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Subject: Proposal to Revise Target Action Levels for Petroleum Hydrocarbons in Soil At Del Monte Plant 35 in Emeryville

Background

The Draft Remediation Plan for the Del Monte Plant 35 Property in Emeryville, California, dated April 25, 1994, proposed a target cleanup level for total petroleum hydrocarbons (TPH) in soil of 100 mg/kg. The target cleanup level was to be used to determine the lateral and vertical extent of soil to be excavated during remediation activities at the property; soil with more than 100 mg/kg TPH would be excavated and disposed of offsite. The 100 mg/kg criteria also applied to over-excavated material: soil excavated that contained less than 100 mg/kg TPH could be left onsite and either returned to the excavation or graded into the site surface.

The remediation activities planned at the time the Draft Remediation Plan was submitted involved six areas where analytical results of soil samples indicated that TPH exceeded 100 mg/kg. Three of these areas are beneath the existing cannery building, one area in the proposed Haven Street area on the west side of the cannery building, one area beneath the former storage yard on the West Parcel, and one area was on the East Parcel near the southeast corner of the label room. In addition to these areas identified during investigation activities at the property, the target action level would also apply to soil surrounding the closed-in-place underground tank on the East Parcel. The soil excavations were scheduled to occur following demolition of the site structures.

Current Remediation Status

As you are aware, site demolition activities have been delayed because of delays and uncertainties in the plans for development of the site by Kaiser. Del Monte's demolition plans were contingent on the sale of the property to Kaiser. Although the sale was not final, in May of this year, Del Monte moved forward with a partial demolition of structures on the East Parcel to allow the underground tank and affected soil to be removed. In addition, a nearby area of soil that contained petroleum and chlorinated hydrocarbons was excavated and stockpiled. Stockpiled soil was sampled and found to contain varying levels of TPH-diesel and -motor oil, and trace amounts of ethylbenzene, xylenes, and chlorinated hydrocarbons. Currently, Del Monte is making plans to offhaul soil for disposal at an appropriate offsite facility.

Proposed Revision to TPH Target Action Levels

Del Monte proposes to revise the TPH target action level for site soil to allow for the specific types of petroleum hydrocarbons present in the soil excavated and planned to be excavated. At the time that the TPH target action level was suggested (Fall 1993), 100 mg/kg was a rule-of-thumb commonly applied to such sites, regardless of the real risks of migration to groundwater or exposure to humans or the environment. Target action levels developed today are typically based on a site-specific approach, considering characteristics of the contaminant, threat to groundwater, and planned site use.

The TPH target action levels for soil proposed for the Del Monte Plant 35 site are:

TPH-gasoline	100 mg/kg
TPH-diesel	200 mg/kg
TPH-motor oil	500 mg/kg

These target action levels would be applied to the site as follows:

- Soil containing these constituents at or above the target action level will be excavated and disposed of at an appropriate offsite facility.

- Soil that is excavated, stockpiled, and sampled and found to contain TPH levels below the target action levels will remain on site.

Rationale for Revision

As stated above, the previously approved target action level of 100 mg/kg TPH was a rule-of-thumb commonly accepted without regard to specific site conditions. The proposed revised target action levels are based on the type of petroleum hydrocarbons detected in site soils, the groundwater quality at the site, the planned site use, and potential health risks.

Type of Petroleum Hydrocarbons

Petroleum hydrocarbons detected in samples of site soil are primarily in the form of diesel and motor oil. Low levels of TPH-gasoline and - kerosene (generally less than 50 mg/kg) have also been detected in some samples. Diesel and motor oil are less mobile than gasoline, particularly in the clayey soils present at the Plant 35 property.

Groundwater Quality at the Site

Petroleum hydrocarbons are not present at levels of concern in groundwater beneath the site. Groundwater has been monitored at the site for approximately six years. The ongoing monitoring has been focused on chlorinated hydrocarbons on the West Parcel. In March 1995, samples from the four West Parcel monitoring wells were analyzed for TPH-diesel, TPH-gasoline, and benzene, toluene, ethylbenzene, and total xylenes (BTEX). Only MW-7 had detectable levels of these constituents: TPH-diesel at 0.120 mg/l, TPH-gasoline at 0.190 mg/l, toluene at 0.6 µg/l, ethylbenzene at 1.2 µg/l, and total xylenes at 2.5 µg/l.

Planned Site Use

The Plant 35 property is located in an industrial area of Emeryville. If Kaiser follows through with their plans to construct a medical center, the property will be covered with buildings, pavement, and landscaping. If Kaiser does not construct a medical center as planned, the property will likely be developed for industrial or commercial use, also involving buildings, pavement, and landscaping covering the ground surface.

Potential Health Risks

Detection of TPH in soil is not an indication of a risk to human health. According to Cal EPA's Preliminary Endangerment Assessment Guidance Manual, dated January 1994, TPH values are not useful in a human health screening evaluation. Rather, human health screenings focus on the constituents of petroleum fuels: BTEX, heavy metals, and polynuclear aromatic hydrocarbons (PNAs). Samples of stockpiled soil have been analyzed for these compounds. Only one sample out of 30 contained any BTEX compounds: 0.0073 mg/kg ethyl benzene and 0.0099 mg/kg total xylenes. Two samples of the soil with the

highest levels of TPH-diesel and TPH-motor oil were analyzed for semi-volatile compounds. None were detected, including PNAs. Metals that were detected were at or near typical background levels.

Management of Excavated Soil That Remains Onsite

Soil that has been excavated and then found to contain TPH at levels below the target action levels will be managed as follows:

- Soil with less than 100 mg/kg of TPH-gasoline,TPH-diesel, or TPH-motor oil may be returned to the excavation for backfill.
- Soil with TPH-diesel between 100 and 200 mg/kg and/or TPH-motor oil between 100 and 500 mg/kg may be used as backfill between the ground surface and two feet above the groundwater table.
- Excess soil that cannot fit into the excavations will be graded into the ground surface and compacted after the pavement at the site is demolished. Until then, the excess soil will be stockpiled and covered with plastic.

Del Monte is planning to offhaul soil above these target action level during the next week and would like to know as soon as possible if you concur with the revised target action levels. Please call me if you have any questions or need additional information during your review of this request. I can be reached at (510) 251-2888 ext 2189.

Sincerely,

CH2M HILL

Madeline Wall

Madeline Wall
Project Manager

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