

Environmental Health Services Groundwater Protection Program

2000 Alameda de las Pulgas, Suite #100 San Mateo, CA 94403 Phone:(650) 372-6200 | Fax: (650) 627-8244

smchealth.org/gpp

SENSITIVE RECEPTOR SURVEY

Sensitive receptors are people or other organisms that may have a significantly increased sensitivity or exposure to contaminants by virtue of their age and health (e.g. schools, day care centers, hospitals, nursing homes), status (e.g. sensitive or endangered species), proximity to the contamination, dwelling construction (e.g. basement), or the facilities they use (e.g. water supply well). The location of sensitive receptors must be identified in order to evaluate the potential impact of the contamination on public health and the environment.

A work plan for a receptor survey must propose and justify a search radius from the site, specify the receptors to be identified, and detail how the receptor survey will be performed, and the findings reported. This plan must be detailed enough for GPP staff to evaluate the value of the proposed work and whether it will adequately investigate potential receptors.

The search radius can be justified by evaluating graphs plotting the logarithm of contaminant concentrations versus time and graphs plotting average contaminant concentrations versus distance along the contaminant flow direction providing the plume is stable, adequately assessed, and the registered professional considers the data set sufficient for such analysis (refer to ASTM Designation E1943). The potential existence of wells, groundwater pumping sumps, basements, and sensitive groups and land use should be investigated in detail within at least 500 feet of the site. In addition, review State Department of Water Resources well records and ask local water district and applicable City and County staff if they are aware of any wells within at least 1,000 feet of the site. Recognize the survey area may be increased if future assessment indicates the plume is unassessed, unstable, or has migrated beyond the limits of the previous survey.

The detailed portion of the survey must be performed by visiting the survey area to look for potential receptors and submitting a GPP staff approved questionnaire to the tenant(s) and property owner(s) of each parcel within the approved survey radius. The work plan must include the questionnaire proposed for use. This form also serves to notify potentially affected residents under Proposition 65. Following work plan approval, the approved questionnaire and a stamped envelope addressed to the consulting firm performing the receptor survey are either hand delivered or mailed to the tenant(s) and property owner(s) of each parcel within the approved survey radius. Two weeks later the questionnaire is mailed to all tenants and property owners who did not respond to the initial survey.

The portion of the work plan discussing the contents of the report must specify it will include a base-10 scaled map showing: 1) the parcels within the detailed receptor survey area and their general land use (e.g. residential, commercial); 2) the parcels responding to the receptor questionnaire; and 3) the location and type of identified receptors. This section of the work plan must also indicate the report will: 1) include a table listing the assessor parcel number, property owner name, site address, and survey results for each parcel in the survey; 2) contain a copy of each questionnaire received from the property owners and tenants; 3) summarize the use, construction, and pumping rate of all identified wells; and 4) evaluate the potential impact of the contamination to identified receptors.