DEPARTMENT NAME CCC DEPT OF FISH AND WILDLIFE A DESCRIPTIVE TITLE FROM NOTICE REGISTER OR FORM 400 SPILL MANAGEMENT TEAM CERTIFICATION	CATEMENT       S         Include calculations and assumptions in the rulemaking record.	A Section 6601-6616 TELEPHONE NUMBER (916) 375-7157 NOTICE FILE NUMBER Z
(REGULATIONS AND ORDERS)         STD. 399 (REV. 12/2013)         DEPARTMENT NAME         DEPT OF FISH AND WILDLIFE         DESCRIPTIVE TITLE FROM NOTICE REGISTER OR FORM 400         SPILL MANAGEMENT TEAM CERTIFICATION         A. ESTIMATED PRIVATE SECTOR COST IMPACTS         1. Check the appropriate box(es) below to indicate w         X         a. Impacts business and/or employees	ECONOMIC IMPACT STATEMENT  DNTACT PERSON  Andrew Benware  EMAIL ADDRESS Andrew.Benware@wildlife.ca.g  S Include calculations and assumptions in the rulemaking record.  whether this regulation:	IC         (916) 375-7157           NOTICE FILE NUMBER
DEPARTMENT NAME DEPT OF FISH AND WILDLIFE DESCRIPTIVE TITLE FROM NOTICE REGISTER OR FORM 400 SPILL MANAGEMENT TEAM CERTIFICATION A. ESTIMATED PRIVATE SECTOR COST IMPACTS 1. Check the appropriate box(es) below to indicate w C a. Impacts business and/or employees	DNTACT PERSON       EMAIL ADDRESS         Andrew Benware       Andrew.Benware@wildlife.ca.g         Image: Solution of the state of the st	IC         (916) 375-7157           NOTICE FILE NUMBER
DEPARTMENT NAME CCC DEPT OF FISH AND WILDLIFE A DESCRIPTIVE TITLE FROM NOTICE REGISTER OR FORM 400 SPILL MANAGEMENT TEAM CERTIFICATION A. ESTIMATED PRIVATE SECTOR COST IMPACTS 1. Check the appropriate box(es) below to indicate w X a. Impacts business and/or employees	DNTACT PERSON       EMAIL ADDRESS         Andrew Benware       Andrew.Benware@wildlife.ca.g         Image: Solution of the state of the st	IC         (916) 375-7157           NOTICE FILE NUMBER
DEPT OF FISH AND WILDLIFE       A         DESCRIPTIVE TITLE FROM NOTICE REGISTER OR FORM 400       SPILL MANAGEMENT TEAM CERTIFICATION         A. ESTIMATED PRIVATE SECTOR COST IMPACTS         1. Check the appropriate box(es) below to indicate w         X       a. Impacts business and/or employees	Andrew Benware Andrew.Benware@wildlife.ca.g	IC         (916) 375-7157           NOTICE FILE NUMBER
<ul> <li>SPILL MANAGEMENT TEAM CERTIFICATION</li> <li>A. ESTIMATED PRIVATE SECTOR COST IMPACTS</li> <li>1. Check the appropriate box(es) below to indicate w</li> <li>a. Impacts business and/or employees</li> </ul>	<ul> <li>Include calculations and assumptions in the rulemaking record.</li> <li>whether this regulation:</li> <li>e. Imposes reporting requirements</li> </ul>	
<ol> <li>Check the appropriate box(es) below to indicate w</li> <li>a. Impacts business and/or employees</li> </ol>	whether this regulation:	
$\fbox$ a. Impacts business and/or employees	e. Imposes reporting requirements	
$\fbox$ a. Impacts business and/or employees	e. Imposes reporting requirements	
	f. Imposes prescriptive instead of performance	
c. Impacts jobs or occupations	g. Impacts individuals	
<ul> <li>d. Impacts California competitiveness</li> </ul>	h. None of the above (Explain below):	
	See attachment	
	hrough g is checked, complete this Economic Impact Statement. hecked, complete the Fiscal Impact Statement as appropriate.	
CDFW/OSPR		
2. The	estimates that the economic impact of this regulation (which includes th	e fiscal impact) is:
Below \$10 million		
Retween \$10 and \$25 million		
Between \$25 and \$50 million		
	ver \$50 million, agencies are required to submit a <u>Standardized Regulatory Impact A</u>	ssassmant
as specified in Government (		<u>232331116111</u>
3. Enter the total number of businesses impacted:	1,255	
Describe the types of businesses (Include nonprof	its): Oil production facilities, rail operators, pipeline operators,	tank vessel owners
Enter the number or percentage of total businesses impacted that are small businesses:	4%	
4. Enter the number of businesses that will be created	d: None eliminated: None	
Explain:		
5. Indicate the geographic extent of impacts: $\overline{\times}$ S	tatewide	
	ocal or regional (List areas):	
6. Enter the number of jobs created: Less than 5	0 and eliminated: None	
Describe the types of jobs or occupations impacte	d: Plan holders with in-house spill management teams may h	ire more personnel
to fill the cascading position requirem	ents . Contracted SMTs may hire additional sta to meet incre	ased demand.
<ol><li>Will the regulation affect the ability of California bu other states by making it more costly to produce g</li></ol>		
If YES, explain briefly:		

DocuSign Envelope ID: 9438854D-0641-42AE-98D3-92F4FBEFF3					
ECONOMIC AND FISCAL IMPACT STATEMEN	SAM Section 660	<u>1-6616</u>			
(REGULATIONS AND ORDERS) STD. 399 (REV. 12/2013)					
ECONOMIC IMPACT STATEMENT (CONTINUED)					
<b>B. ESTIMATED COSTS</b> Include calculations and assumptions in	n the rulemaking record.				
1. What are the total statewide dollar costs that businesses and in	dividuals may incur to comply with this regulation over its lifetime? \$ See atta	chment			
a. Initial costs for a small business: \$ 2,000	Annual ongoing costs: \$ 2,000 Years: annual				
b. Initial costs for a typical business: \$ See attachment	Annual ongoing costs: \$ See attachment Years: annual				
c. Initial costs for an individual: \$ N/A	Annual ongoing costs: \$ N/A Years: N/A				
d. Describe other economic costs that may occur: None. C	osts born by consumers and plan holders (oil producers and tra	nsportatior			
will be smaller than normal market volatility and	l will not impact decisions. See attachment.				
	Coo otto sharont				
2. If multiple industries are impacted, enter the share of total cos	ts for each industry: See attachment.				
	nual costs a typical business may incur to comply with these requirements. ting, and other paperwork, whether or not the paperwork must be submitted. \$ N/A				
4. Will this regulation directly impact housing costs?	× NO				
	r the annual dollar cost per housing unit: \$				
	Number of units:				
5. Are there comparable Federal regulations?	NO NO				
Explain the need for State regulation given the existence or abs	ence of Federal regulations: See attachment.				
Enter any additional costs to businesses and/or individuals that	may be due to State. Foderal differences: \$ -0-				
	·				
<b>C. ESTIMATED BENEFITS</b> Estimation of the dollar value of ben	efits is not specifically required by rulemaking law, but encouraged.				
<ol> <li>Briefly summarize the benefits of the regulation, which may inc health and welfare of California residents, worker safety and th</li> </ol>					
See attachment.					
See attachment.					
	nts, or goals developed by the agency based on broad statutory authority?				
Explain: Statute requires the OSPR Administrator t	o establish criteria for certifying SMTs. (Gov Code sec 8670.32)				
3. What are the total statewide benefits from this regulation over	its lifetime? \$ See attachment.				
4 Briefly describe any expansion of husinesses currently doing h	isiness within the State of California that would result from this regulation: Contr	acted and			
	their personnel in order to comply with the cascading response				
requirements within the regulations.					
<b>D. ALTERNATIVES TO THE REGULATION</b> Include calculation specifically required by rulemaking law, but encouraged.	s and assumptions in the rulemaking record. Estimation of the dollar value of ben	efits is not			
1. List alternatives considered and describe them below. If no alter	rnatives were considered, explain why not:				
The obligation to certify SMT's comes directly fr	om statute. (Gov Code sec 8670.32) No alternatives were identi	fied that			

would have the same regulatory e ect.

ECONOMIC AND FISCAL IMPAC	BD3-92F4FBEFF38E Reset Form	Instructions and Code Citations: <u>SAM Section 6601-6616</u>
(REGULATIONS AND ORDERS)	STATEMENT	
STD. 399 (REV. 12/2013)	NOMIC IMPACT STATEMENT (CONTINU	J <b>ED</b> )
2. Summarize the total statewide costs and ben	fits from this regulation and each alternative considered:	
Regulation: Benefit: \$ See attachm	ent Cost: \$ See attachment	
Alternative 1: Benefit: \$	Cost: \$	
Alternative 2: Benefit: \$	Cost: \$	
<ol> <li>Briefly discuss any quantification issues that an of estimated costs and benefits for this regulation</li> </ol>	e relevant to a comparison	million/yr for the regulation. Costs
across industries are estimated to	be \$12.078 million/yr. See attachment.	
	er performance standards as an alternative, if a nologies or equipment, or prescribes specific andards considered to lower compliance costs? XES	□ NO
Explain: These regulations represen	t performance standards. They do not require speci	fic technology, equipment, or
prescribe specific actions or proce	dures to accomplish the requirements.	
E. MAJOR REGULATIONS Include calculation	as and assumptions in the rulemaking record.	
California Environmen	al Protection Agency (Cal/EPA) boards, offices and deputed	artments are required to
-	wing (per Health and Safety Code section 57005). Other	
1. Will the estimated costs of this regulation to (	California business enterprises <b>exceed \$10 million</b> ? YES	NO
	If YES, complete E2. and E3 If NO, skip to E4	
2. Briefly describe each alternative, or combinat	on of alternatives, for which a cost-effectiveness analysis was perf	ormed:
Alternative 1:		
Alternative 2:		
(Attach additional pages for other alternatives)		
	lescribed. enter the estimated total cost and overall cost-effective	ness ratio:
3. For the regulation, and each alternative just	lescribed, enter the estimated total cost and overall cost-effective Cost-effectiveness ratio: \$	
<ol> <li>For the regulation, and each alternative just Regulation: Total Cost \$</li> </ol>	Cost-effectiveness ratio: \$	
<ol> <li>For the regulation, and each alternative just of Regulation: Total Cost \$</li></ol>		
<ul> <li>3. For the regulation, and each alternative just a Regulation: Total Cost \$</li></ul>	Cost-effectiveness ratio: \$ Cost-effectiveness ratio: \$ Cost-effectiveness ratio: \$ an estimated economic impact to business enterprises and individ between the date the major regulation is estimated to be filed w	duals located in or doing business in California
<ul> <li>3. For the regulation, and each alternative just a Regulation: Total Cost \$</li></ul>	Cost-effectiveness ratio: \$ Cost-effectiveness ratio: \$ Cost-effectiveness ratio: \$ an estimated economic impact to business enterprises and individ between the date the major regulation is estimated to be filed w	duals located in or doing business in California
<ul> <li>3. For the regulation, and each alternative just of Regulation: Total Cost \$</li></ul>	Cost-effectiveness ratio: \$ Cost-effectiveness ratio: \$ Cost-effectiveness ratio: \$ an estimated economic impact to business enterprises and individ between the date the major regulation is estimated to be filed w	duals located in or doing business in California
<ul> <li>3. For the regulation, and each alternative just of Regulation: Total Cost \$</li></ul>	Cost-effectiveness ratio: \$ Cost-effectiveness ratio: \$ Cost-effectiveness ratio: \$ an estimated economic impact to business enterprises and individ between the date the major regulation is estimated to be filed w fully implemented?	duals located in or doing business in California
<ul> <li>3. For the regulation, and each alternative just of Regulation: Total Cost \$</li></ul>	Cost-effectiveness ratio: \$ Cost-effectiveness ratio: \$ Cost-effectiveness ratio: \$ an estimated economic impact to business enterprises and individ between the date the major regulation is estimated to be filed w fully implemented?	duals located in or doing business in California with the Secretary of State through12 months
<ul> <li>3. For the regulation, and each alternative just of Regulation: Total Cost \$</li></ul>	Cost-effectiveness ratio: \$Cost-effectiveness ratio: \$Cost-effec	duals located in or doing business in California ith the Secretary of State through12 months
<ul> <li>3. For the regulation, and each alternative just of Regulation: Total Cost \$</li></ul>	Cost-effectiveness ratio: \$Cost-effectiveness ratio: \$Cost-effecti	duals located in or doing business in California with the Secretary of State through12 months

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PAGE 3

DocuSign Envelope ID: 9438854D-0641-42AE-98D; STATE OF CALIFORNIA DEPARTMENT OF FINANCE	3-92F4FBEFF38E	Reset Form	Instructions and Code Citations: SAM Section 6601-6616
ECONOMIC AND FISCAL IMPACT S (REGULATIONS AND ORDERS)			
STD. 399 (REV. 12/2013)	FISCAL IMPAC	Г STATEMENT	
A. FISCAL EFFECT ON LOCAL GOVERNMENT			ns and assumptions of fiscal impact for the
current year and two subsequent Fiscal Years.			
1. Additional expenditures in the current State (Pursuant to Section 6 of Article XIII B of the			
\$	_		
a. Funding provided in			
Budget Act of	or Chapter	, Statutes of	
b. Funding will be requested in the Gove	ernor's Budget Act of		
	Fiscal Year:		
2. Additional expenditures in the current Stat (Pursuant to Section 6 of Article XIII B of the			
\$			
Check reason(s) this regulation is not reimbursa	ble and provide the appropriate	information:	
a. Implements the Federal mandate cont	ained in		
b. Implements the court mandate set for	th by the		Court.
Case of:		VS	
C. Implements a mandate of the people of	of this State expressed in their a	pproval of Proposition No.	
Date of Election:			
d. Issued only in response to a specific re	quest from affected local entity	r(s).	
Local entity(s) affected:			
e. Will be fully financed from the fees, rev	venue, etc. from:		
		of the	Code:
f. Provides for savings to each affected u		of the	
g. Creates, eliminates, or changes the per	-		
X 3. Annual Savings. (approximate)			
\$ 375 per a ected agency.			
4. No additional costs or savings. This regulatio	n makes only technical, non-sub	stantive or clarifying changes to	current law regulations.
5. No fiscal impact exists. This regulation does	not affect any local entity or prog	gram.	
∑ 6. Other. Explain See attachment.			

DocuSign Envelope ID: 9438854D-0641-42AE-98D3-92F4FBEFF38E	Instructions and Code Citations:
STATE OF CALIFORNIA DEPARTMENT OF FINANCE	<u>SAM Section 6601-6616</u>
FISCAL IMPACT STATEMENT (CONTINUED)	
<b>B. FISCAL EFFECT ON STATE GOVERNMENT</b> Indicate appropriate boxes 1 through 4 and attach calculations and a year and two subsequent Fiscal Years.	assumptions of fiscal impact for the current
1. Additional expenditures in the current State Fiscal Year. (Approximate)	
\$	
It is anticipated that State agencies will:	
a. Absorb these additional costs within their existing budgets and resources.	
b. Increase the currently authorized budget level for the Fiscal Year	
🔀 2. Savings in the current State Fiscal Year. (Approximate)	
s See attachment	
3. No fiscal impact exists. This regulation does not affect any State agency or program.	
X 4. Other. Explain See attachment	
<b>C. FISCAL EFFECT ON FEDERAL FUNDING OF STATE PROGRAMS</b> Indicate appropriate boxes 1 through 4 and atte impact for the current year and two subsequent Fiscal Years.	ach calculations and assumptions of fiscal
1. Additional expenditures in the current State Fiscal Year. (Approximate)	
\$	
2. Savings in the current State Fiscal Year. (Approximate)	
\$	
$\times$ 3. No fiscal impact exists. This regulation does not affect any federally funded State agency or program.	
4. Other. Explain	
FISCAL OFFICER SIGNATURE	DATE
Steve Hampton	7/7/2020
The signature attests that the agency has completed the STD. 399 according to the instructions in SAM sec the impacts of the proposed rulemaking. State boards, offices, or departments not under an Agency Secret highest ranking official in the organization.	
AGENCY SECRETARY	DATE
Bryan Cash	7/16/2020
Finance approval and signature is required when SAM sections 6601-6616 require completion of Fiscal In	ppact Statement in the STD. 399.
DEPARTMENT OF FINANCE PROGRAM BUDGET MANAGER	DATE

PAGE \$	5
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# Attachment to Economic and Fiscal Impact Statement (Form STD 399)

Title 14. California Code of Regulations Regarding Certification of Spill Management Teams to Adopt Sections 830.1, 830.2, 830.3, 830.4, 830.5, 830.6, 830.7, 830.8, 830.9, 830.10, 830.11

## Page 1 of Form STD 399 – Economic Impact Statement

### A. Estimated Private Sector Cost Impacts

These regulations will not have a significant statewide adverse economic impact. These are not considered "major regulations" because the economic impact assessment concludes that the impacts, summing both costs and benefits, will be considerably less than \$50 million annually.

These regulations establish a certification process for Spill Management Teams (SMTs). SMTs may be external companies under contract, in-house staff, staff affiliated with plan holder companies, or any combination thereof. Certifications are voluntary in that external SMTs may offer their services regardless of whether they are certified. However, owners and operators that are required to have contingency plans must specify a certified SMT in their contingency plans. Hiring a certified external SMT and/or providing training for in-house staff are potential costs to a plan holder.

For the purposes of evaluating private sector cost impacts, we focus on new costs associated with training requirements, as the SMTs should already be participating in drills and exercises for contingency plan holders under the current regulations (Title 14 California Code of Regulations sections 820.01 and 820.02). Note that most plan holders already have SMTs, whether internal or external, as part of their oil spill contingency plan and most of these SMTs already have some level of training and experience. This proposed regulation would require all SMTs to become certified, primarily through training and drills.

External (contracted) SMTs will initially bear the cost of meeting the certification requirements. This is essentially an investment on their part in that becoming a certified SMT will create business opportunities. Additionally, some out of state SMTs may hire additional staff in California to meet the increased demand from plan holders wanting to maintain compliance with the regulations. These costs will then be passed on as retainer fee increases to their clients who are the plan holders.

As of 2019, approximately 101 facility SMTs and 18 vessel SMT's operate in California. These SMTs were contacted by the Office of Spill Prevention and Response (OSPR) as part of a survey to ascertain their expected costs from these proposed regulatory requirements. In total, five consultant/contractor spill management teams responded to OSPR's inquiry. Based on discussions with industry representatives in 2018, the cost of maintaining an SMT contract for a contingency plan holder is approximately \$5,000 per year.

The impacted plan holders are involved in oil production, oil transport, oil refining, and oil distribution within the state. California receives about two-thirds of its oil from out of state (mostly via tankers coming from Alaska or overseas), and a third of its oil from domestic production within California. Most of the domestic production is from inland facilities. Nearly all of the oil consumed in California is refined in the state and then distributed for sale throughout the state. Approximately 51 oil producers qualify as small businesses with fewer than 100 employees and annual gross receipts of \$15 million or less, or about 4% of the 1,255 potentially impacted plan holders.

In general, businesses from outside of California do not compete with California refineries or transporters (although facilities within California may be owned by a larger corporation based outside of California). Inland producers do compete on the global market with all oil producers worldwide; however, because they are located locally, they have a strong economic advantage over out-of-state competitors due to minimal transportation costs. All domestic California oil production is consumed within California.

For context, the increased costs incurred by these companies associated with the 2018 statewide regulations for contingency plans, drills and exercises, financial responsibility, and oil spill response organizations (Title 14 California Code of Regulations sections 817.04; 820.02; 791 through 798; and 819 through 819.07, respectively) did little to affect their ability to compete with businesses from outside the state. While OSPR does not have data at the individual company level, we can examine the impact across the industry as a whole. Annual California crude production was approximately 170 million barrels in 2018 (U.S. Energy Information Administration, Annual Crude Oil Production 2018). Assuming a market value of \$66.77 per barrel based on the average 2018 value for a barrel of California Midway-Sunset (U.S. Energy Information Administration Administration, California Midway-Sunset Price Data), the value of this annual production was approximately \$11.35 billion. The estimated total cost of complying with the 2018 regulations, across all facilities and companies, was \$4,090,297 for initial implementation and \$2,045,417 per year thereafter.

Assuming the costs of initial implementation were all incurred in the first year, this was 0.036% of the total revenues of oil production in 2018. The ongoing annual cost of \$2.045 million would represent about 0.018% of the total revenues of oil production in 2018. If applied to the cost of production, these costs would add \$0.024 (about two cents) to the price of a barrel of oil in the first year and \$0.012 (about a penny) to the price of a barrel of oil thereafter. Given the normal variability in the price of oil, and the transport price advantage that producers in California have over their overseas competitors (several dollars per barrel), the cost of implementing the 2018 regulations was unlikely to affect their ability to compete with other producers from out of state.

Using similar analysis for the implementation of these proposed SMT certification regulations, we anticipate that the cost of implementation will be passed along from the SMTs to the plan holders. Tables 1 and 2 below reflect the total number of inland oil-producing plan holders who could potentially be required to comply with these regulations and separates them into categories based upon their average annual production from 2018 to provide a more robust analysis. As a result of this overestimation, our analysis should be considered a robust ceiling for the potential effects of the cost increase.

These production categories allow for more accurate cost estimation for the larger producers who have their own in-house SMTs, while the smaller firms retain outside SMTs as part of their contingency plans. Since a vast majority of the plan holders produce over 9,000 barrels a year, the smallest category begins at 10,000 barrels a year, while the largest category is over 10 million barrels a year. Revenues are calculated using a price of \$40 per barrel based on the most recent forecast for the 2021 per barrel value of California Midway-Sunset in order to account for the economic downturn caused by the coronavirus pandemic (U.S. Energy Information Administration, Short-Term Energy Outlook). It is important to note that this estimate is lower than the forecasted price of oil for 2022, which the U.S. Energy Information Administration estimates will rise to approximately \$50 per barrel.

The figures presented in Table 2 are based upon the limited feedback OSPR received from industry members in a 2019 survey and reflect the estimated cost increase that plan holders will face from either SMT retainer fee increases or from hiring certified SMT staff. The cost of an SMT retainer includes the compensation for the training that SMTs must undergo, as well as the cost for participating in required drills and exercises. Costs are expected to be higher for the top three production categories as they either have in-house SMTs or a combination of in-house and external SMTs, and thus are directly paying for labor costs for certified SMT staff.

Annual Production in Barrels	Number of Firms	Average Production	Total Average Revenue	Average Revenue
Greater than 10 million	2	27,090,210	\$2,167,216,800	\$1,083,608,400
Greater than 1 million	7	4,190,012	\$1,173,203,360	\$167,600,480
Greater than 500,000	9	651,537	\$234,553,320	\$26,061,480
Greater than 100,000	14	218,585	\$122,407,600	\$8,743,400
Greater than 50,000	5	69,464	\$13,892,800	\$2,778,560
Greater than 10,000	39	23,792	\$37,115,520	\$951,680
Total	79		\$3,748,389,400	

Table 1: Estimated Revenues Based on Production

Annual Production in Barrels	Number of Firms	SMT Cost/Retainer Increase	Total Cost Increase	Average Cost Increase as % of Average Revenue	Cost per Barrel
Greater than 10 million	2	\$410,000	\$820,000	0.038%	\$0.015
Greater than 1 million	7	\$130,000	\$780,000	0.078%	\$0.031
Greater than 500,000	9	\$12,000	\$108,000	0.046%	\$0.018
Greater than 100,000	14	\$2,000	\$28,000	0.023%	\$0.009
Greater than 50,000	5	\$2,000	\$10,000	0.072%	\$0.029
Greater than 10,000	39	\$2,000	\$78,000	0.210%	\$0.084
Total	79		\$1,824,000	0.049%	

Table 2: Estimated Cost Increase from proposed SMT Regulations

For the purpose of this analysis, based upon survey results, we assume that the smaller SMTs could transfer their increased costs from additional training and staff to meet the proposed requirements for incident command system certification to plan holders by increasing their retainer rates from \$5,000 per year to \$7,000 per year. Larger facilities that maintain their own SMTs may see increased costs associated with additional staffing requirements for cascading response personnel. Table 2 presents the average estimated cost increase for each production category, which is used to estimate the total costs for the industry at about \$1.824 million.

While we have no information on the costs of production, we can estimate gross revenues by multiplying the annual production of crude oil by the price of crude oil. We then assumed that all of the costs of the regulations are borne by each company and not passed on to consumers. We compared those costs to the estimated annual revenues to provide a measure of the economic burden of complying with the regulations (Table 2).

For all but the smallest plan holders, the impact of the estimated cost increase of regulatory compliance is less than 0.1% of their average revenues. The smallest producers would experience a cost increase of 0.21% of their average revenue. The additional cost for most plan holders is probably less than that described here, as this analysis assumes only high-end cost estimates. Additionally, plan holders with in-house SMTs may decide to reduce their costs by moving to external SMTs, which eliminates the need to maintain certified SMT personnel and thus eliminates the associated labor costs.

We also compared these cost increases to the natural volatility in the market that oil producers experience. For all plan holders, the effect of a \$1 per barrel change in the price of crude oil (e.g. from \$40 per barrel to \$39 per barrel) would have a greater impact than the total maximum estimate of the costs of regulatory compliance (Table 2). To calculate the impact on plan holders, we divide the cost increases in Table 2 by the average production in Table 1 to calculate the per barrel effect. For plan holders in the

top five production categories the cost of regulatory compliance is equal to or smaller than the impact of a 3 cent drop in the price of a barrel of crude oil, while plan holders in the lowest category would potentially face an impact similar to that of an 8 cent drop in the price of a barrel of crude oil. This is well within the daily average variability in the price of crude oil and thus unlikely to affect business decisions.

Pipeline operators, refineries, railroads, and tank vessels would face similar cost increases from their in-house SMT training and personnel requirements or from increased SMT retainer costs. As most of these companies are large and have revenues comparable to, if not higher than, those of inland producers, it is reasonable to assume that the impacts from their increased SMT costs would be similarly miniscule. An estimation of their cost increases and the impact of those costs on their revenue is presented in Table 3.

Industry	# of Firms	Average Revenue	Average Cost Increase	Cost Increase as % of Revenue
Class 1 Rail	2	\$23,000,000,000	\$410,000	0.002%
Class 3 Rail	3	\$31,900,000	\$2,000	0.006%
Large Pipeline	6	\$30,000,000,000	\$410,000	0.001%
Medium Pipeline	1	\$5,000,000,000	\$2,000	0.00008%
Small Pipeline	5	\$30,000,000	\$2,000	0.007%
Vessel Owner	1159	\$472,105,000	\$6,000	0.00127%
Totals		\$748,415,395,000	\$10,254,000	0.00132%

Table 3: Estimated Revenue, Cost Increases, and Impact for Rail, Pipeline, andVessel Operators

As seen in Table 3, the impact of the expected costs on average revenues is not expected to exceed 0.01% for each operator type. The total expected cost to all rail, pipeline, and tanker vessel operators is \$10.254 million. Combined with the total expected cost of \$1.824 million for oil producers from Table 2, the total expected costs across all impacted plan holders is estimated to be \$12.078 million.

Assuming that plan holders decide to pass the cost of compliance with the proposed regulations to the consumer, the likely outcome would be an increase in gasoline prices, which would primarily impact automobile drivers. To apply this total to the annual cost of driving a car, we assume that the average vehicle is driven 12,000 miles per year, gets 17.5 miles per gallon, and thus requires 686 gallons of gasoline per year. The annual crude production in California was estimated at 170 million barrels in 2018 (U.S. Energy Information Administration, Annual Crude Oil Production 2018). Applying the total cost to producers to the estimated production of 170 million barrels yields a per barrel increase of \$0.07 per barrel (7 cents a barrel). A price increase of \$0.07 per barrel translates to \$0.0017 per gallon (1 barrel = 42 gallons). Applied to the 686 gallons needed to drive for a year, this would add \$1.14 to the annual gas budget for the vehicle.

## **B. Estimated Costs**

# 1. What are the total statewide dollar costs that businesses and individuals may incur to comply with this regulation over its lifetime?

See above for details (Tables 2 and 3). The total cost to oil producers adjusting their inhouse SMT personnel or facing increased SMT retainer fees is expected to be around \$1.824 million annually (Table 2). The total cost to rail, pipeline, and tank vessel operators is expected to be around \$10.254 million (Table 3). Combined, the total expected costs are estimated to be \$12.078 million.

In terms of the size of the businesses impacted, roughly 51 oil producers qualify as small businesses with fewer than 100 employees and annual gross receipts of \$15 million or less. The expected annual cost increase should not exceed that of the expected \$2,000 per year increase in SMT retainer costs, as almost all of these businesses rely on an external SMT and represent a total expected cost of \$102,000. This leaves 1,204 "typical" businesses from the 1,255 impacted businesses (Table 4) with the remaining \$11.976 million per year from the total expected cost of \$12.078 million per year from all industry members.

Applied to the annual production of 170 million barrels of crude, the total cost of \$12.078 million represents a \$0.07 per barrel increase, or \$0.0017 per gallon. Assuming this is passed on to consumers who drive an average of 12,000 miles per year, get an average of 17.5 miles per gallon, and require 686 gallons of gasoline per year, the impact to individuals will be an increase in fuel expenditures of \$1.14 per vehicle per year.

### 2. If multiple industries are impacted, enter the share of total costs for each industry:

Multiple industries are involved with the production and distribution of oil within California, including rail, tank vessels, and pipeline operators. All of these industries must comply with California regulations for contingency planning. Our analysis assumes that the external SMTs pass along the increased cost associated with these proposed regulation's training requirements by increasing the retainer fees for contingency plan holders, and that plan holders with in-house SMTs will face increased personnel costs to meet the cascading personnel requirements of the proposed regulations. Table 4 presents the total estimated cost increases across all impacted industries and shows each industry's share of the cost increase.

Industry	Number of Firms	Total Cost to Industry	Industry Share of Total Costs
Class 1 Rail	2	\$820,000	6.789%
Class 3 Rail	3	\$6,000	0.050%
Oil Production	79	\$1,824,000	15.102%
Pipeline Operator	12	\$2,474,000	20.484%
Vessel Owner	1159	\$6,954,000	57.58%
Totals	1255	\$12,078,000	

The total cost across all industries is expected to be \$12.078 million. Despite making up 92.35% of the firms impacted, vessel owners only bear 57.58% of the total cost to industry. The impact of these costs on an average firm's revenue can be seen in Tables 2 and 3 within the analysis for section A, page 1. Summarizing those results, all oil producers would experience the costs as less than 0.21% of their average revenues, while operators of railroads, pipelines, and tank vessels would experience the costs as less than 0.01% of their average revenues.

# 5. Are there comparable Federal regulations? Explain the need for State regulation given the existence or absence of Federal regulations.

California's preparedness and response requirements are generally more comprehensive than those of the federal government. For example, OSPR has the following key requirements which are different from the federal government: sensitive site identification and protection, use of and rating of oil spill response organizations including minimum response times and minimum equipment requirements, and additional requirements for equipment deployment drills and tabletop exercises.

Currently, federal regulations only stipulate that vessels transporting oil must have an SMT listed in their response plans (Title 33 Code of Federal Regulations part 155), but do not offer a certification process to verify an SMT's capabilities. OSPR's proposed regulations establish a certification requirement for SMTs listed in contingency plans filed with the state. There should be no additional costs due to the state-federal difference since contingency plans accepted by OSPR also meet the federal government requirements.

# C. Estimated Benefits

1. Briefly summarize the benefits of the regulation, which may include among others, the health and welfare of California residents, worker safety and the State's environment.

These regulations will provide benefits to the health and welfare of California residents by ensuring a minimum level of skills and competence to manage a spill in California's waterways. Training and drill requirements prepare and test the ability of SMTs to respond to and effectively manage an oil spill. These regulations will benefit the state's environment and communities with efficient and competent response to an oil spill.

These regulations build upon the OSPR's preparedness and response program, which includes regulations for contingency planning, drills and exercises for plan holders, financial responsibility, and rating of oil spill response organizations.

The programs have a proven track record of reducing the number of spills, both large and small, as well as the size of spills. As SMTs are part of the contingency plans mentioned above, it is expected that these proposed SMT regulations will contribute to this trend through the creation of a certification process to ensure consistent capabilities for SMTs responding to an oil spill. To provide context for how the proposed SMT regulations will further reduce the number of spills and the volume spilled in the absence of immediate data, we rely on the analysis used in the 2018 statewide regulations (Title 14 California Code of Regulations, sections 817.04; 820.02; 791 through 798; and 819 through 819.07), which used spill data collected during the emergency regulations phase (2014-2015) when OSPR's mandate was extended to the inland environment. We recap the analysis below to provide an example of how improved spill preparedness benefits the state.

OSPR has a database of spills, based on reports from the California Office of Emergency Services. Smaller spills happen on a regular basis, allowing us to compare spill data since the initiation of the emergency regulations in September 2015, which extended regulations to inland facilities. OSPR examined data regarding inland oil spills to water, comparing the 21 months (September 2015 through April 2017) under the emergency regulations to the previous 38 months (July 2012 through August 2015) before the implementation of the emergency regulations. We included all spills of 10 gallons or more.

Normalizing to a 12-month period to use comparable annual figures, the total number of inland oil spills to water (of 10 gallons or more) stayed about the same (123 per year before the emergency regulations went into effect and 135 per year after). However, the spills became smaller after the emergency regulations. The number of spills from 100 to 999 gallons fell a third (from 32 to 21 per year), while the number of spills of 1,000 gallons or more dropped in half (from 6.3 to 2.9 per year) and (Figure 1).

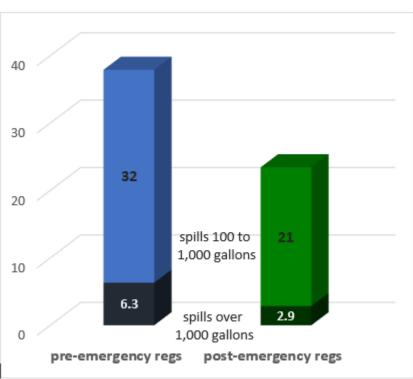


Figure 1: Number of Inland Oil Spills to Water

More significantly, the volume of oil spilled declined dramatically, from about 90,000 gallons per year before the establishment of the emergency regulations to 20,000 gallons per year after (Figure 2). Based on an average response cost of \$2,000 per barrel (California Oil Spill Response Cost Study, November 2019), or about \$47.62 per gallon, this represented an annual savings of just over \$3.33 million per year. This response cost, provided to OSPR by a group of oil facilities who conducted their own internal survey, is intended to include cleanup costs as well as third party claims and natural resource damages.

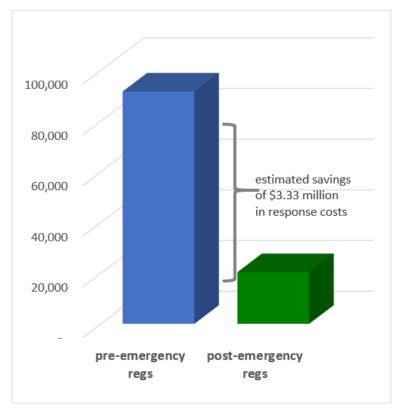


Figure 2: Gallons Spilled Per Year (Inland Oil Spills to Water)

An important caveat to this analysis is that significant oil spills are rare events, and large oil spills are even more rare, thus requiring long timeframes to ensure enough data to paint a realistic picture. Furthermore, one large spill within the time period under examination can strongly bias results. In this instance, there were no exceptionally costly spills during the months under examination. Removing the largest spills from the 2012-2017 data would not meaningfully change the results presented above.

In addition to the benefits of reducing the unreimbursed costs of a spill mentioned above, the proposed regulations should have health benefits for both response workers and the public. By reducing the volume spilled through improved spill management, these proposed regulations will reduce the exposure of the public and response workers to the harmful effects of exposure to oil, which vary by the type of oil. According to the National Institutes of Health (NIH), these effects on human health can include skin and eye irritation, as well as neurologic and breathing problems. However, there is currently not much data about the long-term effects of an oil spill on human health, making it difficult to fully quantify and predict overall health benefits.

# 3. What are the total statewide benefits from this regulation over its lifetime?

Given the success of the 2018 regulations, we expect that SMTs certified under the proposed regulations will continue the trend of reducing inland spills to water. As these regulations also include SMTs for vessel operators, we expect a further reduction in spills and spill volume to marine waters as well. The average annual number of marine spills from 2015-2018 was 122 spills per year, slightly less than the 135 per year rate for inland spills to water. The decline in the number of spills from 100 to 999 gallons over this period is roughly the same as the decline in small inland spills.

Given the \$3.33 million in savings from the reduction of small inland spills to water based on an average response cost of \$2,000 per barrel (Figure 2), we assume that a similar benefit occurs with the reduction of the amount oil spilled to marine waters, which is roughly the same volume as the amount spilled to inland waters. Thus, the combined expected benefit from the reduction of small marine and inland spills to water is \$6.66 million or double the amount of the benefit from the reduction of small spills to inland waters.

# Page 3 of Form STD 399 – Economic Impact Statement

## D. Alternatives to the Regulation (continued)

2. Summarize the total statewide costs and benefits from this regulation and each alternative considered:

These proposed SMT regulations add to the 2018 approved regulations (Title 14 California Code of Regulations section 817.04, 820.02, 791 through 798, and 819 through 819.07) by requiring SMTs be certified by OSPR before being listed in a contingency plan. Thus, it is likely that these proposed regulations will contribute further to the reduction of spills both in number and size. There will be a cost increase to SMTs to meet the certification requirements through additional training and staff, but it is expected that these costs will be passed along to the plan holders retaining SMTs as part of their plan. The estimated cost increase for these plan holders is \$12.078 million per year. This estimate assumes that larger plan holders with in-house SMTs will decide to train and hire additional SMT staff, and does not reflect the possibility that these plan holders could choose to lower their costs by eliminating their in-house SMT staff and retaining an external SMT. The estimated benefit of the earlier regulations for reducing inland spills to water is close to \$3.3 million per year. By further increasing the preparedness of plan holders to respond to an oil spill, the additional benefit of these proposed regulations is likely at least the same as the combined benefit of the 2018 regulations and the estimated benefit from the reduction of marine spills. Thus, the expected benefit in reduced spills and improved spill response is at least \$6.66 million.

# Page 4 of Form STD 399 – Fiscal Impact Statement

# A. Fiscal Effect on Local Government

# 3. Annual Savings (approximate)

The estimated \$6.66 million per year benefit from a reduction in oil spills refers to the economic benefit of reduced response costs, reduced environmental damage, and reduced third party injuries. None of these benefits include fiscal savings by state or local governments.

In theory, all response costs are reimbursed by the responsible party, resulting in no net costs. In practice, however, cost recovery is not 100%. Sometimes oil spills are caused by unknown sources, sometimes the responsible party is not financially viable, or even known. In these cases, government agencies may end up incurring some of the response costs. OSPR estimates that its rate of cost recovery is approximately 90%. The remaining 10% goes unreimbursed and is borne by OSPR. Local governments would likely experience the same difficulties with cost recovery. To that extent, a

reduction in spills will mean a reduction in unreimbursed response costs for OSPR and local agencies. OSPR's annual unreimbursed costs are about \$75,000 per year; however, OSPR does not have data on local government response costs, whether reimbursed or not. It undoubtedly varies from year to year depending on spill activity. In general, local agency response costs are a small fraction of OSPR's. Assuming it was 10% of OSPR's, local agency unreimbursed costs would be \$7,500 per year.

Spills that are responded to by certified SMTs would be managed more effectively, which, in turn, would reduce the total cost of spill response incurred by state and local agencies. A reduction in total response costs would mean a reduction in the likelihood of unreimbursed spill costs. Assuming a small initial reduction in the range of 1-5%, this benefit could be realized as a decrease of up to \$3,750 per year in unreimbursed costs to OSPR and a reduction of up to \$375 per year for local government agencies. The unreimbursed costs of oil spill response could be further reduced over time as SMTs continuously renew their certification every three years which includes meeting the training and drill requirements of the proposed regulations.

Local governments may realize savings in another way. In the aftermath of a spill, local governments are also allowed to make a legal claim for lost revenues. For example, if an oil spill results in the closure of a city park, and the city received revenues from users reserving the park or paying for parking spaces at the park, the city could make a claim for that lost revenue. In practice, such claims are rare, and the local governments suffer the lost revenue. To the extent that spills are reduced, such losses will be reduced, which is a benefit to local governments. OSPR does not have data on such claims and is not able to estimate the magnitude.

## 6. Other. Explain

The savings described above are expected annually. In summary, the annual savings to local government are at least \$375 per year.

# Page 5 of Form STD 399 – Fiscal Impact Statement

### **B.** Fiscal Effect on State Government

### 2. Savings in the current State Fiscal Year (Approximate)

The estimated \$6.66 million per year benefit from a reduction in oil spills refers to the economic benefit of reduced response costs, reduced environmental damage, and reduced third party injuries. None of that includes fiscal savings by state or local governments.

OSPR and other state agencies may realize a fiscal benefit from a reduction in future oil spills (as illustrated in Figures 1 and 2 above), especially from the reduction in unreimbursed costs. As mentioned in the analysis for the fiscal effect on local government, this could be realized as a reduction of \$3,750 per year.

However, consequential to the 2018 statewide regulations OSPR is now responding to more spills. This is expected to continue. While the vast majority of spills that OSPR responds to are small (100 to 999 gallons), and the response costs are much smaller than those for a large spill, this will add to unreimbursed response costs. That is to say,

even though the total number of spills – especially large spills – is reduced, OSPR is responding to more of them than it had previously. Based on a review of OSPR cost recovery since 2015, OSPR's unreimbursed cost recovery has remained at \$75,000 per year. While the number of spills has declined significantly (Figures 1 and 2), OSPR is now responding to more small spills than previously. Before 2015, OSPR responded to and incurred response costs to 17 spills per year. After 2015, that figure jumped to 43 spills per year. However, because most of the additional spills are small inland spills, total response costs to OSPR, and total unreimbursed response costs, did not change significantly.

Other state government agencies respond much less often than OSPR. Nevertheless, they would likely experience the same difficulties with cost recovery. To that extent, a reduction in larger spills, which they would be more likely to respond to, will mean a reduction in unreimbursed response costs.

OSPR's annual unreimbursed costs are about \$75,000 per year. However, OSPR does not have data on the response costs for other state agencies, whether reimbursed or not. It undoubtedly varies from year to year depending on spill activity. In general, the response costs for other state agencies are a small fraction of OSPR's. Assuming they were 10% of OSPR's, other state agencies' unreimbursed costs would be \$7,500 per year. If these declined by half (in keeping with Figures 1 and 2), other state agencies would save \$3,750 per year.

OSPR is not aware of other state agencies making claims for lost revenue as described for local agencies under A.3., but such a situation is possible. A reduction in spills would make such losses in revenue less likely.

4. Other. Explain

The savings described above are expected annually. In summary, OSPR is expecting a decrease in unreimbursed response costs due to fewer spills, especially large spills, but these will largely be offset by an increase in the small spills that OSPR responds to. Based on an analysis of OSPR's cost recovery before and after the implementation of the emergency regulations OSPR expects to break even.

Other state agencies may experience a savings via a decrease in unreimbursed response costs of about \$3,750 per year.

END