

**CHARNOCK INITIAL
REGIONAL RESPONSE ACTIVITIES (CIRRA)
Charnock Sub-Basin; Los Angeles, California
Task 14 Interim Restoration Measures**

**Analysis of the Performance of the Sepulveda-Venice
Subregional Groundwater Remediation
Systems**

Submitted to:

California Regional Water Quality Control Board,
Los Angeles Region

U.S. Environmental Protection Agency,
Region IX

On behalf of:

Shell Oil Company
Shell Oil Products Company
Equilon Enterprises LLC

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1.0 INTRODUCTION

This report has been prepared by ENVIRON International Corporation on behalf of Shell Oil Company, Shell Oil Products Company, and Equilon Enterprises LLC (Shell) in partial fulfillment of the work required by Task 14 of Attachment A-Scope of Work (SOW) to the Los Angeles Regional Water Quality Control Board (LARWQCB) and the United States Environmental Protection Agency (USEPA) (herein collectively referred to as the “Agencies”) under Stipulated Agreement No. 00-064 and the Administrative Order on Consent, USEPA Docket No. RCRA 7003-09-2000-0003 (SA/AOC). The scope of the analyses presented in this report has been further defined in a letter to Shell from the Agencies dated August 13, 2001, and a letter of reply from ENVIRON dated September 10, 2001.

The purpose of the analyses presented in this report is to evaluate the effectiveness of the current ground water remediation systems operated by Shell and Exxon-Mobil in reducing the mass of gasoline residuum¹ and related soluble gasoline constituents, which have affected ground water quality in the Sepulveda-Venice subregion of the Charnock Sub-Basin. Based on these analyses, a forecast of the future progress in further reducing constituent concentrations in the Shallow and Upper Silverado aquifers is presented.

¹ Gasoline residuum is residual non-aqueous phase gasoline trapped in the pores of saturated soils below the water table.