



**OPERATIONS AND MAINTENANCE PLAN  
REGATTA BOULEVARD  
MARINA BAY PROJECT  
RICHMOND, CALIFORNIA**

This plan has been prepared on behalf of Richmond Community Redevelopment Agency (Agency) by PES Environmental, Inc. (PES) as a plan for inspecting and maintaining the cap located on a portion Regatta Boulevard within the North Shore Areas of the Marina Bay Project in Richmond, California (Plate 1). Regatta Boulevard is a public roadway that generally runs to the east and west along the northern extent of the Marina Bay project. The capped portion of Regatta Boulevard is bounded on the north by property used for commercial purposes, and on the east, south, and west by residential areas (Plate 2).

An area of encapsulated hydrocarbon-bearing soil, encompassing a total of approximately 5,581 square feet (ft<sup>2</sup>), is located beneath Regatta Boulevard (Plate 3)<sup>1</sup>. One test pit in Area L identified total petroleum hydrocarbons as diesel (TPHd) and total oil and grease (TOG) at 53 and 2,900 parts per million (ppm), respectively. This soil was within the proposed future alignment of Regatta Boulevard and was therefore left in place for in-situ encapsulation during construction of Regatta Boulevard<sup>2</sup>. The cap was completed when the west-bound lane and median strip of Regatta Boulevard was constructed, by placing road base and the overlying asphaltic concrete roadway. A map depicting the approximate location of the cap and the underlying hydrocarbon-bearing soils are provided on Plate 3. Exhibit A to the Covenant to Restrict Use of Property<sup>1</sup>, provides a more detailed description of the location of the subject area.

The goal of the inspection and maintenance actions is to maintain the integrity of the cap. To accomplish this goal, this plan: (1) details the frequency and procedures for routine operation and maintenance; (2) documents reporting requirements; and (3) details the procedures to be implemented for non-routine operation and maintenance.

### **ROUTINE OPERATION AND MAINTENANCE**

Annually, the site owner will complete inspection and maintenance activities during the month of February (unless an extension of time is obtained from the Department of Toxic Substances Control [DTSC] or its successor):

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<sup>1</sup> Covenant to Restrict Use of Property, Environmental Restriction, Regatta Boulevard Right-of-Way (northwest of Parcel L), Marina Bay Redevelopment, Richmond, California dated March 21, 2005.

<sup>2</sup> Harding Lawson Associates, 1993. Final Remedial Action Plan, Marina Bay Development, Richmond, California. June 25.

- (1) The roadway asphalt of the cap area will be inspected by a California-registered civil engineer for signs of cracking or other degradation, which might compromise the integrity of the cap. Field notes describing the observations made at the time of inspection will be prepared and will detail the pavement conditions; and
- (2) Cracks or other degradation of the asphalt will be patched or otherwise repaired within 30 days of the inspection.

## **REPORTING**

### **Annual Reporting**

Annually, the site owner will submit a report to DTSC within 45 days of the inspection. The report will include the field inspection notes and a description of repairs.

### **5-Year Reporting**

Every 5 years a 5-year review report will be prepared by a California-registered civil engineer. Ninety days before the end of the 5-year period, the site owner will submit a workplan to DTSC describing how the 5-year review will be conducted. The 5-year review report will be submitted to DTSC 30 days after approval of the workplan.

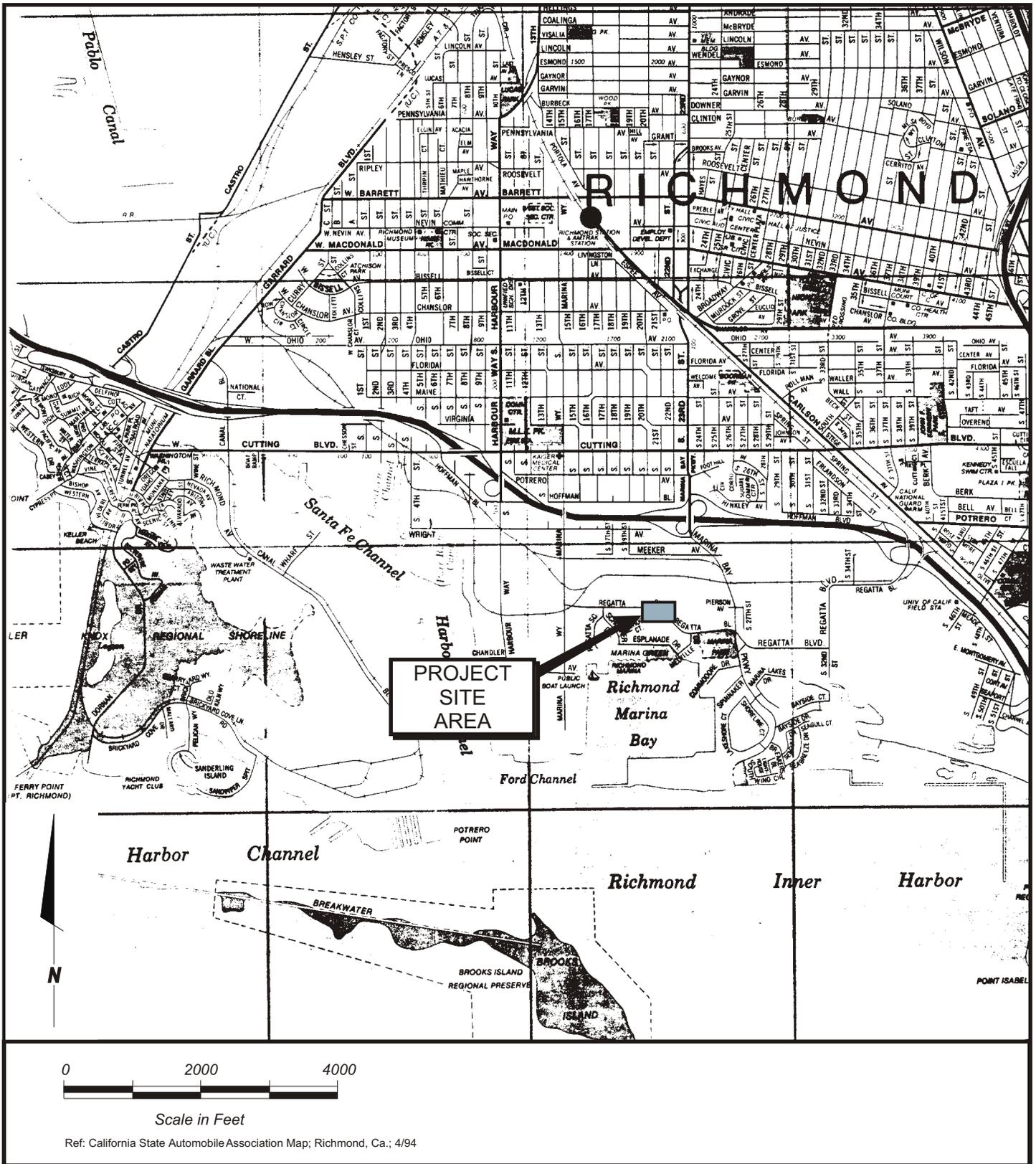
The report will describe the inspection and maintenance activities that were conducted over the past 5 years. The report will include, at a minimum, a review of the status and effectiveness of the cap and if necessary, make recommendations to modify the cap or cap design. A copy of field inspection notes for the prior 5-year period will be included in the report.

## **NON-ROUTINE OPERATION AND MAINTENANCE**

This plan is intended to describe only those procedures for routine inspection and maintenance of the cap. If it is determined by the site owner that major cap repairs or other subsurface construction activities are needed at the portion of Regatta Boulevard that is subject of this plan, and that will result in penetration of the cap to the underlying petroleum hydrocarbon-bearing soil, then: (1) all applicable regulations to provide protection of worker safety and health will be followed; (2) a Soil Management Plan including a Health and Safety Plan will be submitted to DTSC for review and approval prior to any construction activity; and (3) DTSC will be notified prior to commencement of work.

Attachments: Plate 1 – Site Location Map  
Plate 2 – Vicinity Map  
Plate 3 – Site Plan

**ATTACHMENTS**



Ref: California State Automobile Association Map; Richmond, Ca.; 4/94



**PES Environmental, Inc.**  
Engineering & Environmental Services

**Site Location Map**  
Regatta Boulevard O&M Plan  
Marina Bay Project  
Richmond, California

PLATE  
**1**

