitting and Regulatory Compliance shall be calculated by multiplying the Base Site Remediation Cost from subdivision (a)(1) by five percent.

(B) The cost of Mobilization and Demobilization shall be calculated by multiplying the Base Site Remediation Cost from subdivision (a)(1) by five percent.

(C) The cost of Project Management and Engineering shall be calculated by multiplying the Base Site Remediation from subdivision (a)(1) by eight percent.

(3) The Site Remediation Aggregated Risk Score. The Site Remediation Aggregated Risk score shall be calculated by identifying the characteristics of the site, points assigned to those characteristics, as listed in the Site Remediation Aggregated Risk Score Table in subdivision (a)(3)(A), and summing those points.

(A) Site Remediation Aggregated Risk Score Table

<u>Characteristic</u>	<u>Points</u>
<u>Site location is sensitive or urban; or the facility location is environmentally sensitive, as defined in Section 1760</u>	<u>10</u>
<u>Any other conditions that potentially pose a threat to life, health, property, or natural resources</u>	<u>10</u>
<u>History of spills and/or leaks; unlined sumps</u>	<u>10</u>
<u>Original land type has freshwater aquifer underneath</u>	<u>5</u>
<u>Site location is in an area of known geologic hazards including subsidence, landslides, or seismicity</u>	<u>5</u>
<u>Surface obstacles preventing access such as buildings, structures, surface-use, roads, irrigation systems, terrain</u>	<u>5</u>
<u>Age of site is greater than 50 years</u>	<u>5</u>
<u>Maximum Potential Aggregated Risk Score</u>	<u>50</u>

(4) The Contingency Cost. The Contingency Cost shall be calculated by multiplying the Base Site Remediation Cost from subdivision (a)(1) by the Contingency Percentage. The Contingency Percentage shall be determined based upon the Well Site and Production Facility Site Remediation Aggregated Risk Score calculated under subdivision (a)(3) as follows:

(A) The Contingency Percentage shall be 10% if the Well Site and Production Facility Site Aggregated Risk Score is less than 10 points.

(B) The Contingency Percentages shall be 20% if the Well Site and Production Facility Site Aggregated Risk Score is between 10 and 19 points.

(C) The Contingency Percentages shall be 30% if the Well Site and Production Facility Site Aggregated Risk Score is 20 points or greater.

### **§ 1753.3. Well Abandonment Cost Estimate Method 2**

(a) Well Abandonment Cost Estimates calculated by operators using Method 2 shall be calculated by summing the costs estimated under subdivision (a)(2) through (a)(8) for plugging and abandoning each of the operator's wells in accordance with Public Resources Code section 3208, and shall provide the following information for each of the operator's wells:

(1) The number of days, including partial days to perform the plugging and abandonment work;

(2) Cost to develop and obtain permits;

(3) Cost for the project management and engineering;

(4) Cost to develop safety, environmental, and emergency response plans;

(5) Cost to mobilize and demobilize the equipment and crews required to perform the work;

(6) Costs associated with access to the site location;

(7) Costs associated with materials recycling or disposal; and

(8) Costs associated with spill response or incident cleanup.

(b) Operators calculating Well Abandonment Cost Estimates under this section shall account for costs associated with the location of the well and well specific characteristics such as age, well condition and configuration, geologic hazards, well history, and proximity to sensitive populations and environmental resources.

(c) Operators calculating Well Abandonment Cost Estimates under this section shall also submit documentation consistent with section 1753.1 supporting the costs estimated under subdivision (a).

### **§ 1753.3.1 Production Facility Decommissioning Cost Estimate Method 2**

(a) Production Facility Decommissioning Cost Estimates calculated by operators using Method 2 shall be calculated by summing the costs estimated under subdivision (a)(2) through (a)(11) for each production facility. Operators shall provide the following information for each of the operator's production facilities:

- \_\_\_\_\_ (1) The name of the lease where the production facility is located.
- \_\_\_\_\_ (2) A description, the quantity, unit type, and unit cost data for decommissioning the production facility;
- (3) Cost to develop and obtain permits;
- (4) Cost for the project management and engineering;
- (5) Cost to develop safety, environmental, and emergency response plans;
- (6) Cost to mobilize and demobilize the equipment and crews required to perform the work;
- (7) Costs associated with materials removal and transportation;
- (8) Costs associated with materials recycling or disposal;
- (9) Costs associated with access to the production facility;
- (10) Costs associated with spill response or incident cleanup; and
- (11) A contingency of 10% of the costs calculated under subdivision (a)(2) through (a)(10).

### **§ 1753.3.2 Site Remediation Cost Estimate Method 2**

(a) Site Remediation Cost Estimates calculated by operators using Method 2 shall be calculated by summing the estimated costs to restore the site in accordance with Section 1776, including subdivisions (e) and (f) and including but not limited to the following for each of the operator's well sites and production facility sites:

- \_\_\_\_\_ (1) A description, the quantity, unit type, and unit cost data for each site remediation activity;
- (2) Costs to develop and obtain permits;



(3) Cost for the project management and engineering;

(4) Cost to develop safety, environmental, and emergency response plans;

(5) Cost to mobilize and demobilize the equipment and crews required to perform the work;

(6) Costs associated with materials removal and transportation;

(7) Costs associated with materials recycling or disposal;

(8) Costs associated with access to the site location;

(9) Costs associated with spill response or incident clean up; and

(10) A contingency of 10% of the costs calculated under subdivision (a)(1) through (a)(9).