

**INFORMATIONAL  
CALENDAR ITEM  
C56**

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**STAFF REPORT ON THE MONITORING FOR  
POSSIBLE SUBSIDENCE AND SEISMIC HAZARDS,  
LONG BEACH UNIT, WILMINGTON OIL FIELD,  
LOS ANGELES COUNTY**

**PARTY:**

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

**BACKGROUND:**

The City of Long Beach conducts surveys twice each year, in May and November, for the purpose of monitoring changes in ground elevation of the Long Beach tidelands and adjacent areas. The Commission's staff reviews and interprets the benchmark elevation data from these semi-annual surveys. This report covers benchmarks surveyed in May 2002 and compares elevation changes that have occurred since completion of the previous survey in November 2001.

Minor elevation changes occurred throughout the Harbor District. The harbor area south of Seaside Boulevard remained stable or experienced slight elevation gains of up to 0.07 feet (0.84 inches). The piers north of Seaside Boulevard decreased in elevation by up to 0.05 feet (0.60 inches). These minor gains and losses in elevation are the combined effects of changes in water injection rates, well realignments, fill compaction and stabilization of Harbor redevelopment areas. A localized elevation loss of 0.07 feet (0.84 inches) on Pier D was the result of pile driving and dewatering at the Long Beach Unit Power Plant construction site.

CALENDAR ITEM NO. C56 (CONT'D)

Elevation losses of up to 0.15 feet (1.8 inches) continued over the curtailed Tar steam flood area adjacent to Henry Ford Avenue at the western part of the field. The steam flood, initiated in the 1980's, was terminated in 1999 because of negative surface elevation impact due to compaction of shales by the steam.

Alamitos Bay, Naples Island and the Central City remained relatively stable except for elevation gains of up to 0.05 feet (0.60 inches) on the east. Similar elevations increases occurred for the oil islands. The Civic Center experienced elevation losses of up to 0.07 feet (0.84 inches) west of Magnolia Avenue and north of Ocean Boulevard. These were an eastward extension of the northern Harbor elevation losses.

The results of the next regular elevation survey, to be conducted in November 2002, will be reported to the Commission after the data have been received and analyzed by the Commission's staff.

No seismic event originated within the Long Beach Unit during the review period November 2001 to May 2002. The Commission's staff will continue to advise the Commission of any change in seismic activity in the vicinity of the Long Beach Unit.

**EXHIBIT:**

- A. Location Map

**PERMIT STREAMLINING ACT DEADLINE:**

N/A