# CALENDAR ITEM 80

A 35 08/19/15 W 26911 S. Curran S 18 S. Blackmon

# CONSIDER AUTHORIZING COMMISSION STAFF OR ITS AGENTS TO CONDUCT INVESTIGATION AND ASSESSMENT ACTIVITIES REGARDING THE SUMMERLAND FIELD BECKER ONSHORE WELL, SUMMERLAND BEACH, SANTA BARBARA COUNTY

#### PARTY:

California State Lands Commission 100 Howe Avenue, Suite 100-South Sacramento, CA 95825-8202

#### **BACKGROUND:**

The Summerland Oil Field was developed in an area of naturally occurring oil and gas seeps in the late 1890s, first from onshore and then from piers that extended into the Pacific Ocean at Summerland in Santa Barbara County. The field was the first offshore oil development in the United States. Virtually no records exist regarding the drilling and abandonment of these wells. When production ceased to be economical in the early 1900s, operators left many of the wells and piers to deteriorate. To the extent operators performed well abandonments, they used procedures that do not meet current regulatory requirements. Due to natural seeps and/or leaks from these improperly abandoned legacy wells oil sheens have intermittently been observed on the beach and in the water near Summerland. For example, oil seepage occurring from the area around one particular well, the "Becker onshore well," becomes visible approximately 10 days every year (discussed below).

In 1898, John Treadwell, a mining engineer, who appears to have had a close relationship to the Southern Pacific Railroad Company, built one of the piers, dubbed the "Treadwell Pier." As the Pier was being constructed, oil wells were also being drilled. By August 1899, 18 wells had been drilled, with the average production of each well between two and four barrels of oil per day. The Pier had multiple purposes, serving as a dock for loading and unloading vessels to transfer materials to shore or the rails of the Southern Pacific railroad, and as a wharf that could anchor oil wells drilled into the ocean floor. When the Pier was completed, it extended 1,230 feet from the shore and supported 20 wells. Most

historical maps and documents from the early 1900s refer to the Treadwell Pier as the Southern Pacific Company's Pier and wells.

## STATE LANDS COMMISSION INVOLVEMENT:

The hundreds of oil wells drilled in waters offshore Summerland in the late 19<sup>th</sup>/early 20<sup>th</sup> centuries were drilled without state authority and while trespassing on state property. Although the state received no revenues from the wells, the California State Lands Commission (Commission or CSLC) has since spent significant time and resources to ameliorate legacy coastal hazards, including remnants of piers, oil wells and pilings, and old pipelines (see <a href="https://www.slc.ca.gov/Programs/Coastal\_Hazards.html">www.slc.ca.gov/Programs/Coastal\_Hazards.html</a>). The CSLC staff has taken the following actions associated with historic Summerland oil development.

Late 1960s	CSLC staff conducted a Summerland Beach Cleanup Project, which included the abandonment of 60 wells, including the Treadwell Number 10 well, with short (about 5 feet) cement plugs and cutting off of the casings.
1975	Because of oil seepage near the previously abandoned Treadwell Number 10 well, CSLC staff re-abandoned the well using a 6-foot-diameter concrete filled tub to cap the well at the seafloor.
1993	CSLC staff abandoned three wells on Summerland Beach as part of its Summerland Well Abandonment Project. The objective of the program was to properly abandon wells that were not properly abandoned in 1907. The three wells differed from the Treadwell Number 10 well because they were located on the Summerland Beach and were exposed at low tide and submerged about 3 feet at high tide. The wells were abandoned using a rig mounted on a 20-foot-high steel structure ("Surf Sled Vehicle"). The project was completed for approximately \$863,000. The oil seepage from natural seeps in the near shore waters continues at Summerland Beach.
1994	The Commission, Office of Spill Prevention and Response (OSPR), and offices of U.S. Senator Feinstein and State Representative Jack O'Connell requested U.S. Coast Guard (USCG) Oil Spill Liability Trust Fund revenues to re-examine the area and determine if old abandoned wells in the area might be responsible for some of the continuing oil seepage. The USCG conducted a two-phase study of the Summerland area seeps.  • Phase 1 was a geophysical/ hydrographic sight survey that identified 43 potential targets for further investigation. A Summerland area map describing the oil well casings, oil seeps, and wharf and pier piling type hazards was developed from the survey.

	• During phase 2, seven sites were identified to require excavation to determine seep sources; the other sites were identified as a variety of metal wrapped piles from old piers and other remaining infrastructure that was either below the mudline or did not represent a threat. After spending about \$215,000 on the study, the USCG determined that only one well, called the "Becker well," could positively be identified as an oil seep source (originally drilled from the long since removed Becker Pier) and which, when excavated, leaked approximately ½ barrel of oil. Additionally, prior surveys noted that the Becker well may leak up to ½ barrel of oil per day when actively seeping and the seepage becomes visible approximately 10 days every year.
2011	After oil was observed leaking on Summerland Beach at very low tide, CSLC staff, along with staffs from the Santa Barbara County Office of Emergency Services and Planning and Development Department, Energy Division, visited the beach on the next low tide date (April 12, 2011). Oil was not present on this visit, but the location coincided with the onshore Becker well referenced in the 1994 USCG study.
2013	CSLC staff met in August with staff from the offices of Senator Hannah-Beth Jackson and Assembly Member Das Williams, the Summerland Citizen's Association (mainly comprised of Summerland residents), and agency staffs (USCG, OSPR, Santa Barbara County, and University of California, Santa Barbara). One positive outcome was the development of a user-friendly, online incident reporting form for Summerland residents to report well leakage and seep activity (see Summerland Beach Seep/Sheen Report at <a href="https://www.slc.ca.gov/Forms/Coastal Hazards/SummerlandSeepRptFrm.pdf">www.slc.ca.gov/Forms/Coastal Hazards/SummerlandSeepRptFrm.pdf</a> ). Residents were trained to collect Global Positioning System (GPS) measurements for site-specific incidents such as fresh oil on the beach from the Becker well. CSLC staff maintains this database, and 30 incident reports have been received in the last 2 years.

#### **RECENT EVENTS:**

Fresh oil surfacing through the sand on Summerland Beach has occurred as recently as April 2015. In April, CSLC staff was provided with GPS data, taken using a commercial grade Trimble GPS unit, identifying the location where the oil surfaced on the shoreline. However, because the Becker onshore well casing is still buried, and the GPS measurement was taken on the oil seepage as it leaked onto the beach sand, CSLC staff needs to verify the actual location of the buried casing. To accurately locate the well casing, for future remediation efforts, the casing needs to be excavated, the location needs to be verified, and additional information needs to be collected regarding the condition of the well.

## PROJECT DESCRIPTION:

CSLC staff propose to conduct the following activities to investigate and assess the Becker onshore well. The well site is in the surf zone in 3 to 4 feet of water so the site can only be accessed from the beach at extremely low tide. The next minus tides (lower than 0 feet) to occur in Santa Barbara County in Fall 2015 are a -0.1 foot tide on September 30, at 6:17 PM, a -0.7 foot tide on October 29, at 6:05 PM (followed by a -0.4 foot tide on October 30 at 7:00 PM), and a -0.1 foot tide on November 12, at 4:08 PM (followed by a -0.2 foot tide on November 13 at 4:47 PM). The following steps represent a Phase 1 effort until additional funding is obtained to undertake the complete Becker well abandonment project. This project has several parts and the outcome of each part determines the next steps to be undertaken.

- Drive a backhoe and/or excavator onto the beach to the estimated Becker onshore well location while the tide is receding and the well casing becomes less covered during the low tide cycle. Primary access for the backhoe and/or excavator equipment will be the County road located south approximately 0.5 mile away from the site.
- In order to determine the best method to cap or remediate the well, the
  well site needs to be excavated to uncover the Becker well casing, which
  may be buried by as much as 5 to 8 feet of beach sand. The well casing
  area will be excavated several feet down around the top of the casing.
  This will enable CSLC staff to: (1) inspect the condition of the exposed
  well casing; (2) take measurements of the casing circumference and
  diameter; and (3) obtain a new commercial grade Trimble GPS
  measurement on the exposed well casing.
- Mark the exposed well casing with a metal stake driven along the outside and attach a buoy. This will make the site location visible even when under water the next time the well is uncovered naturally or excavated.

 As the tide migrates landward, remove equipment from the beach and allow the site to be covered naturally. A contingency has been built in to allow two separate attempts on consecutive days.

Staff has concluded that the proposed project falls within one or more classes of projects that have been determined not to have a significant effect on the environment, pursuant to the State California Environmental Quality Act (CEQA) Guidelines (§ 15300). Further, for the following reasons, staff believes none of the exceptions in section 15300.2 applies because there is no reasonable possibility that a significant impact could occur:

- Marine Resources, Water Quality, and Hazards: Equipment staging areas shall be identified which are located at least 100 feet from any water body or wetlands. The contractor shall maintain spill containment and clean-up materials such as absorbent pads on-site during the assessment activities for any oiling that may occur. All staging, fueling, and maintenance of vehicles shall be conducted in designated staging areas. Equipment shall be provided with drip pans nightly to prevent soil contamination during periods of inactivity. Any soil contaminated by fuels or petroleum-based products shall be immediately removed and placed in U.S. Department of Transportation (DOT)-approved drums and properly disposed in accordance with state and federal regulations. All beach excavations shall be naturally backfilled by ocean waves or backfilled with clean, native materials to the extent feasible if needed. The Project is not located on a site which is included on a list of hazardous materials sites (per the provisions of Gov. Code, § 65962.5, commonly referred to as the "Cortese List").
- <u>Sensitive Habitats and Species:</u> The proposed activities would occur after mid-September, which is after the breeding season of any sensitive bird species that could occur in the area and outside the spawning period of any potential grunion spawning habitat. In addition, a biological monitor will be designated by the CSLC staff to be on-site during the assessment activities.
- Noise and Visual Resources: Since the assessment activities would be temporary and short term and limited to low tides, minimal noise and visual impacts are expected. If temporary night lighting is needed, lights shall be shielded and aimed downward to minimize glare.<sup>1</sup>

-

<sup>&</sup>lt;sup>1</sup> The sun sets on the low tide dates as follows: September 30, 6:44 PM; October 29, 6:08 PM; and November 12, 4:56 PM.

 <u>Public Access:</u> All work activities will be clearly delineated by safety fencing and/or an on-site monitor to direct individuals around the work area. When equipment must be left on the beach overnight, it must be stored above the tide and will not block public use of the beach. No loss of coastal access would occur due to the assessment activities.

## OTHER PERTINENT INFORMATION:

1. The staff recommends that the Commission find that this activity is exempt from the requirements of CEQA as a categorically exempt project. The project is exempt under the following classes: Class 30, Minor Actions to Prevent, Minimize, Stabilize, Mitigate or Eliminate the Release or Threat of Release of Hazardous Waste or Hazardous Substances; California Code of Regulations, Title 14, section 15330; Class 4, Minor Alterations to Lands; California Code of Regulations, Title 14, section 15304; and, Class 6, Information Collection; California Code of Regulations, Title 14, section 15306.

Authority: Public Resources Code section 21084 and California Code of Regulations, Title 14, section 15300.

2. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code section 6370 et seq., but such activity will not affect those significant lands. Based upon the staff's consultation with the persons nominating such lands and through the CEQA review process, it is the staff's opinion that the project, as proposed, is consistent with its use classification.

#### **EXHIBIT:**

A. Becker Well location in the Summerland Oil Field

## **RECOMMENDED ACTION:**

It is recommended that the Commission:

#### **CEQA FINDINGS:**

Find that the activity is exempt from the requirements of CEQA pursuant to California Code of Regulations, Title 14, section 15061 as a categorically exempt project, Class 30, Minor Actions to Prevent, Minimize, Stabilize, Mitigate or Eliminate the Release or Threat of Release of Hazardous Waste or Hazardous Substances; California Code of Regulations, Title 14, section 15330; Class 4, Minor Alterations to Land; California Code of Regulations, Title 14, section 15304; and, Class 6, Information Collection; California Code of Regulations, Title 14, section 15306.

## **SIGNIFICANT LANDS INVENTORY FINDING:**

Find that this activity is consistent with the use classification designated by the Commission for the land pursuant to Public Resources Code section 6370 et seq.

## **AUTHORIZATION:**

Authorize the Commission staff or its agents to locate, excavate, and assess the condition of the Becker Onshore Well, located in the Summerland Oil Field, Santa Barbara County.

