

Review Process: Scientific and technical review of the information and conclusions presented in the “South Ellwood Natural Oil and Gas Seeps Technical Memorandum”

California Ocean Science Trust scientific and technical review on behalf of the California State Lands Commission

Overview

The California State Lands Commission (CSLC) has asked the Ocean Science Trust to coordinate an independent scientific and technical review of a technical report, prepared by AMEC on behalf of CSLC, which summarizes existing literature and scientific information linking oil production with natural oil seep activity. The report “South Ellwood Natural Oil and Gas Seeps Technical Memorandum” will be part of an Environmental Impact Report (EIR) to inform CSLC decision-making about whether to approve an amendment to State Oil and Gas Lease that would allow client Venoco to implement the South Ellwood Field Project¹. See the “[Scope of Review](#)” for details on the charge to reviewers.

Ocean Science Trust will design and implement all aspects of the review process, including compiling appropriate background materials, drafting instructions to guide reviewers, and producing final review outputs, among other activities. Ocean Science Trust will produce two review outputs: (1) a summary of the process and resulting reviews that will be made publicly available on the Ocean Science Trust website; and (2) a confidential technical review report that includes detailed reviewer assessments for use by CSLC in the EIR consideration and permit decision-making processes.

Scientific Review Principles

In any review, it is our intent to provide an assessment of the work product that is balanced, fairly represents all reviewer evaluations, and provides feedback that is actionable. When building a scientific and technical review process, we seek to balance and adhere to six core review principles. These principles help guide the design and implementation of each review, and shape the final outputs:

- **Scientific rigor:** the process must yield an evaluation of whether scientific and technical components contained within products are valid, accurate and thorough.
- **Transparency:** given the context for the review, the process must include the appropriate level of information disclosure and openness in order to facilitate social recognition and accountability.
- **Legitimacy:** the process must yield an output that is viewed as authoritative in the eyes of scientific community, the requesting agency, and other constituents.
- **Credibility:** the process will seek to be unbiased and incorporate the best available science.
- **Salience:** the process will consider the most relevant scientific information while balancing management needs and timelines.

¹ For the full South Ellwood Field Project description, see section 2.0 of *Notice of Preparation of a Draft Environmental Impact Report and Notice of Public Scoping Meeting*: http://www.slc.ca.gov/Info/Reports/South_Ellwood/NOP.pdf

- **Efficiency:** the process will be as cost-effective as possible, and utilize time, resources, and effort in a proficient manner to create the most robust output possible.

Review Process

The review will take place from October through January 2015, with delivery of the summary of review outcomes to CSLC expected by January 2015. A timeline and summary of each task is provided below.

Approximate Timeline

	2015				
Milestone	September	October	November	December	January
TASK 1: Review Preparation					
Scope and process development (~2-3 weeks)	X	X			
Assemble Review Committee (~2-3 weeks)	X	X			
CSLC delivery of project document(s) to Ocean Science Trust		Late October			
TASK 2: Conduct Review					
Reviewer Assessment: Develop review instructions, reviewer assessment period (~6-8 weeks)		X	X	X	
Report Development (~4 weeks)				X	X
Final Delivery of Results to CSLC					X

Task 1: Review Preparation

Scope and Process Development

Prior to engaging reviewers, we work closely with CSLC in a series of remote planning meetings to develop and formalize a review scope. The review scope identifies the charge to reviewers and the scientific and technical issues on which CSLC would like feedback, and specifies the roles and responsibilities of each party. Based on the scoping exercise, we develop a proposed review process (this document) for eliciting scientific and technical feedback. The review scope and process documents articulate shared expectations for the review at the outset and are made publicly available on our [website](#).

Assembling a Review Committee

Reviewer Selection

Ocean Science Trust will implement a reviewer selection process to assemble a review committee composed of **three external scientific experts**. Ocean Science Trust will consult with and accept reviewer recommendations from the Ocean Protection Council Science Advisory Team (OPC-SAT), CSLC, as well as Ocean Science Trust's own professional network among the academic and research community. Membership may include experts from academia, research institutions, and government agencies as appropriate to deliver balanced feedback and multiple perspectives.

Reviewers will be considered based on two key criteria:

- **Expertise:** The reviewer should have demonstrated knowledge, experience, and skills in one or more of the following areas:
 - Oil and petroleum exploration; biogeochemistry of hydrocarbons
 - Coastal and marine sedimentology and stratigraphy
 - Coastal zone evolution and development; shoreline processes, coastal hazards and engineering
 - Seafloor mapping and geomorphology
- **Conflict of Interest:** Reviewers will be asked to disclose any potential conflicts of interest to determine if they stand to financially gain from the outcome of the process (i.e., employment and funding). The reviewer should be independent from the generation of the product under review, free from institutional or ideological bias regarding the issues under review, and able to provide an objective, open-minded, and thoughtful review in the best interest of the review outcome(s). In addition, the reviewer should be comfortable sharing his or her knowledge and perspectives and openly identifying his or her knowledge gaps. Conflicts will be considered and may exclude a potential reviewer's participation.

Final selections for the reviewers will be made by the Ocean Protection Council Science Advisor (Ocean Science Trust Executive Director).

Reviewer Anonymity

Reviewer names will be kept anonymous to CSLC and public throughout (i.e., a single blind review). Given that the assessment will focus on key scientific and technical elements (and not on management or regulation), maintaining reviewer anonymity will encourage unbiased and candid input, as well as ensure this review is conducted in a timely and efficient manner.

Task 2: Conduct Review

Reviewer Assessment

CSLC will be asked to deliver all materials for review, along with any background information, to Ocean Science Trust in Word documents (with line numbers where feasible). Ocean Science Trust will work in collaboration with CSLC to develop review instructions and guiding questions for reviewers that focus their efforts on the appropriate scientific and technical aspects of the work product (see *Review Scope*).

We provide reviewers with:

- the project document(s) and any supporting materials
- review instructions
- review scope and process documents

Reviewers will be asked to prepare individual written responses based on guiding questions in the review instructions. We request that reviewers support their comments, positive or negative, with specific evidence and suggestions for improvement, and identify within the project documents where additional relevant sources of information could be integrated. In addition to their direct responses to specific questions, reviewers will be asked to provide specific in-text comments directly on the project document(s) in the form of “track-changes.”

Report Development

Ocean Science Trust will organize reviewer assessments into two review outputs to be provided to CSLC:

1. A brief public summary of the review process and resulting reviewer assessments, intended for inclusion in the EIR documentation. This summary will also be made available on the Ocean Science Trust website upon completion of the review.
2. A technical review report for use by CSLC in the EIR consideration and permit decision-making processes. This report will include technical details from the reviewers, including in-text comments on the draft, as well as responses to guiding questions from the review instructions. We acknowledge that reviewers may provide recommendations beyond the given charge; such recommendations will be honored and represented in the final report.

Contact Information

- **For information related specifically to the scientific review process:** Hayley Carter, Project Scientist, Ocean Science Trust (hayley.carter@calost.org)
- **For information related to the EIR, and other management inquiries:** Eric Gillies, Asst. Chief, Division of Environmental Planning and Management, California State Lands Commission (eric.gillies@slc.ca.gov)