

Recent Appearance of Tar Balls on Local Beaches

Issued by the U.S. Coast Guard / Department of Fish and Game

On January 28, 2008, tar balls were found on shorelines from Monterey County to San Francisco County. Because of the ongoing cleanup of the November 7, 2007 M/V Cosco Busan oil spill, the US Coast Guard and Department of Fish and Game mobilized over 75 personnel to cleanup the impacted shoreline over a three-day period.

Chemical analysis, known as “fingerprinting,” indicated that the tar balls were characteristic of natural seeps of oil and tar derived from the Monterey Formation, an oil-bearing rock which is the source of many natural seeps offshore the California coast. This is a natural event and may not warrant further cleanup efforts since it is impractical to cleanup a natural event that occurs regularly off the California coastline (more so in southern California). Aside from being an aesthetic nuisance, the tar balls are weathered and at this stage pose minimal risk to the environment.

U.S. Geological Survey (USGS) scientists working in collaboration with the Minerals Management Service have spent more than 10 years fingerprinting over 600 samples of tar and oil from natural seeps, offshore oil and gas platforms, and California coastal locales. Their results show that virtually all the tar balls that wash up on the California coast come from natural seeps of oil and tar derived from the Miocene Monterey Formation—a rock unit that is also the source of much of the oil produced from California’s oil wells (both onshore and offshore). Natural seeps occur both onshore (the La Brea Tar Pits are a famous example) and offshore. Most of the known sea-floor seeps are in the Santa Barbara Channel in southern California, and tar balls (to the surprise of unsuspecting tourists) are common year-round on many beaches in that area.

Tar balls that appear on central California beaches during the winter months mostly originate in southern California seeps, as evidenced by their chemical characteristics. These tar balls are believed to be carried north by the Davidson Current, which flows north along the California coast when winter storms bring southwesterly winds to the region. Unusually large numbers of tar balls sometimes appear on central California beaches after a series of storms, as occurred in January 2008 and in February 2007.

Beachgoers who find tar balls are offered the following tips:

- While tar balls may seem firm on the outside, if broken open, they will reveal a sticky interior which can quickly soil your hands and clothing, so if found, simply leave them alone.
- Avoid direct skin contact with the oil.
- If you get oil or tar balls on your skin, wash it off with soap and water.
- Take precautions, such as washing your hands before eating, so you don't accidentally swallow the oil.
- If you get oil on clothing, wash it in the usual way.
- There is no need to use harsh detergents, solvents or other chemicals to wash oil from skin or clothing, and the use of such materials is discouraged.
- Don't burn trash or driftwood contaminated with oil.

Oil spills can be reported to the U.S. Coast Guard National Response Center at 800-424-8802 or the California Office of Emergency Services at 800-645-7911. Pollution investigators will be notified immediately to respond appropriately.

For additional information, visit the USGS Web site on “Natural Oil and Gas Seeps in California” at URL <http://geomaps.wr.usgs.gov/seeps/>.

Additional information can be obtained by calling the Department of Fish and Game, Office of Spill Prevention and Response during normal business hours Monday – Friday at (916) 445-9338

