



Coastal Best Available Technology FAQs
Revision Date: 1/7/2021

1. What is the AB-864 regulation? What is the CBAT regulation?

In October 2015, the State of California issued Assembly Bill 864 (AB-864) Oil Spill Response: Environmentally and Ecologically Sensitive Coastal Areas. (California Government Code (CGC), Section 51013.1) was later signed into law and addresses the use of Best Available Technology (BAT) to limit the quantity of a release in the event of an oil spill. Because the California State Assembly will likely reuse 864 as a bill number in the future, the OSFM refers to the AB-864 regulation as the Coastal Best Available Technology (CBAT) regulation to avoid unnecessary confusion.

2. Where is the final text of the CBAT regulation?

The final regulation is published on the OSFM Title 19 Development website: <https://osfm.fire.ca.gov/divisions/code-development-and-analysis/title-19-development/>

(PLS) Intrastate Hazardous Liquid Pipelines - Best Available Technologies AB864

- [Notice of Approval](#)
- [Final Text of Regulations/Express Terms\(ET\)\(PDF\)](#)
- [Final Statement of Reasons\(FSOR\)\(PDF\)](#)
- [FSOR Attachment 'A' \(PDF\)](#)
- [FSOR Amendment to Attachment 'A' \(PDF\)](#)

3. What are the deadlines for the CBAT regulation?

The deadline summary is shown below:

October 1, 2020	Effective date of the regulation.
No official deadline	Pipeline Identification (Section 2102).
May 1, 2021	Due date for Section 2103 Exemption (Section 2103).
May 1, 2021	Due date for Section 2104 Deferral (Section 2104).
October 1, 2021	Due date for the implementation plan and risk analysis.

A detailed supplemental implementation plan is due 60 days after the acceptance of risk analysis.

April 1, 2023 Due date for operators to complete retrofit of pipeline.

4. Which pipelines are subject to the CBAT regulation?

CBAT regulates pipelines that meet the definition of a pipeline under California Government Code Section 51010.5 (a) and are within ½ mile of the coastal zone and/or the environmentally and ecologically sensitive area (EESA).



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- California Government Code Section 51010.5 (a):
https://leginfo.ca.gov/faces/codes_displayText.xhtml?lawCode=GOV&division=1.&title=5.&part=1.&chapter=5.5.&article=

5. What is the definition of the EESA?

EESA means environmentally and ecologically sensitive areas identified in the State oil spill contingency plan, as developed by the Administrator of the Office of Spill Prevention and Response pursuant to subdivision (d) of Section 8574.7 of the California Government Code.

- EESA Data from OSPR: <https://wildlife.ca.gov/OSPR/Science/GIS>

GIS shapefiles and KMZ files available for download:

- [Downloadable Files \(FTP\)](#)
- [ERMA Viewer](#)
- [Download Environmental Sensitivity Index \(ESI\) Maps](#)
- [Downloadable OSFM EESA Files \(FTP\)](#)

6. What are the requirements of risk analysis for the CBAT regulation?

The requirements of risk analysis for the CBAT regulation are outlined in Section 2111 of the CBAT regulation. As stated in Section 2111, an operator shall conduct a spill analysis and consider the worst possible dispersion of oil on the adverse environmental condition among other requirements.

7. What is BAT?

Section 2100 defines Best Available Technology (BAT) as the technology that provides the greatest degree of protection by limiting the quantity of release in the event of a spill, taking into consideration whether the processes are currently in use and could be purchased anywhere in the world.

Section 2109(a) also provides five (5) examples of BAT, which includes, but is not limited to, the installation of leak detection technology, automatic shutoff systems, remote-controlled sectionalized block valves, Emergency Flow Restriction Devices, or any combination of these technologies.

The OSFM understands that every pipeline is unique. The operator shall evaluate the effectiveness and the engineering feasibility of each technology on the pipeline and shall submit the proposed BAT(s) for the approval/acceptance/consensus of the OSFM.

8. What is the guideline for selecting BAT? What are the criteria that the OSFM will be used in determining the adequacy of BAT?



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Form PSD-2113 can be used as the guideline for selecting the BAT. The form is not required to be submitted by operators but will assist OSFM and industry in meeting the requirements of the CBAT regulation.

As required by Section 2109(c), the Form PSD-2113 directs the operator to conduct the risk analysis of the BAT(s) per Section 2111. In addition to the risk analyses, Form PSD-2113 requests the written justification(s) of why the BAT is chosen, as required by Section 2110(b).

After the OSFM receives the risk analyses and the justification(s) of why the BAT is chosen, the OSFM will evaluate the adequacy of BAT per Section 2110. At a minimum, the proposed BAT shall reduce the quantity of release in the event of a spill.

9. **Section 2109(a) provides five examples of BAT, which include, but is not limited to, leak detection technology, automatic shutoff systems, remote-controlled sectionalized block valves, emergency flow restriction devices, or any combination of these technologies. Is there a maximum release volume performance level that operators are expected to achieve and is there a maximum time interval for this to occur?**

The OSFM understands that every pipeline is unique, and the magnitude of spill volume that may be reduced by the BAT(s) varies with pipelines. The spill volume analysis should consider all relevant parameters that influence spill volume and rate of release. While the CBAT regulation does not specify a threshold parameter on the spill volume reduced by the BAT(s), the OSFM will review the documents to support the decisions and analyses of why BAT(s) is/are chosen to evaluate the adequacy of the proposed BAT(s).

An operator is expected to propose the appropriate BAT(s) and estimate the worst-case discharge using the existing technology and using the BAT(s). The OSFM will compare the worst-case as a proxy to evaluate the effectiveness of the chosen BAT(s).

The CBAT regulation does not specify a threshold parameter on the time that is required to reach the maximum release volume.

10. **Since components of the risk analysis may be conducted in different applications, will the CSFM accept a technical report presenting the combined analysis methods, results, and attachments including P&IDs? Would a hard copy and PDF copy be sufficient?**

The OSFM will accept any technical report(s) that support the combined analysis methods, results, and attachments including P&IDs to meet the minimum requirements of the risk analysis.



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As required by Section 2111, the risk analysis must be submitted, with supporting documents, in both hard copy format and electronic format. PDF is an acceptable form of electronic format.

11. **Section 2111(a)(3) requires that geographic features including soil and terrain; drainage systems such as small streams, other smaller waterways, culverts that could serve as a conduit to an environmentally and ecologically sensitive area; roadway crossings and ditches; potential natural forces inherent in the area; natural and manmade barriers; potential physical pathways between the pipeline and environmentally and ecologically sensitive areas should be included in the pipeline description. Would a combination of current imagery and field verification serve as sufficient sources of this information? Should this analysis be limited to only within ½ mile of the EESA?**

The ½ mile buffer of the coastal zone and/or the EESA is used to determine whether a pipeline is subject to the CBAT regulation. If a pipeline is subject to the CBAT regulation, a risk analysis is required for that pipeline.

The risk analysis does not use the ½ mile buffer to evaluate the impact of the EESA. Instead, an operator is expected to consider any physical features or relevant factors that could affect the EESA in the risk analysis.

12. **How does a segment subject to the regulation get defined? Is it limited to the portion within the ½ mile buffer that is shown to have a potential to impact the coastal portion of an EESA (see attached map)? Or does it extend to the first EFRD or isolation point? Please clarify expectations for defining the segment of a pipeline subject to the CBAT requirement. For example, please designate the extent of the segment that should be defined for the purpose of exemption, deferral, and retrofit on the attached map?**

[Note: Map was removed because this is a pipeline specific question.]

The OSFM is available to meet with each operator to discuss pipeline specific questions. In general, a segment that is subject to the regulation is any segment from ½ mile to the EESA to the closest isolation point where upstream from that point could not affect the EESA.

13. **Are there specific types of leak detection that are considered BAT? CPM, hydrocarbon sensors, etc.? Is OSFM going to provide any further clarification on what they view as BAT prior to the May 1 deadline?**

See FAQ #7 for details. Each leak detection system and BAT(s) are unique based on the pipeline in which it is used. Thus, an operator is expected to evaluate and propose BAT(s) and justify why the BAT(s) is/are chosen.



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- 14. In Section 2103(a), the term impact is used. Is there a formal definition of “impact” that OSFM will expect operators to use to define the extent of a spill impact for the purpose of this regulation? Is it concentration based, free product, a visible sheen?**

Section 2111(d)(4) requires each operator to consider the worst possible dispersion of oil in a spill analysis. An operator is expected to use conservative assumptions and define the appropriate terminologies used in the risk analysis. The OSFM will review the assumptions and conclusions of each risk analysis. Regarding the terminology of “impact”, the OSFM follows the standard definition since the terminology of “impact” is not defined in Section 2100. If an operator estimates that the worst possible dispersion reaches the EESA in the risk analysis, the EESA is impacted.

- 15. Per Section 2111, a risk assessment must be performed. Is there an expectation for the type of risk assessment to be performed, i.e., quantitative or qualitative approach? If the pipeline operator is already performing risk assessments as part of their 49 CFR Part 195 integrity management program, can that be used for prioritization of retrofits and as part of the risk analysis to support the BAT analysis?**

Please see FAQ #6 and Section 2111 for details. The OSFM follows Section 2111 to review each risk analysis. An operator may go beyond the minimum requirements of the risk analysis. As stated in Section 2111, an operator must conduct a spill analysis to determine the consequences of a potential release. There are other requirements such as Pipeline Description, worst-case discharge, etc.

- 16. Section 2111(d)(2)(A)(1) references the terms “oil capacity” and the “capacity of the pipeline”. Can you clarify what is meant by each of these terms (i.e., line fill versus maximum flow rate)?**

Section 2111(d)(2)(A)(1) refers to the “oil capacity” as the worst-case discharge from a pipeline. The “capacity of the pipeline” is the pipeline volume.

- 17. Per Section 2112, if the operator’s determination of BAT is not found to be consistent with the OSFM’s determination on what the BAT is, will the OSFM inform the operator of what they view as the BAT for their pipeline system or provide other detailed feedback to aid in resolving the submission?**

An operator is expected to identify and select the appropriate BAT(s) and justify why the BAT(s) is/are chosen. If the OSFM determines that the proposed BAT is inadequate, the OSFM will provide feedback(s) to the operator.

- 18. Section 2117(a)(2). Is there an expected frequency for updates to the EESA data that could drive more frequent updates to the risk analysis? Once a**



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new EESA is identified or other trigger occurs, how long does the operator have to update their risk assessment?

The EESA dataset is provided by the Office of Spill Prevention and Response (OSPR). The OSFM encourages operator(s) to contact the OSPR on the expected frequency for updates to the EESA dataset. An operator should evaluate the information they obtain from the OSPR to determine if it is accurate and to ensure compliance with the CBAT regulation.

Section 2117(a) requires operators to update/review the risk analysis once every five (5) years from the date of the most recent Letter of Acceptance. If there is a significant change to the EESA dataset, the operator is expected to notify the OSFM and submit a new risk analysis on the pipeline.

19. “Deadline Summary from 10/19/2020 FAQs Document

Under question 3, the OSFM indicates December 1, 2021 is the “Due Date for detailed supplemental plan”. However, given that the OSFM must accept or deny a Risk Analysis within 90 days after receipt pursuant to Section 2112(a)(1) and that a detailed supplemental implementation plan must be submitted “with 60 days of acceptance of the Risk Analysis” pursuant to Section 2113(b), one might expect the due date for detailed supplemental implementation plans to be up to 150 days after October 1, 2020. Please clarify.

See FAQ #3. The deadline of the detailed supplemental implementation plan has been corrected. The detailed supplemental implementation plan is due within 60 days of the acceptance of the risk analysis.

20. “Guideline for selecting BAT” from 10/19/2020 FAQs/Form PSD-2113 Document

Under question 8, the OSFM indicates it “prepared the Form PSD-2113 as the guideline for selecting the BAT” with reference to the requirements of Section 2109(c), 2111, and 2110(b). Form PSD-2113 includes various elements that, when filled out, would indeed meet some, if not all the requirements of the Risk Analysis (Section 2111). However, the title of “Form PSD-2113 Implementation Plan” suggests there is some connection to the implementation plan required in Section 2113. Please clarify.

The Form PSD-2113 is provided as an optional form and is served as a guideline to highlight the key elements in selecting the BAT(s). This form is named as Form PSD-2113 Implementation Plan because 2113 refers to the code section, and Section 2113 is named as Implementation Plan in the CBAT regulation. If an operator identifies other required documents, than they are expected to submit those documents along with the Form PSD-2113.



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As a side note, an operator may submit technical report(s) in another format as long as the submission meets the minimum requirements of the CBAT regulation.

21. “Good cause” demonstrations

Section 2113(c)(2)(B) states that deviations from the timetable submitted in the implementation plans must be communicated to the OSFM in writing and should demonstrate good cause for delay. Section 2113(d) and (e) state that OSFM shall commence enforcement for operators who fail to implement and complete the plan absent a showing of good cause. What criteria must be met in order for an operator to demonstrate or show good cause? If an operator is unable to implement BAT due to delays or discretionary decision of a permitting agency with jurisdiction over ground-disturbing activities related to BAT installation, does that render the BAT infeasible?

An operator is expected to make a reasonable effort to implement the BAT(s) on a pipeline. If the implementation of BAT(s) is delayed, an operator shall notify the OSFM via Pipeline Notification email and provide any supporting documents. As an example, if the implementation of the BAT(s) is delayed due to a permit, an operator may notify the OSFM via email and provide the appropriate supporting documentation. This is considered a good cause for delay.

22. Likelihood or frequency of a reasonable worst-case discharge

Please confirm that the “Risk Analysis” required in Section 2111 does not include the quantification of the likelihood or frequency of a reasonable worst-case discharge.

Section 2111 and the CBAT regulation do not discuss the likelihood or frequency of a reasonable worst-case discharge. The OSFM follows Section 2111 to evaluate the adequacy of each risk analysis.

23. BAT Determination

Please confirm that BAT determination will be specific to each pipeline.

An operator is expected to propose BAT(s) on each CBAT regulated pipeline. The OSFM understands that every pipeline is unique, and the BAT(s) may vary with pipelines.

24. Integration of High Consequence Areas (HCAs) into Risk Analysis

Please clarify whether operators should have integration of High Consequence Areas (HCAs) as defined by 49 CFR Part 195 into the Risk Analysis required in Section 2111.



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High Consequence Area is not in Section 2111. The OSFM does not object to review any risk analysis beyond the minimum requirements listed in Section 2111.

25. Suggested drain down volume release threshold

Does the OSFM have a suggested drain down volume release threshold (i.e., release volumes due to elevation when valves are closed, and pumps are shut) for identifying the optimal location(s) of the automated shutdown valves?

The CBAT regulation does not specify a threshold on drain down volume. Since every pipeline is unique, the operator is expected to, but not limited to, analyze the condition of each regulated pipeline, list the assumptions in the risk analysis, and propose the appropriate drain down volume on each pipeline.

26. Assumptions for retire/inactive pipelines.

Can an operator make general assumptions about residual volumes remaining in pipeline segments of lines that have been purged and are considered out-of-service?

If an out-of-service pipeline is purged of hydrocarbon, an operator may submit Form PSD-2104.OOS or equivalent form/report to comply with the CBAT regulation. If an out-of-service pipeline is filled with hydrocarbon, an operator may submit Form PSD-2113.OOS or equivalent form/report to comply with the CBAT regulation.

27. BAT required for entire pipeline system

If an operator identifies BAT that provides the greatest degree of protection for portions of a pipeline system subject to the CBAT regulation, is the operator required to implement the BAT throughout the entire pipeline system?

The objective of the CBAT regulation is to provide the greatest degree of protection to the coastal zone and/or EESA in the event of a spill. An operator is expected to implement the proposed BAT(s) at the location(s) on the pipeline segment(s) that will impact the coastal zone and/or EESA.

28. Biofuels applicability

Section 2100(a)(12) defines "Oil" as:

"Oil means hazardous liquid as defined in Section 195.2 of Title 49 of the Code of Federal Regulations, which includes petroleum, petroleum products, anhydrous ammonia, or ethanol. Petroleum means crude oil, condensate, natural gasoline, natural gas liquids, and liquefied petroleum.



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Petroleum product means flammable, toxic, or corrosive products obtained from distilling and processing of crude oil, unfinished oils, natural gas liquids, blend stocks, and other miscellaneous hydrocarbon compounds.”

However, the stated definition draws from an outdated version of 49 CFR §195.2. The current definition in 49 CFR §195.2 also includes non-petroleum fuels, such as biofuels. Are pipelines carrying non-petroleum fuels, such as biofuels, subject to this requirement?

According to the CBAT regulation, Section 2100(a)(12), oil means hazardous liquid as defined in the 49 CFR Part 195.2...

In the 49 CFR Part 195.2, hazardous liquids mean petroleum, petroleum products, anhydrous ammonia, and ethanol or other non-petroleum fuel, including biofuel...

Since biofuels are defined as hazardous liquids under 49 CFR Part 195.2, pipelines carrying biofuels are subject to the CBAT regulation.