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14 January 2011
File No. 32022-100

Tom Alo
California Regional Water Quality Control Board - San Diego Region
9174 Sky Park Court
San Diego, California

Subject: **Comments to Draft Addendum No. 4 to the Cleanup and Abatement Order No. R9-2004-0258, Former Teledyne Ryan Aeronautical Company, 2701 North Harbor Drive, San Diego, California**

Dear Mr. Alo:

Haley & Aldrich, Inc. (Haley & Aldrich) is submitting this letter on behalf of the San Diego Unified Port District (Port) and the San Diego County Regional Airport Authority (Airport) documenting our comments to Draft Addendum No. 4 to Cleanup and Abatement Order No. R9-2004-0258 for the Former Teledyne Ryan Aeronautical (TRA) facility located at 2701 North Harbor Drive in San Diego, California (Site).

We appreciate the opportunity to submit these comments and are available to discuss these comments collectively with your team and TDY's technical representatives at a mutually convenient time.

Sincerely yours,
HALEY & ALDRICH, INC.

Beth Breitenbach

Beth Breitenbach, PG
Senior Environmental Geologist

Benjamin Chandler

Ben Chandler
Vice President

Attachments:

Port/Airport Comments to the Draft Addendum No. 4
Attachment 1 - Table I – Summary of Sediment Analytical Data
Table II – Summary of Water Analytical Data
Figure 1 – San Diego Bay Sample Locations with December 2008 and January 2009 Data
Attachment 2 – TDY Internal Correspondence

c: **RWQCB; Attn: John Anderson**
San Diego Unified Port District; Attn: Bill Hays
San Diego County Regional Airport Authority; Attn: Paul Manasjan
Allegheny Technologies; Attn: Edgard Bertaut
Geosyntec Consultants; Attn: Brian Hitchens
Laura Hunter, Environmental Health Coalition

EXCERPT FROM DRAFT ADDENDUM NO. 4 TO CAO NO. R9-2004-0258	PORT/AIRPORT COMMENTS
Order Finding 4. **DEMOLITION AND CLEANUP ACTIVITIES**	Comment #1. TDY's obligations for TRA Site cleanup should not be confused with the Port's demolition project, and therefore we request "AND CLEANUP" be deleted from the description of demolition activities.
Order Finding 8. **Table 2 - Areas of Concern for Potential Transport of Contaminated Media to Convair Lagoon**	Comment #2. Sampling performed by the Port and Airport in December 2008/January 2009 identified detectable concentration of PCBs in all six TRA Site-related storm drain outfalls either into Convair Lagoon or San Diego Bay. This data is presented in Attachment 1. This data indicates that in addition to the 60-inch, the 54-inch, 30-inch West, and 30-inch East storm drains to Convair Lagoon and the 15-inch and 30-inch storm drains to San Diego Bay are areas of concern for potential transport of contaminated media to Convair Lagoon and San Diego Bay.
Order Finding 10.c. **Contaminated Groundwater to the SWCS.** Groundwater seepage into the SWCS and discharge to Convair Lagoon is an insignificant transport pathway. Therefore, this pathway does not contribute to any human health or ecological risks. All seeps found in the 54-inch and 60-inch Convair Lagoon storm drains were patched with concrete. Additionally, in order for this pathway to be significant, groundwater concentrations must exceed CTR criteria and intercept the 54-inch and/or 60-inch Convair Lagoon storm drains which are the only storm drains that are in contact with the water table. Hexavalent chromium and zinc concentrations in groundwater at the Building 158 AOC and PCB concentrations in groundwater at one well located in the corner of Building 120 are above CTR criteria. The contaminated groundwater plumes in these locations, however, have not migrated to the 54-inch and 60-inch Convair Lagoon storm drains.	Comment #3. During monthly stakeholder meetings, the City of San Diego has informed us on several occasions that the 60-inch SWCS is not water-tight by design. During TDY's SWCS sediment removal activities, infiltration of groundwater and base flow within the 54-inch and 60-inch drains were observed and had to be managed through installation of plugs and pumping (TDY PCB Report pp. 59, 65, 79, 94, Appendix C Tables 6 and 7). TDY has reported infiltration rates of up to 80 gallons per minute into the 60-inch SWCS over a 225-feet section (TDY PCB Report Appendix C, Table 6) prior to limited patching. This patching was of joints and cracks in three locations in the last 15 feet of the pipe before the outfall and was performed during June to October 2006 SWCS cleaning (TDY PCB Report p. 87). TDY sampled groundwater seeping into the 54-inch storm drain on 15 June 2006 (TDY PCB Report Appendix C, Table 7) prior to patching one location on 26 June 2009. Direct observations and sampling by Haley & Aldrich when entering the 54-inch and 60-inch trunk lines indicate that seeps exist in locations other than the four locations patched to date by TDY (Attachment 1). As the storm drains continue to age and deteriorate, future seeps will likely occur. In the absence of a maintenance program to monitoring and patch seeps or a liner, this pathway will likely become more significant as the SWCS ages. Comment #4. Seep sampling performed by the Port and Airport in January 2009 (Attachment 1), after the patching near the outfall of the 60-inch, identified chlorinated VOCs in the 60-inch storm drain beneath the

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	TRA Site that correspond to chemicals of concern identified in groundwater at the TRA Site. TDY's 15 June 2006 PCB, VOC and SVOC in groundwater seep data for the 54-inch storm drain (TDY PCB Report Appendix C, Table 7) and the attached Port/Airport VOC groundwater seep data for the 60-inch storm drain indicated that TRA Site-related chemicals of concerns have entered the 54-inch and 60-inch trunk lines. This data indicates that a current pathway exists between groundwater at the TRA Site and the 60-inch trunk line, and as the 54-inch and 60-inch storm drains age, these pathways will become more significant if lining and/or maintenance are not performed. Comment #5. We understand from the RWQCB's 19 December 2008 letter to TDY and comments made by the RWQCB storm water personnel on several occasion during stakeholder meetings that any detectable concentrations of TRA Site-related chemicals in the SWCS would violate Prohibition No. 8 of the Basin Plan. As such, the Port and Airport consider groundwater seepage into the SWCS as a significant pathway that needs to be addressed by the RAP and appropriate cleanup levels need to be established that are protective of the receiving surface waters. The Port and Airport is concerned that failure by TDY to adequately address this pathway could result in an inappropriate burden being placed on government agencies that rely on public funding, either to demonstrate to the RWQCB that violations of Prohibition No. 8 are the responsibility of TDY after TDY has been released from the Site, or worse the public agencies are held responsible to remedy discharges related to TDY's waste releases. Comment #6: The RWQCB makes reference to CTR values; however, many of the groundwater Alternative Cleanup Levels are set above the CTRs values. As stated above (Comment #4), groundwater is currently and/or has the future potential to discharge to the SWCS and as such appropriate cleanup levels for the protection of surface water quality should established that lie between background and the CTR values.
Order Finding 10.d. **Contaminated Surface Soil to the SWCS.** Contaminated surface soil transported into the SWCS via storm water runoff is an insignificant transport pathway. Therefore, this pathway does not contribute to any human health or ecological risks.	Comment #7. The Port and Airport will follow best practices and best available technologies to prevent surface soils at the Site from being eroded and discharged to the SWCS. Recognizing that stormwater best practice and best available technologies have limitations, the

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As described in Finding 5, all of the laterals and storm drains are capped and will be removed as part of the site demolition. Furthermore, following demolition activities, clean fill will be used at the site and the surface will be covered with asphalt or other suitable surface treatment to minimize dust generation and runoff of surface sediment from the site.	Port's/Airport's compliance with Prohibition No. 8 of the Basin Plan may not be possible, if for examples, TDY is permitted by the RWQCB to leave detectable levels of PCBs in surface soil. Furthermore, neither the Port or Airport can guarantee that contaminated surface soil left at the TRA Site by TDY will be covered with clean fill or surfacing materials for all times in the future, and such an expectation would place an onerous burden on the Port and Airport for capping and managing TDY's wastes. This would also be in contravention of the Settlement Agreement between TDY, the Port and Airport for TDY to remediate the Site for unrestricted industrial/commercial use. A requirement for the Port and Airport to maintain a cap at the Site is considered to be a restriction on the Site use. TDY's economic feasibility assessment under Resolution No. 92-49 for PCBs in soil identifies an incremental cost of $1M to remediate to non-detect levels compared with their proposed alternative cleanup level of 1 mg/kg (TDY's RI/FS pp.32-34). This incremental cost is not economically infeasible for TDY and far more has been spent to date by TDY in lawsuits against others related to the cleanup of the Site and Convair Lagoon, and by others to defend themselves against TDY's claims. Furthermore, this incremental cost would be offset by avoided lifecycle costs associated with managing TDY's wastes on-Site *ad infinitum* or potential cost for subsequent cleanup of the SWCS, Convair Lagoon and San Diego Bay and potential legal disputes.
Order Finding 11. **ECOLOGICAL RISKS.** An ecological risk assessment was not conducted for the former TDY site because there are no ecological receptors at the site that would potentially be exposed to contaminated soil and groundwater.	Comment #8. Future ecological receptors at the TRA Site could include the Airport's very successful Least Tern colony as this colony expands and/or is relocated onto the TRA Site.
Order Finding 13. **TECHNOLOGICAL AND ECONOMIC FEASIBILITY TO CLEANUP TO BACKGROUND CONDITIONS.** State Water Board Resolution No. 92-49, Policies and Procedures for Investigation and Cleanup and Abatement of Discharges under Water Code Section 13304, must be applied when setting cleanup levels for impacted media at the former TDY site if such media poses a risk to human health.[7] These media must be cleaned up to background conditions unless it would be technologically[8] or economically[9] infeasible to do so.	Comment #9. For the reasons stated in Comment #7 above, the Port and Airport do not agree that the incremental cost to cleanup to background levels is economically infeasible for PCBs in soil (cost of $1M) (Geosyntec's 6 December 2010 Technical Memoranda). Comment #10. Based on our review of the cited documents that support this RWQCB finding (TDY's RI/FS and Geosyntec's 6 December 2010 Technical Memoranda), we do not see TDY's economic evaluation of costs to cleanup to background levels for all metals in soil and groundwater, and PCBs in groundwater. In the absence of this

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	evaluation how does the RWQCB conclude that cleanup to background is economically infeasible?
Order Finding 14. **ALTERNATIVE CLEANUP LEVELS.**	Comment #11. Risk-based concentrations (RBCs) have been developed by TDY (TDY RI/FS Table 5-9) for more chemicals of concern (COCs) than are listed in Tables 4 and 5 (and the related Tables 6 and 7). Why has the RWQCB truncated the list of COC for which there are cleanup levels? Comment #12: It is our understanding that the Alternate Cleanup Levels presented in Tables 4 and 5 are based on TDY's RBCs. We noted several discrepancies between the RBCs and Alternate Cleanup Levels, as follows: • 1,1-Dichhloroethane in groundwater should be 30,000 ug/L (not 35,000 ug/L) • Chloroethane in groundwater should be 47,000 ug/L (not 830,000 ug/L) • Arsenic in groundwater should be 1.1 mg/L (not 4.6 mg/L) Comment #13. A number of the Alternative Cleanup Levels presented in Table 5 are significantly above California Hazardous Waste Total Threshold Limit Concentrations (TTLC), notably chromium, copper, mercury and zinc. Leaving soils at the TRA site with contaminant levels that exceed hazardous waste levels is not acceptable to the Port and Airport and would place an inappropriate burden on these public agencies for managing this hazardous waste discharged by TDY in the event that this soil is dug up during redevelopment or other activities. Comment #14. We understand that the cleanup levels presented in the order were developed in part with oversight from DTSC who supported the RWQCB related to human-health based cleanup goals. Can the RWQCB confirm that DTSC has reviewed and approved the proposed cleanup levels?
Order Finding 16. a. **Storm Drain Cleanout.** As an interim action to prevent further discharges of PCB-impacted sediments into Convair Lagoon, specific sections of the onsite SWCS were cleaned out from June to October 2006. Documentation of the final results of storm drain cleanout activities was accomplished by written documentation of visual	Comment #15. As documented by TDY (PCB report pp. 88), following completion of TDY's July 2006 cleanout in the 60-inch trunk line beneath the TRA site, PCBs up to 2,780 mg/kg were detected. Following TDY's re-cleaning in July 2007, PCBs up to 403 mg/kg were detected (subsequent re-cleaning has yet to be performed). This RWQCB finding

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inspections of the storm drains, via daily field notes, digital photos and video clips.	as written implies that the interim action cleanout have prevented further discharges of PCB-impacted sediments into Convair Lagoon through removal of PCB impacted sediments in the SWCS. This finding is not supported by the PCB analytical data cited by TDY.
Order Directive 2. b. **60-INCH CONVAIR LAGOON STORM DRAIN AND ENERGY DISSIPATION CHANNEL**. TDY shall remediate PCB-contaminated sediments within the 60-inch Convair Lagoon storm drain and the energy dissipation channel to background conditions. Cleanup to background conditions shall be achieved by removing all visible sediment, to the extent practicable, within the 60-inch storm drain (end of the storm drain where it discharges into Convair Lagoon to 25-feet north of the property line) and the energy dissipation channel. Cleanup to background conditions shall be verified by daily field notes, digital photos, video clips, and 3rd party inspection.	Comment #16. A visual method has been used by TDY in past sediment removal activities for substantiating cleanout effectiveness. However, it has yet to be proven an effective performance standard. Post-cleanout sampling as documented by TDY (PCB report pp. 88), following completion of TDY's July 2006 cleanout in the 60-inch trunk line beneath the TRA site, identified PCBs up to 2,780 mg/kg. Following TDY's re-cleaning in July 2007, PCBs up to 403 mg/kg were detected (subsequent re-cleaning has yet to be performed). Comment #17. The directive to cleanup to background conditions "to the extent practicable" is a subjective standard in the absence of specificity as to the means of the sediment removal, and as such, TDY, the 3rd party inspector, the RWQCB and other stakeholders could disagree on whether the standard had been met. For instance, removal of sediment by Hydroblasting (the Best Available Technology used by GD; TDY PCB Report Appendix R) may ultimately remove more sediment than lower pressure jetting and manual labor (a technology previously used by TDY; TDY PCB Report p.59). A more robust standard may be to require TDY to remove all visible sediment to the extent practicable by applying Best Available Technologies as presented in the RAP to be submitted by TDY for approval by the RWQCB, and that any residuals that cannot be removed will be tested for PCBs and the volume quantified. Comment #18. Data shows (Attachment 1; TDY PCB Report pp. ix) that all six storm drain lines identified under Finding 5 of the Draft Addendum No. 4 continue to be impacted with PCBs. These impacts include PCBs in sediments in all six lines and in some cases PCBs in the concrete pipe materials (TDY PCB Report Appendix P). The last round of storm drain sediment removal was performed by TDY was in 2006 and 2007. Only those portions of the SWCS that contained PCBs in sediments in concentrations in excess of 1 mg/kg were target for cleaning. On-site storm drain laterals associated with these lines were capped in May 2010 by the Port as part of Site demolition. TDY should be required through

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	observation and chemical testing to appropriately characterize the post capping condition of the five storm drain trunk lines (other than the 60-inch) with respect to PCBs in sediment, characterize PCB impacts to the construction materials of the drains that will remain in-place, and take appropriate remedial actions. Comment #19. We understand from discussions with the RWQCB and TDY during the stakeholder meeting on 10 January 2011 that the RWQCB is confident that once the SWCS laterals have been removed and observable sediment is removed from the 60-inch trunk line to the extent practicable then TRA Site-related PCB releases will have been abated. The Port and Airport do not share this confidence. As indicated by TDY (TDY PCB report pp. vii), as PCB-impacted construction materials weather with age they contribute to PCBs in sediments. Based on this finding by TDY, we are concerned that the storm drain trunk line building materials, which have been shown to be impacted with PCBs (see Note 1), are an ongoing source of PCBs in sediments and that solely removing the sediment in a one-time event may not prevent further on-going releases of PCBs to sediments in the storm drain lines and Convair Lagoon/San Diego Bay (further information to substantiate this concern is provided in Note 2 below). As such, this directive is viewed by the Port and Airport as an interim measure by TDY that may not be a final remedy in preventing TRA Site-related PCB discharges into the SWCS and Convair Lagoon/San Diego Bay, and TDY should be required to perform further actions to remediate these impacts, as appropriate. We request that this point be clarified in the addendum, since as currently written it could be misconstrued as a final remedy. Comment #20. Convair Lagoon is currently impacted with PCBs from the TRA site (TDY Convair Lagoon Sand Cap Sampling Report dated 12 February 2008). As has been stated by TDY "fine sediment suspended in the water column may be transported under low-velocity conditions" (TDY PCB Report pp.27), and upstream ("incoming tide") velocities were measured by Geosyntec in 2002 (TDY PCB Report pp.26). Hence, PCB-impacted sediments in Convair Lagoon and in the SWCS beneath the TRA Site are a potential source of PCB-impacted sediments in the tidally influenced SWCS. Furthermore, the 60-inch drain is tidally influenced not only beneath the Site but further north beneath the Airport and Former

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	GD Lindbergh Field Plant site (Eel Grass has been observed that could only have come from San Diego Bay at the manhole on the Former GD LFP site nearest to Washington Street; TDY PCB Report Appendix ZZ, Appendix D). Again, given these findings by TDY, this directive is viewed by the Port and Airport as an interim measure by TDY that should not be considered a final remedy in preventing PCBs that originated from the Site entering the SWCS and Convair Lagoon/San Diego Bay, and TDY should be required to perform further actions to remediate these impacts, as appropriate. We request that this point be clarified in the addendum. Comment #21. We recommend that the directive to remove sediment to 25 feet north of the property line be clarified if the intent is that this is 25 feet north of the northern TRA site property boundary. As currently written, it could be misconstrued as 25 feet from the southern boundary. Comment #22. As stated above (see Comment #20), the 60-inch drain is tidally influenced not only beneath the TRA Site but further north beneath the Airport and Former GD Lindbergh Field Plant site, approximately 1,700 feet north of the TRA site's northern property line. As such the basis for 25 feet is not clear, and may not address all TRA site-derived PCB impacted sediments in the 60-inch drain that have migrated upstream via the incoming tide.
Order Directive 3.c. **Monitoring Program**. A monitoring program capable of demonstrating the effectiveness of the selected remedial alternatives and compliance with the alternative cleanup levels. Groundwater monitoring shall be conducted for a period of at least one year to verify that the cleanup levels in Directive 2.a. have been achieved and maintained, and shall begin after the completion of active remedial action measures by TDY. Monitoring shall be conducted at intervals proposed by TDY and agreed to by the San Diego Water Board. The proposed intervals shall be adequate to assess compliance with the alternative cleanup levels.	Comment #23. We recommend that the groundwater monitoring be performed on a quarterly basis for at least one year *after* all cleanup levels have been reached. Comment #24. We recommend that the monitoring program include sediment and water monitoring in the SWCS through sampling and laboratory analysis for PCBs and other COCs.

Notes:

1. **Three concrete chip samples were collected from the 54-inch trunk in January 2006 (TDY PCB Report Appendix P). All three samples contained PCBs up to 3.34 mg/kg. The attached internal TDY correspondence that came to light during litigation (see Attachment 2) indicated that on 21 September 1987 a sample chiseled from the former 30-inch east line contained PCBs in a concentration of 54,000 ppm. We understand that the 30-inch east line was replaced where this sample was collect. However, based on this data, the Port and Airport does not consider it unreasonable to conclude that the construction materials of the 60-inch trunk line are impacted with PCBs and that these will be continuing PCB sources until there are removed or encapsulated (and similarly for the other five TRA Site-related storm drains).**

2. **TDY reports that filter socks were placed on all tributaries to the 60-inch trunk line in February 2007 and two diversion/filtration systems were installed at tributaries to the 60-inch trunk line that "contained significantly elevated PCB concentrations" (TDY PCB Report pp. 92-93). In July 2007, TDY performed sediment removal activities in the 60-inch line (TDY PCB Report p. 88), 6 months after reportedly all the tributaries had been equipped with filter socks, and/or diversion/filtration system BMPs were in place to prevent sediment in the laterals discharging to the 60-inch trunk line. Ten days after the 30 to 31 July 2007 sediment removal activities, PCBs were detected up to 294 mg/kg in sediments sampled on 10 August 2007 from the bottom of the 60-inch trunk line at a location specifically targeted for cleaning (TDY PCB Report Figure 1, sample CB133_15S_PI). This data indicates releases of PCBs into the 60-inch trunk line from on-Site sources other than the sediments in laterals that have been reportedly mitigated by TDY's BMPs.**

   This finding is not inconsistent with TDY's chromatogram interpretation (TDY PCB Report p. 93) that the "majority" of PCBs detected in the 60-inch trunk line during the 18 January 2007 sediment sampling event originated from the CB 131 and CB 133 tributaries. However, the fact that PCBs were detect up to 294 mg/kg in the 10 August 2007 sampling event, within 10 days of sediment removal activities while BMPs were in-place on the laterals, indicates other on-Site PCBs sources in addition to the BMP-protected laterals.

   It is also noteworthy that the range of Aroclors detected in the 60-inch trunk line in August 2007 after the sediment removal and BMP installation (i.e., 1242, 1248, 1254 and 1260) is different from the range of Aroclors detected in the filter socks on the laterals (i.e., 1248 and 1260). This is a second line of evidence for other on-Site PCBs sources in addition to the BMP-protected laterals.

ATTACHMENT 1

TABLE I
SUMMARY OF SEDIMENT ANALYTICAL DATA
FORMER TRA SITE
SAN DIEGO, CALIFORNIA

LOCATION DESIGNATION	15CH	30CGCH	30CH_153S	30ECH	30WCH	54CH	54CH_75SW	54CH_90SE	60CH_OUTFALL
SAMPLE DESIGNATION	15CH_OS_121208	30CGCH_OS_121208	30CH_153S_SD_121208	30ECH_OS_121208	30WCH_OS_121208	54CH_OS_SD_121208	54CH_75SW_SD_121208	54CH_90SE_SD_121208	60CH_OS_010909
SAMPLING DATE	12/12/08	12/12/08	12/12/08	12/12/08	12/12/08	12/12/08	12/12/08	12/12/08	01/09/09
METALS									
ANTIMONY	<2000	**342 J**	<2000	**757 J**	**899 J**	**307 J**	<2000	**8000**	--
ARSENIC	**3000**	**2600**	**4500**	**4100**	**2700**	**3000**	**1900**	**2100**	--
BARIUM	**7100**	**27000**	**30000**	**40000**	**60000**	**28000**	**34000**	**13000**	--
BERYLLIUM	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	--
CADMIUM	**136 J**	**929 J**	**227 J**	**246 J**	**426 J**	**471 J**	**298 J**	**312 J**	--
CHROMIUM	**25000**	**100000**	**11000**	**17000**	**23000**	**28000**	**20000**	**14000**	--
COBALT	**713 J**	**3500**	**1500**	**2800**	**1900**	**2000**	**2200**	**1200**	--
COPPER	**7700**	**42000**	**20000**	**60000**	**100000**	**73000**	**32000**	**53000**	--
LEAD	**8600**	**74000**	**9300**	**38000**	**19000**	**25000**	**23000**	**11000**	--
MERCURY	<100	**150**	**74.2 J**	<100	<100	**230**	**230**	**370**	--
MOLYBDENUM	**151 J**	**1400**	**511 J**	**1400**	**1300**	**921 J**	**128 J**	**528 J**	--
NICKEL	**2400**	**20000**	**3300**	**6700**	**6100**	**5200**	**4000**	**5300**	--
SELENIUM	<1000	**605 J**	**507 J**	**821 J**	**562 J**	**463 J**	**617 J**	<1000	--
SILVER	<1000	**212 J**	<1000	<1000	<1000	<1000	<1000	<1000	--
THALLIUM	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	--
VANADIUM	**9300**	**16000**	**12000**	**15000**	**12000**	**19000**	**20000**	**10000**	--
ZINC	**26000**	**110000**	**55000**	**160000**	**200000**	**170000**	**69000**	**84000**	--
POLYCHLORINATED BIPHENYLS									
AROCLOR 1016	<16	<16	<16	<16	<16	<16	<16	<16	<16
AROCLOR 1221	<33	<33	<33	<33	<33	<33	<33	<33	<33
AROCLOR 1232	<16	<16	<16	<16	<16	<16	<16	<16	<16
AROCLOR 1242	<16	<16	<16	<16	<16	<16	<16	<16	<16
AROCLOR 1248	<16	**750**	**160**	**46**	**1700**	**79**	<16	**420**	**950**
AROCLOR 1254	<16	<16	<16	<16	<16	<16	**88**	<16	<16
AROCLOR 1260	**14.9 J**	**97**	**20**	<16	**110**	**26**	<16	**59**	**70**
AROCLOR 1262	<16	<16	<16	<16	<16	<16	<16	<16	<16
AROCLOR 1268	<16	<16	<16	<16	<16	<16	<16	<16	<16
TOTAL TARGETED	**14.9**	**847**	**180**	**46**	**1810**	**105**	**88**	**479**	**1020**

Notes:
Concentrations reported in micrograms per kilogram (µg/kg)
< = less than laboratory detection limit
J = estimated concentration
-- = not analyzed

TABLE I
SUMMARY OF SEDIMENT ANALYTICAL DATA
FORMER TRA SITE
SAN DIEGO, CALIFORNIA

LOCATION DESIGNATION	60CH_150S	60CH_150S	60CH_66S	60CH_66S	60CH_66S	60CH_93S	60CH_93S	CB-131-030S
SAMPLE DESIGNATION	60CH_150S_SD_121208	60CH_150S_SD_010909	60CH_66S_SD_121208	60CH_66S_SD_010909	60CH_66S_SD_010909_02	60CH_93S_SD_121208	60CH_93S_SD_010909	CB131_30S_SD_010909
SAMPLING DATE	12/12/08	01/09/09	12/12/08	01/09/09	01/09/09	12/12/08	01/09/09	01/09/09
METALS								
ANTIMONY	<2000	--	**303 J**	--	--	<2000	--	--
ARSENIC	**3700**	--	**8100**	--	--	**5500**	--	--
BARIUM	**32000**	--	**16000**	--	--	**23000**	--	--
BERYLLIUM	<1000	--	**185 J**	--	--	**87.7 J**	--	--
CADMIUM	**762 J**	--	**284 J**	--	--	**230 J**	--	--
CHROMIUM	**100000**	--	**14000**	--	--	**12000**	--	--
COBALT	**2500**	--	**1400**	--	--	**1500**	--	--
COPPER	**49000**	--	**14000**	--	--	**11000**	--	--
LEAD	**52000**	--	**7600**	--	--	**11000**	--	--
MERCURY	**94.1 J**	--	<100	--	--	<100	--	--
MOLYBDENUM	**1400**	--	**819 J**	--	--	**660 J**	--	--
NICKEL	**6200**	--	**3000**	--	--	**2200**	--	--
SELENIUM	**498 J**	--	<1000	--	--	<1000	--	--
SILVER	<1000	--	<1000	--	--	<1000	--	--
THALLIUM	<1000	--	<1000	--	--	<1000	--	--
VANADIUM	**16000**	--	**10000**	--	--	**9900**	--	--
ZINC	**170000**	--	**49000**	--	--	**55000**	--	--
POLYCHLORINATED BIPHENYLS								
AROCLOR 1016	<16	<16	<16	<16	<16	<16	<16	<16
AROCLOR 1221	<33	<33	<33	<33	<33	<33	<33	<33
AROCLOR 1232	<16	<16	<16	<16	<16	<16	<16	<16
AROCLOR 1242	<16	<16	<16	<16	<16	<16	<16	<16
AROCLOR 1248	**920**	**4400**	**10000**	**230**	**150**	**1000**	**3900**	**440**
AROCLOR 1254	<16	<16	<16	<16	<16	<16	<16	<16
AROCLOR 1260	**120**	**240**	**230**	**22**	**20**	**160**	**150**	**230**
AROCLOR 1262	<16	<16	<16	<16	<16	<16	<16	<16
AROCLOR 1268	<16	<16	<16	<16	<16	<16	<16	<16
TOTAL TARGETED	**1040**	**4640**	**10230**	**252**	**170**	**1160**	**4050**	**670**

Notes:
Concentrations reported in micrograms per kilogram (µ
< = less than laboratory detection limit
J = estimated concentration
-- = not analyzed

TABLE I
SUMMARY OF SEDIMENT ANALYTICAL DATA
FORMER TRA SITE
SAN DIEGO, CALIFORNIA

LOCATION DESIGNATION	CB-131-060N	CB-133	CB-133-110N	CB-134	Coast Guard 01	Coast Guard 02	Coast Guard 03	Coast Guard 04
SAMPLE DESIGNATION	CB131_60N_SD_010909	CB133_SD_010909	CB133_110N_SD_011309	CB134_SD_010909	Coast Guard 01_SD_121208	Coast Guard 02_SD_121208	Coast Guard 03_SD_121208	Coast Guard 04_SD_121208
SAMPLING DATE	01/09/09	01/09/09	01/13/09	01/09/09	12/12/08	12/12/08	12/12/08	12/12/08
METALS								
ANTIMONY	--	--	--	--	<2000	<2000	<2000	<2000
ARSENIC	--	--	--	--	**1100**	**1800**	**2000**	**1100**
BARIUM	--	--	--	--	**4800**	**3000**	**25000**	**13000**
BERYLLIUM	--	--	--	--	<1000	<1000	<1000	<1000
CADMIUM	--	--	--	--	**129 J**	**67.8 J**	**207 J**	**159 J**
CHROMIUM	--	--	--	--	**8500**	**4300**	**13000**	**13000**
COBALT	--	--	--	--	**655 J**	**498 J**	**1900**	**1100**
COPPER	--	--	--	--	**7600**	**3700**	**15000**	**12000**
LEAD	--	--	--	--	**5800**	**6500**	**11000**	**7000**
MERCURY	--	--	--	--	<100	<100	**46.8 J**	**44 J**
MOLYBDENUM	--	--	--	--	**196 J**	<1000	**81.5 J**	**86 J**
NICKEL	--	--	--	--	**1200**	**895 J**	**2900**	**1700**
SELENIUM	--	--	--	--	<1000	<1000	<1000	**432 J**
SILVER	--	--	--	--	<1000	<1000	<1000	<1000
THALLIUM	--	--	--	--	<1000	<1000	<1000	<1000
VANADIUM	--	--	--	--	**10000**	**6800**	**17000**	**10000**
ZINC	--	--	--	--	**24000**	**18000**	**53000**	**39000**
POLYCHLORINATED BIPHENYLS								
AROCLOR 1016	<16	<16	<16	<33	<16	<16	<16	<16
AROCLOR 1221	<33	<33	<33	<66	<33	<33	<33	<33
AROCLOR 1232	<16	<16	<16	<33	<16	<16	<16	<16
AROCLOR 1242	<16	<16	<16	<33	<16	<16	<16	<16
AROCLOR 1248	**480**	**310**	**480**	**830**	<16	<16	<16	<16
AROCLOR 1254	<16	<16	**290**	<33	<16	<16	<16	<16
AROCLOR 1260	**170**	**39**	**420**	**110**	<16	**13.8 J**	**10.1 J**	<16
AROCLOR 1262	<16	<16	<16	<33	<16	<16	<16	<16
AROCLOR 1268	<16	<16	<16	<33	<16	<16	<16	<16
TOTAL TARGETED	**650**	**349**	**1190**	**940**	ND	**13.8**	**10.1**	ND

Notes:
Concentrations reported in micrograms per kilogram (µ
< = less than laboratory detection limit
J = estimated concentration
-- = not analyzed

TABLE I
SUMMARY OF SEDIMENT ANALYTICAL DATA
FORMER TRA SITE
SAN DIEGO, CALIFORNIA

LOCATION DESIGNATION	Convair 01	Convair 02	Convair 03	Convair 04	Convair 05	CV001	MH-201
SAMPLE DESIGNATION	Convair 01_CS_121208	Convair 02_CS_121208	Convair 03_CS_121208	Convair 04_CS_121208	Convair 05_CS_121208	CV01_SD_010909	CB201_SD_010909
SAMPLING DATE	12/12/08	12/12/08	12/12/08	12/12/08	12/12/08	01/09/09	01/09/09
METALS							
ANTIMONY	**477 J**	<2000	**396 J**	**619 J**	**343 J**	--	--
ARSENIC	**3300**	**3500**	**4500**	**4500**	**4300**	--	--
BARIUM	**36000**	**57000**	**42000**	**49000**	**53000**	--	--
BERYLLIUM	<1000	<1000	<1000	<1000	<1000	--	--
CADMIUM	**625 J**	**706 J**	**876 J**	**847 J**	**841 J**	--	--
CHROMIUM	**40000**	**40000**	**90000**	**64000**	**46000**	--	--
COBALT	**2300**	**2600**	**3100**	**3200**	**2800**	--	--
COPPER	**47000**	**47000**	**59000**	**59000**	**58000**	--	--
LEAD	**34000**	**37000**	**49000**	**45000**	**45000**	--	--
MERCURY	**97.8 J**	**97 J**	**95 J**	**160**	**110**	--	--
MOLYBDENUM	**2200**	**1000**	**1600**	**1500**	**1300**	--	--
NICKEL	**5300**	**6100**	**9400**	**7100**	**7200**	--	--
SELENIUM	**500 J**	**462 J**	**547 J**	**823 J**	<1000	--	--
SILVER	<1000	<1000	**48.1 J**	**130 J**	<1000	--	--
THALLIUM	<1000	<1000	<1000	<1000	<1000	--	--
VANADIUM	**14000**	**15000**	**20000**	**21000**	**20000**	--	--
ZINC	**190000**	**210000**	**180000**	**270000**	**180000**	--	--
POLYCHLORINATED BIPHENYLS							
AROCLOR 1016	<16	<16	<16	<16	<16	<16	<33
AROCLOR 1221	<33	<33	<33	<33	<33	<33	<66
AROCLOR 1232	<16	<16	<16	<16	<16	<16	<33
AROCLOR 1242	<16	<16	<16	<16	<16	<16	<33
AROCLOR 1248	**160**	**770**	**4400**	**1100**	**660**	**4100**	**1500**
AROCLOR 1254	<16	<16	<16	<16	<16	<16	<33
AROCLOR 1260	**35**	**140**	**160**	**150**	**75**	**660**	**70**
AROCLOR 1262	<16	<16	<16	<16	<16	<16	<33
AROCLOR 1268	<16	<16	<16	<16	<16	<16	<33
TOTAL TARGETED	**195**	**910**	**4560**	**1250**	**735**	**4760**	**1570**

Notes:
Concentrations reported in micrograms per kilogram (µ
< = less than laboratory detection limit
J = estimated concentration
-- = not analyzed

TABLE II
SUMMARY OF WATER ANALYTICAL DATA
FORMER TRA SITE
SAN DIEGO, CALIFORNIA

LOCATION DESIGNATION	30ECH	54CH	60CH_OUTFALL	60CH-2	60CH-2	60CH-2	CB-131-030S	CB-131-060N	CB-133	CB-133
SAMPLE DESIGNATION	30ECH_OW_010909	54CH_OW_121208	60CH_OW_010909	60CH_OW_121208	60CH_OW2_010909	60CH_OW2_010909_02	CB131_30S_SW_010909	CB131_60N_SW_011309	CB133_SW_010909	CB133_SW_011309
SAMPLING DATE	01/09/09	12/12/08	01/09/09	12/12/08	01/09/09	01/09/09	01/09/09	01/13/09	01/09/09	01/13/09
POLYCHLORINATED BIPHENYLS										
AROCLOR 1016	--	<0.5	--	<0.5	--	--	--	--	--	--
AROCLOR 1221	--	<1	--	<1	--	--	--	--	--	--
AROCLOR 1232	--	<0.5	--	<0.5	--	--	--	--	--	--
AROCLOR 1242	--	<0.5	--	<0.5	--	--	--	--	--	--
AROCLOR 1248	--	<0.5	--	<0.5	--	--	--	--	--	--
AROCLOR 1254	--	<0.5	--	<0.5	--	--	--	--	--	--
AROCLOR 1260	--	<0.5	--	<0.5	--	--	--	--	--	--
AROCLOR 1262	--	<0.5	--	<0.5	--	--	--	--	--	--
AROCLOR 1268	--	<0.5	--	<0.5	--	--	--	--	--	--
TOTAL TARGETED	--	ND	--	ND	--	--	--	--	--	--
VOLATILE ORGANIC COMPOUNDS										
1,1,1,2-TETRACHLOROETHANE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-TRICHLOROETHANE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2,2-TETRACHLOROETHANE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-TRICHLOROETHANE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-DICHLOROETHANE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-DICHLOROETHYLENE	<0.5	<0.5	**1.9**	**1.4**	**1.8**	**1.8**	<0.5	**2.5**	**2**	**2.7**
1,1-DICHLOROPROPENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-TRICHLOROBENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-TRICHLOROPROPANE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-TRICHLOROBENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-TRIMETHYLBENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-DIBROMOETHANE (ETHYLENE DIBROMID	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-DICHLOROBENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-DICHLOROETHANE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-DICHLOROPROPANE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3,5-TRIMETHYLBENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-DICHLOROPROPANE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-DICHLOROBENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,2-DICHLOROPROPANE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-CHLOROTOLUENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-PHENYLBUTANE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-CHLOROTOLUENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BROMOBENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BROMODICHLOROMETHANE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BROMOMETHANE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.44 J**	<0.5	<0.5	<0.5
CARBON TETRACHLORIDE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CFC-11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CFC-12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CHLOROBENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CHLORODIBROMOMETHANE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CHLOROETHANE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CHLOROFORM	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CHLOROMETHANE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CIS-1,2-DICHLOROETHENE	<0.5	<0.5	**4.1**	**3.5**	**3.8**	**3.7**	**0.28 J**	**4.7**	**3.8**	**5.4**
CIS-1,3-DICHLOROPROPENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CYMENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
DIBROMOMETHANE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
DICHLOROMETHANE	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ETHYLBENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

TABLE II
SUMMARY OF WATER ANALYTICAL DATA
FORMER TRA SITE
SAN DIEGO, CALIFORNIA

LOCATION DESIGNATION	30ECH	54CH	60CH_OUTFALL	60CH-2	60CH-2	60CH-2	CB-131-030S	CB-131-060N	CB-133	CB-133
SAMPLE DESIGNATION	30ECH_OW_010909	54CH_OW_121208	60CH_OW_010909	60CH_OW_121208	60CH_OW2_010909	60CH_OW2_010909_02	CB131_30S_SW_010909	CB131_60N_SW_011309	CB133_SW_010909	CB133_SW_011309
SAMPLING DATE	01/09/09	12/12/08	01/09/09	12/12/08	01/09/09	01/09/09	01/09/09	01/13/09	01/09/09	01/13/09
HEXACHLORO-1,3-BUTADIENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
ISOPROPYLBENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
M-DICHLOROBENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
METHYLBENZENE (TOLUENE)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NAPHTHALENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-BUTYLBENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-PROPYLBENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
O-XYLENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
P/M-XYLENE	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
STYRENE (MONOMER)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TERT-BUTYLBENZENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TETRACHLOROETHENE	<0.5	<0.5	**3.8**	**2.6**	**3.4**	**3.3**	<0.5	**4.8**	**3.2**	**5**
TRANS-1,2-DICHLOROETHENE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TRIBOMOMETHANE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TRICHLOROETHYLENE	<0.5	<0.5	**4.5**	**3.8**	**4.2**	**4**	<0.5	**5**	**3.5**	**5.8**
VINYL CHLORIDE	<0.5	<0.5	**2**	**1.4**	**1.8**	**1.7**	<0.5	**2.7**	**1.8**	**2.8**
TOTAL TARGETED	ND	ND	**16.3**	**12.7**	**15**	**14.5**	**0.72**	**19.7**	**14.3**	**21.7**

Notes:
Concentrations reported in micrograms per liter (µg/L)
< = less than laboratory detection limit
J = estimated concentration
-- = not analyzed

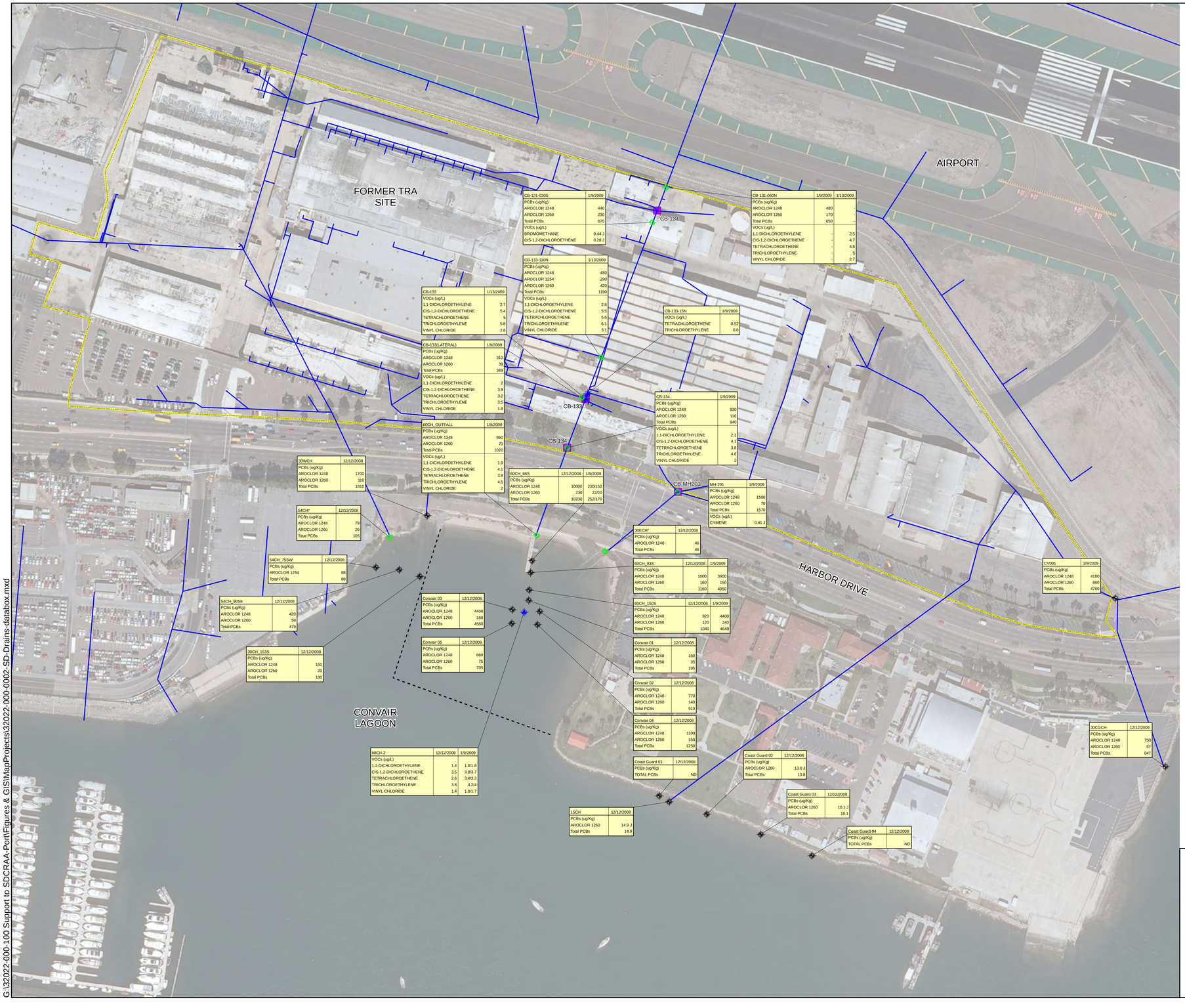
TABLE II
SUMMARY OF WATER ANALYTICAL DATA
FORMER TRA SITE
SAN DIEGO, CALIFORNIA

LOCATION DESIGNATION	CB-133-110N	CB-133-15N	CB-134	MH-201
SAMPLE DESIGNATION	CB133_110N_SW_011309	CB133_15N_SW_010909	CB134_SW_010909	CB201_SW_010909
SAMPLING DATE	01/13/09	01/09/09	01/09/09	01/09/09
POLYCHLORINATED BIPHENYLS				
AROCLOR 1016	--	--	--	--
AROCLOR 1221	--	--	--	--
AROCLOR 1232	--	--	--	--
AROCLOR 1242	--	--	--	--
AROCLOR 1248	--	--	--	--
AROCLOR 1254	--	--	--	--
AROCLOR 1260	--	--	--	--
AROCLOR 1262	--	--	--	--
AROCLOR 1268	--	--	--	--
TOTAL TARGETED	--	--	--	--
VOLATILE ORGANIC COMPOUNDS				
1,1,1,2-TETRACHLOROETHANE	<0.5	<0.5	<0.5	<0.5
1,1,1-TRICHLOROETHANE	<0.5	<0.5	<0.5	<0.5
1,1,2,2-TETRACHLOROETHANE	<0.5	<0.5	<0.5	<0.5
1,1,2-TRICHLOROETHANE	<0.5	<0.5	<0.5	<0.5
1,1-DICHLOROETHANE	<0.5	<0.5	<0.5	<0.5
1,1-DICHLOROETHYLENE	**2.8**	<0.5	**2.1**	<0.5
1,1-DICHLOROPROPENE	<0.5	<0.5	<0.5	<0.5
1,2,3-TRICHLOROBENZENE	<0.5	<0.5	<0.5	<0.5
1,2,3-TRICHLOROPROPANE	<0.5	<0.5	<0.5	<0.5
1,2,4-TRICHLOROBENZENE	<0.5	<0.5	<0.5	<0.5
1,2,4-TRIMETHYLBENZENE	<0.5	<0.5	<0.5	<0.5
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	<0.5	<0.5	<0.5	<0.5
1,2-DIBROMOETHANE (ETHYLENE DIBROMID	<0.5	<0.5	<0.5	<0.5
1,2-DICHLOROBENZENE	<0.5	<0.5	<0.5	<0.5
1,2-DICHLOROETHANE	<0.5	<0.5	<0.5	<0.5
1,2-DICHLOROPROPANE	<0.5	<0.5	<0.5	<0.5
1,3,5-TRIMETHYLBENZENE	<0.5	<0.5	<0.5	<0.5
1,3-DICHLOROPROPANE	<0.5	<0.5	<0.5	<0.5
1,4-DICHLOROBENZENE	<0.5	<0.5	<0.5	<0.5
2,2-DICHLOROPROPANE	<0.5	<0.5	<0.5	<0.5
2-CHLOROTOLUENE	<0.5	<0.5	<0.5	<0.5
2-PHENYLBUTANE	<0.5	<0.5	<0.5	<0.5
4-CHLOROTOLUENE	<0.5	<0.5	<0.5	<0.5
BENZENE	<0.5	<0.5	<0.5	<0.5
BROMOBENZENE	<0.5	<0.5	<0.5	<0.5
BROMODICHLOROMETHANE	<0.5	<0.5	<0.5	<0.5
BROMOMETHANE	<0.5	<0.5	<0.5	<0.5
CARBON TETRACHLORIDE	<0.5	<0.5	<0.5	<0.5
CFC-11	<0.5	<0.5	<0.5	<0.5
CFC-12	<0.5	<0.5	<0.5	<0.5
CHLOROBENZENE	<0.5	<0.5	<0.5	<0.5
CHLORODIBROMOMETHANE	<0.5	<0.5	<0.5	<0.5
CHLOROETHANE	<0.5	<0.5	<0.5	<0.5
CHLOROFORM	<0.5	<0.5	<0.5	<0.5
CHLOROMETHANE	<0.5	<0.5	<0.5	<0.5
CIS-1,2-DICHLOROETHENE	**5.5**	<0.5	**4.1**	<0.5
CIS-1,3-DICHLOROPROPENE	<0.5	<0.5	<0.5	<0.5
CYMENE	<0.5	<0.5	<0.5	**0.41 J**
DIBROMOMETHANE	<0.5	<0.5	<0.5	<0.5
DICHLOROMETHANE	<1	<1	<1	<1
ETHYLBENZENE	<0.5	<0.5	<0.5	<0.5

TABLE II
SUMMARY OF WATER ANALYTICAL DATA
FORMER TRA SITE
SAN DIEGO, CALIFORNIA

LOCATION DESIGNATION	CB-133-110N	CB-133-15N	CB-134	MH-201
SAMPLE DESIGNATION	CB133_110N_SW_011309	CB133_15N_SW_010909	CB134_SW_010909	CB201_SW_010909
SAMPLING DATE	01/13/09	01/09/09	01/09/09	01/09/09
HEXACHLORO-1,3-BUTADIENE	<0.5	<0.5	<0.5	<0.5
ISOPROPYLBENZENE	<0.5	<0.5	<0.5	<0.5
M-DICHLOROBENZENE	<0.5	<0.5	<0.5	<0.5
METHYLBENZENE (TOLUENE)	<0.5	<0.5	<0.5	<0.5
NAPHTHALENE	<0.5	<0.5	<0.5	<0.5
N-BUTYLBENZENE	<0.5	<0.5	<0.5	<0.5
N-PROPYLBENZENE	<0.5	<0.5	<0.5	<0.5
O-XYLENE	<0.5	<0.5	<0.5	<0.5
P/M-XYLENE	<1	<1	<1	<1
STYRENE (MONOMER)	<0.5	<0.5	<0.5	<0.5
TERT-BUTYLBENZENE	<0.5	<0.5	<0.5	<0.5
TETRACHLOROETHENE	**5.6**	**0.52**	**3.8**	<0.5
TRANS-1,2-DICHLOROETHENE	<0.5	<0.5	<0.5	<0.5
TRIBOMOMETHANE	<0.5	<0.5	<0.5	<0.5
TRICHLOROETHYLENE	**6.1**	**0.6**	**4.6**	<0.5
VINYL CHLORIDE	**3.1**	<0.5	**2**	<0.5
TOTAL TARGETED	**23.1**	**1.12**	**16.6**	**0.41**

Notes:
Concentrations reported in micrograms per liter (µg/L
< = less than laboratory detection limit
J = estimated concentration
-- = not analyzed



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LEGEND

- SEDIMENT SAMPLE LOCATION
- SEDIMENT AND WATER SAMPLE LOCATION
- WATER SAMPLE LOCATION
- CATCH BASIN LOCATION
- STORMWATER CONVEYANCE SYSTEM
- SITE BOUNDARY

SAMPLE LOCATION — SAMPLING DATE

CHEMICAL GROUP

CB-134	1/9/2009
PCBs (ug/Kg)	
AROCLOR 1248	830
AROCLOR 1260	110
Total PCBs	940
VOCs (ug/L)	
1,1-DICHLOROETHYLENE	2.1
CIS-1,2-DICHLOROETHENE	4.1
TETRACHLOROETHENE	3.8
TRICHLOROETHYLENE	4.6
VINYL CHLORIDE	2

CHEMICAL NAME — CONCENTRATION IN ug/L

NOTES:

1. ALL LOCATION AND DIMENSIONS ARE APPROXIMATE.
2. UG/KG: MICROGRAMS PER KILOGRAM
3. UG/L: MICROGRAMS PER LITER
4. PCB: POLYCHLORINATED BIPHENYLS
5. VOCS: VOLATILE ORGANIC COMPOUNDS
5. ND: NOT DETECTED ABOVE LABORATORY REPORTING LIMIT
6. J: ESTIMATED VALUE
7. /: DUPLICATE VALUES
8. -: NOT SAMPLED OR NOT DETECTED
9. *: WATER SAMPLES COLLECTED; VOCS NOT DETECTED

N
W E
S

0 75 150 300 450 600

SCALE IN FEET

HALEY & ALDRICH

FORMER TELEDYNE RYAN AERONAUTICAL FACILITY
2701 NORTH HARBOR DRIVE
SAN DEIGO, CALIFORNIA

SAN DIEGO BAY SEDIMENT SAMPLING LOCATIONS WITH DECEMBER 2008 AND JANUARY 2009 RESULTS

SCALE: AS SHOWN
JANUARY 2011

FIGURE 1

ATTACHMENT 2

TRA PRIVATE/CONFIDENTIAL

TRA ENVIRONMENTAL MATTERS

Mid-1950s	15/30" storm drain line installed by Ryan. Storm drain line originates at NE corner Sheet Metal Fab Shop and runs to Gate 2 under Harbor Drive into Convair Lagoon.
1979	PCBs limited to enclosed uses.
1979-85	State Mussel Watch samples showed elevated levels of PCBs in Convair Lagoon.
1983-85	Regional Water Quality Control Board found low levels of PCBs in Lagoon. (below 50 ppm hazardous level)
Feb/June 84	Board samples of 15/30" line basins showed very low levels of PCBs.
Feb/March/May/ Oct 85	TRA sample results inconsistent with Board samples--viewed inconclusive by TRA. Highest TRA sample was 906 ppm whereas highest Board sample was 4700 ppm.
29 Jul 86	Board staff report finding TRA "contributor" to PCB problem in Convair Lagoon.
30 Sep/1 Oct 86	EPA inspection of 15/30" line. Sample results from very low levels to 3300 ppm (Aeroclor 1248).
17 Oct 86	Board issues Cleanup/Abatement Order--requires TRA to clean 15/20" basins and line. Requires basin sampling prior to cleaning.
23 Oct 86	Board requires TRA to submit technical plan of study for sampling Convair Lagoon. No requirement that TRA perform sampling.
22-27 Oct 86	Sample results by TRA and Board confirm high levels at some basins in 15/30" line. 10 of 15 storm basins exceed 50 ppm. Cleaned 15/30" line.
13 Jan 87	First post-cleanup samples by TRA show PCBs still in line.

TRA PRIVATE/CONFIDENTIAL

1 Feb 87	TRA submits plan of study for sampling Convair Lagoon.
1 May 87	Post-cleanup sample by TRA shows basins at top of line from none to low-levels PCBs whereas mid-line Basin 146 showed 2100 ppm.
28 May 87	Sample by TRA of mid-line basins showed highest level found--26,000 ppm (black sediment from N-inlet of 145).
2 Jul 87	Board issues Addendum No. 1 to Cleanup/Abatement Order. Requires TRA to sample storm drain basins on 54", 60" and East Drainage lines.
21 Sep 87	Board requires TRA to submit minor revisions to technical plan of study for sampling Convair Lagoon.
21 Sep 87	Sample of mid-line Basin 144 inlet pipe showed 54,000 ppm of Aeroclor 1248. Sample chiseled from pipe. Consultant advises not practical or cost-effective to reclean line.
16 Nov 87	TRA submits revised technical plan of study for sampling Convair Lagoon.
Nov/Dec 87	TRA Facilities Engineering and consultants complete studies re 15/30" line.
Dec 87	TRA Facilities Engineering and outside consultant recommend removal/replacement of 15/30" line.
4 Dec 87	Board Agenda notice for 21 Dec 87 meeting includes proposed civil referral.
7 Dec 87	Board issues Addendum No. 2 to Cleanup/Abatement Order. Requires TRA to implement Phase I sampling of Convair Lagoon. Board hearing set 21 Dec 87.