The MATES III health risk assessment results are provided in Figure 4.3-1. The location of the Inglewood Oil Field is also shown as a point of reference. This figure indicated that the modeled baseline health risk in the vicinity of the Inglewood Oil Field is in the 600-800 excess cancer cases per million individuals exposed, which is considerably higher than levels that are considered acceptable, which are approximately 10 excess cancer cases per million individuals exposed. The relative risk from the Inglewood Oil Field, or what might be considered the contribution from this facility to the greater regional health risk, are summarized in Section 4.3.1.3.

4.3.1.2 Regional Toxic Air Contaminant Concentrations

A toxic air contaminant is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. Toxic air contaminants are usually present in minute quantities in the ambient air. However, their high toxicity or health risk may pose a threat to public health even at very low concentrations. In general, for those toxic air contaminants that may cause cancer, there is no concentration that does not present some risk. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined and for which the state and federal governments have set ambient air quality standards.

In 1987, the California legislature adopted the Air Toxics "Hot Spots" Information and Assessment Act (or AB 2588). AB 2588 requires facilities to submit an air-toxics-inventory report from which priority scores are calculated. Facilities with a priority score exceeding specific thresholds must provide health risk analysis. If the risk reported in the health risk analysis exceeds specific thresholds, then the facility is required to provide public notice to the affected community. In 1992, the California legislature added a risk reduction component, the Facility Air Toxic Contaminant Risk Audit and Reduction Plan (or SB 1731), which required the District to specify a significant risk level, above which risk reduction would be required. The District began to implement the AB 2588 program beginning in 1988.

Monitoring for toxic air contaminants is limited compared to monitoring for criteria pollutants because toxic pollutant impacts are typically more localized than criteria pollutant impacts. California Air Resources Board (CARB) conducts air monitoring for a number of toxic air contaminants various locations throughout California. The closest CARB toxic air contaminant monitoring location is the North Long Beach site. Table 4.3.1 presents the Annual Toxics Summary for North Long Beach, the maximum concentration data for volatile organic compounds, polycyclic aromatic hydrocarbons and inorganic compounds. The data for volatile organic compounds are for the year 2005; for polycyclic aromatic hydrocarbons the year is 2004; and for all inorganic compounds the data are for the year 2003 except for hexavalent chromium, which is from 2005, the most recent data available from CARB on toxic air contaminants.