THE CITY OF SAN DIEGO

January 14, 2011

Electronic Delivery to: TAlo@waterboards.ca.gov

Tom C. Alo, Water Resource Control Engineer
Regional Water Quality Control Board
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Subject: Comments on Draft Addendum No. 4 to CAO No. R9-2004-0258

Dear Mr. Alo:

The City of San Diego has conducted a review of draft Addendum No. 4 to Cleanup and Abatement Order R9-2004-0258 issued by the Regional Water Quality Control Board San Diego Region (Regional Board) on December 15, 2010. Draft Addendum No. 4 specifies cleanup levels for metals, polychlorinated biphenyls (PCBs), and volatile organic compounds (VOCs) in soils and groundwater at the TDY Industries site at 2701 North Harbor Drive, San Diego, California. The document also references various site documents prepared in support of the identified cleanup levels.

The City is incorporating previous comments letters reiterating our concerns to the Regional Board which include Risk Assessment, Appendix A (April 5, 2010), PCB Characterization Report (April 5, 2010) and Draft Remedial Investigation/Feasibility Study (April 30, 2010).

Scope

Draft Addendum No. 4 states in Finding 2 that the document only addresses the cleanup and abatement of wastes discharged to land at the former TDY site. However, subsequent language in Finding 2 includes the abatement of waste discharges beyond the TDY site to Convair Lagoon and San Diego Bay. Addendum No. 4 appears to include the abatement of any current or future waste discharges from the TDY site to adjacent areas, Convair Lagoon, San Diego Bay, and the cleanup and abatement of waste discharged to land within the TDY property boundaries. The City recommends the focus of Addendum No. 4 be further clarified so that these specific issues addressed under Addendum 4 are understood.

Demolition and Cleanup Activities

Site demolition and cleanup activities described in Finding 4 are limited to the area within TDY's historical property boundaries and does not include any discussion of the storm drains originating on the TDY site that exit the property. If Addendum No. 4 does in fact include waste discharges to Convair Lagoon and San Diego Bay, it is recommended that the Regional Board include the continuation of all storm drain pipes exiting the site.

Onsite Storm Water Conveyance System

Finding 5 describes the presence of four storm drains (60", 54", 30" West, 30" East) discharging to Convair Lagoon, and two storm drains (15" and 30") that discharge to Downtown Anchorage. These storm drains have received storm water, sediments, and, potentially, wastewater from historical TDY operations. Although Finding 5 describes the current and future status of these storm drains within the TDY property boundaries, the current and future status of the offsite continuation of these storm drains is not addressed. In addition to these six storm drains, there is an 18-inch San Diego Bay storm drain shown on Attachment 1 which is not discussed in Finding 5.

It is unclear if offsite storm drain infrastructure has recently been inspected for the presence of sediments that may contain contaminants associated with the TDY property (e.g. PCBs, metals, SVOCs, VOCs, etc.). If this activity has not occurred, it is recommended as part of the remediation of the TDY property that the offsite portions of these six storm drains be inspected, and if necessary, be cleaned of all accumulated sediments.

The City also has concerns regarding the abandonment of these storm drains that continue offsite to San Diego Bay. Will these sections of inactive storm drains between the TDY property boundary and San Diego Bay be abandoned in-place or removed? Our records indicate that these are not City owned storm drains and if abandoned in-place, how will these storm drains be maintained to prevent them from becoming conduits for future contaminant issues? Additionally, it is our understanding that these storm drains have had PCB detections found in them, however, removal of PCBs has not been addressed.

Potential Pathways to Convair Lagoon and Associated Human Health and Ecological Risks

Finding 10a concludes the discharge of groundwater to Convair Lagoon is an insignificant pathway and that the potential for PCBs present in local groundwater to migrate to Convair Lagoon at concentrations exceeding the applicable California Toxics Rule value is minimal. The discussion regarding PCB migration in groundwater adjacent

to Convair Lagoon is based primarily on the results of a qualitative modeling exercise reported in the Site Wide Risk Assessment, Appendix A Section 3.1, pages A-7 to A-10. The screening model's results mainly concluded that PCBs detected in groundwater at this location is unlikely to migrate to Convair Lagoon in 1,000 years and the presence of PCBs is not related to past TDY operations.

The modeling incorporated conservative data derived from a small sample dataset or used default values included in the software's database. The modeling did not consider a range of values for groundwater or subsurface soil parameters applicable to this site, as demonstrated in site boring logs and other available data. Additionally, the modeling results were used in other site documents (including Attachment 6 of this Addendum) to support the assertion that historical PCBs discharges from the TDY site have not impacted groundwater adjacent to Convair Lagoon.

If such modeling results are allowed to support future decisions regarding responsibility for offsite impacts documented at Convair Lagoon, it is recommended that a more quantitative modeling exercise be conducted that includes an appropriate range of model inputs for soils, as well as other contaminants of concern associated with this site such as metals, VOCs, and SVOCs.

The Finding 10b conclusion that e the use of former dredged material as backfill around the storm drains does not create a potential preferential pathway is not warranted unless supported by data collected from a representative cross-section of the storm drain right-of-ways. The City is concerned the finding may be based on potentially faulty assumptions regarding the use of former dredged material as backfill and the absence of representative subsurface data to adequately evaluate this pathway.

Review of TDY boring logs and logs for the area between Convair Lagoon and the TDY site, as well as the TDY site itself show a widespread layering of former dredged material varying in texture ranging from clays and silts to fine and coarse sands and some gravels. The subsequent excavation of this pre-existing material for the installation of these storm drains completely changed the structure and texture of this material. The excavation, stockpiling, and placement back into the excavation thoroughly mixed the various distinct textures into one composite texture that was likely to be significantly different from the undisturbed material.

Subsequent settling of storm drains and pre-existing backfill material over time due to natural processes, the installation of roads and other commercial infrastructure in the vicinity of these storm drains, and the constant fluctuation of groundwater has likely created areas adjacent to the storm drains where a range of distinctly different soil permeabilities and groundwater hydraulic conductivities exist. Previous site studies have documented the presence of seeps in the 60-inch and 54-inch Storm Water Conveyance System (SWCS) that clearly show the movement of local groundwater into the SWCS from adjacent pre-existing backfill material.

It is recommended that the Regional Board consider this pathway a potentially complete migration pathway until such time additional data have been collected that documents

otherwise. It appears that TDY is trying to achieve a reduction in liability for Convair Lagoon and San Diego Bay impacts by getting this pathway removed from consideration without the necessity of collecting the appropriate data.

Ecological Risks

Finding 11 states an ecological risk assessment was not conducted because there are no ecological receptors at the site. It is recommended that Finding 11 include a discussion regarding how the site will be secured from the intrusion of the endangered Least Tern and other species after demolition completion and before the site has been remediated and redeveloped. Exposure of birds to residual contaminants in surface soils and surface water runoff during this timeframe could potentially occur.

While the necessity to evaluate ecological risks in Convair Lagoon is acknowledged in this finding, an assessment of human health risks for this area is not listed. If ecological receptors need to be evaluated in Convair Lagoon, the City recommends the appropriate human and environmental receptors (e.g., recreational or subsistence seafood consumers) also be evaluated.

Technological and Economic Feasibility to Cleanup to Background Conditions

Table 3 of Finding 13 states it is economically infeasible to cleanup various chemical groups to background concentrations. Text in Finding 14 only presents the alternative cleanup levels (ACLs) as an economically feasible solution based on cost curves provided in referenced technical memorandums and Remedial Investigation/Feasibility Study (RI/FS).

It is not clear how the specified PCB remediation costs on a cubic yard or unit mass basis in Appendix H of the RI/FS were derived. Costs were simply listed in column F of the Appendix H tables without any footnotes describing the various costs or consideration included in the unit calculations. These estimated unit costs in conjunction with the estimated cubic yards of soil to be excavated at various cleanup levels were then used to generate the cost curves which support the proposed economically feasible PCB cleanup level. Similar comments can be made for VOCs, Total Petroleum Hydrocarbons (TPH), and metals. The City recommends the San Diego Water Board confirm the underlying unit cost basis for these estimated remediation costs as they are central to the identification of economically feasible ACLs.

Alternative Cleanup Levels

The ACLs listed in Tables 4 and 5 of Finding 14, Tables 6 and 7 attempts to address both currently documented areas of concern, and any areas of concern discovered during site demolition. However, some of the specified ACLs may not be appropriate for a site located near an ecologically sensitive area such as Convair Lagoon. Has the Regional Board considered possible future impacts to groundwater caused by specifying ACLs for some TPH fractions that exceed saturation concentrations in soils? The presence of TPH fractions in soils at concentrations greater than saturation may result in chronic leaching of TPH into local shallow groundwater after site remediation has been completed. Given

this site is less than 400 feet from Convair Lagoon, the Regional Board must consider setting ACLS for TPH in soils below saturation concentrations to minimize the potential for TPH in soils to leach to groundwater. Due to the proximity of groundwater and Convair Lagoon to the TDY site, the Regional Board should evaluate some of the ACLs

specified for the more mobile metals such as chromium and zinc and also consider lining the 60" storm drain to prevent re-infiltration of contaminants. The City recommends that ACLs levels for the site be based on the Water Quality Objectives and not the Occupational Safety and Health safety standards. As with PCB concentrations, if the Occupational Safety and Health standards are allowed to prevail as the ACL for TPH as drafted in Addendum 4, the City shall be held harmless from the Regional Board's failure to enforce Water Quality Objective standards in this cleanup order. For a legacy site such as this with its known conditions, please accept these comments as notice that it would be clearly unreasonable and likely unlawful for the Regional Board to later attempt to transfer responsibility to the City for attainment of WQOs for these constituents in the Convair Lagoon or in the public drains where it is clear that the City has no responsibility or control over their discharge and where that ability to control lies with the Regional Board in this matter.

Attachment 4

It is recommended that an additional transport mechanism and some revision to potentially exposed receptor populations be included for the Conceptual Site Model for Human Health Risks from Soil and Groundwater Contamination. Surface water runoff should be included as an additional transport mechanism, since all onsite storm drains have been sealed for the duration of site demolition and remediation activities and runoff of surface water to adjacent areas during heavy precipitation events is a possibility.

It is recommended that Offsite Industrial/Commercial Worker population be classified as a potentially complete pathway for inhalation (indoor air) from the volatilization transport mechanism and that Recreator/Fisher populations be classified as potentially complete pathways for inhalation (outdoor air) from the erosion/fugitive dust transport mechanism.

Attachment 5

It is recommended that additional transport mechanisms and potentially complete exposure pathways be incorporated for the CSM for Human Health Risks from Migration of Chemicals. Groundwater migration to Convair Lagoon via storm drain backfill and seeps transport mechanisms should be identified as potentially complete exposure pathways for the Recreator/Fisher and Aquatic Organism populations. Site data suggests these transport mechanisms are present at the site.

It is also recommended that fugitive dust emissions along with surface water runoff be included for surface sediment media as transport mechanisms.

Attachment 6

The Conceptual Site Model for PCB Sources and Pathways requires revision to more accurately describe potential PCB sources. The City does not agree with the depiction in Attachment 6 that PCBs in groundwater adjacent to Convair Lagoon are not site related. This conclusion is based on a small sample dataset and the results of a qualitative modeling exercise. The fact that the TDY site has been in operation upgradient of the lagoon since 1939 suggests the more likely source is past TDY operations and not some as yet undefined source. The City recommends at a minimum, the legend be revised to include 'unknown source' for this particular PCB source.

If you have additional questions, please contact Ruth Kolb, Program Manager, at (858) 541-4328 or Edith Gutierrez at (858) 541-4361.

Sincerely,

Kris McFadden
Deputy Director

KM\rk

Attachments: Comments on Risk Assessment, Appendix A
Comments on the PCB Characterization Report
Comments on Draft Remedial Investigation/Feasibility Study & Table cc:

CC: Ruth Kolb
Edith Gutierrez
Fritz Ortlieb