SITE DESCRIPTION AND HISTORY

The Petaluma Quarry (the “Site”) is composed of two properties on either side of Petaluma Boulevard South: the quarry property is approximately forty-three acres and located on the south side of Petaluma Boulevard at 1600 Petaluma Boulevard South; the landing property is approximately 3½ acres and located on the north side of Petaluma Boulevard at 1500 Petaluma Boulevard South. The area surrounding the Site includes rural residential, heavy industry, Highway 101, and the Petaluma River. The Site has been developed for use as a quarry since at least the early 1900s; rock mining operations ceased in about 1993. The Site currently supports aggregate storage, classification, sale, a settling pond, and asphalt production activities. Offices, an asphalt plant, settling ponds, various above ground storage tanks (ASTs), and concrete recycle piles currently occupy the Site. Historic Site features included a vehicle and equipment maintenance shop, wash plants, crushing plants, a brick plant, reduction plants, asphalt plants, concrete recycling plants, and settling ponds. The principal locations where operations occurred moved over time as the quarry developed and grew.

PROPOSED REDEVELOPMENT

Redevelopment plans for the Site include residential units consisting of single-family homes, duplexes and town homes, live-work lofts, several parking lots, and appurtenant streets. The asphalt batch plant is currently operating on the quarry property but is scheduled to be relocated from the quarry to the landing property in September 2005 and will operate there for at least one year. As a beneficial result, the asphalt batch plant will be available to recycle the petroleum hydrocarbon-impacted soil at the Site (see discussion below).

FINDINGS OF PREVIOUS INVESTIGATIONS

Soil and Groundwater Investigations - The Site has been the subject of various soil and groundwater investigations over the past two years. As a result of historic on-Site activities, the soil in limited areas of the Site has been impacted by petroleum hydrocarbons including total petroleum hydrocarbons (TPH) as diesel (TPH-d) and motor oil (TPH-mo). Testing for a broad range of other organic constituents and metals has not detected chemicals at concentrations above...
background or action levels with the exception of two soil samples for nickel. Site investigations have revealed that the area most significantly impacted by petroleum hydrocarbon is in the vicinity of the existing asphalt batch plant. Site investigations also revealed minor petroleum hydrocarbon impacts to soil at four other locations on the quarry property and three locations on the landing property.

Low levels of petroleum hydrocarbons have also been detected in shallow groundwater on the landing property and in the northwestern portion of the quarry property. However, the detected concentrations in groundwater are below levels of concern for residential development when compared to San Francisco Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (ESLs). Due to the location of these detections in groundwater, they are thought to be from an off-site source.

**Naturally Occurring Asbestos Assessment** - A naturally-occurring asbestos (NOA) assessment was conducted in January 2005 to assess whether NOA exists at the Site. Out of eighteen samples analyzed, chrysotile asbestos was detected in one rock sample and in one soil sample collected from a serpentinite outcrop located on the southeastern slope of the central pit. However, development in this area will result in the burial of this serpentinite outcrop under approximately 25 (at the lowest elevation of the outcrop) to 65 feet (at the highest elevation of the outcrop) of fill. A Deed Restriction that will be prepared separately after remediation activities have been completed on the quarry property will prohibit excavation into this NOA-bearing serpentinite body. Because of the potential for encountering NOA from serpentinite rock bodies during cut and fill operations, a Site-specific Asbestos Dust Mitigation Plan was developed for the Site. The Plan was approved by the BAAQMD in a letter dated May 12, 2005. The Plan has specific guidelines to control the emissions of dust during construction activities. The primary method of controlling dust will be through the application of water.

**PROPOSED REMEDIAL ACTIONS**

Residential land use ESLs developed by the SFRWQCB have been proposed as remedial cleanup goals for contaminated soil at the Site. These values are designed for shallow soils within 3 meters of ground surface at residential sites where groundwater is not considered a current or potential drinking water resource.

A Draft Final Remedial Action Plan (RAP) has been prepared for the quarry property that discusses proposed soil excavation activities in the hydrocarbon-impacted areas. A separate RAP will be prepared for the landing property when it is developed in the future. As discussed in the Draft Final RAP, sidewall and bottom samples will be collected from the excavations to confirm removal of the petroleum hydrocarbon impacted soil. The excavated material will be recycled in the asphalt batch plant. To the extent that some soil may not be recyclable, that soil will be disposed in a licensed Class II or III landfill. Excavation and confirmation sampling will continue until analytical results document that soil exceeding the remedial cleanup goals has been removed, or the excavation has reached refusal in bedrock. In addition, the top few inches (approximately two inches) of soil on all roadways will be scrapped off and either be re-used in the production of asphalt or disposed at a licensed Class II or III landfill. This will address minor pieces of asphalt and incidental oil spillage that may be present in roadways.

To address the issue of nickel in soil at one location, an additional investigation of the extent of nickel in soil will be performed and if necessary, soil remediation will be conducted using residential land use ESLs as the remedial cleanup goal.

A Draft Final Risk Management Plan (Draft Final RMP) has been prepared for the quarry property to identify general requirements and guidelines for the management and disposal of soil and groundwater with chemicals at concentrations above action levels that could potentially be encountered during construction activities. The Draft Final RMP will also address the possibility of encountering pollution during subsurface activities after development of the quarry property. A deed restriction will also be developed that will restrict extraction of groundwater from the Site, prohibit excavation into the NOA-bearing serpentinite body, and reference the RMP in the event that contaminants are discovered on the Site after remediation.