File #: 2015-527, **Version:** 1

Report to Mayor and City Council

Tuesday, July 07, 2015

Discussion

SUBJECT:

CONSIDER STATUS REPORT ON THE REGIONAL WATER QUALITY CONTROL BOARD ENVIRONMENTAL INVESTIGATION AND CARSON DECLARATION OF THE EXISTENCE OF A LOCAL EMERGENCY WITHIN THE CAROUSEL TRACT (CITY COUNCIL)

I. SUMMARY

This item is on the agenda to provide updates at all regularly scheduled City Council meetings related to the environmental investigation of the Carousel Tract.

II. RECOMMENDATION

CONSIDER and DISCUSS.

III. ALTERNATIVES

TAKE such other action the City Council deems appropriate that is consistent with the requirements of law.

IV. BACKGROUND

On June 22, 2015, the Los Angeles Water Quality Control Board (Regional Board) provided staff a copy of the petition that Barclay Hollander Corporation (Barclay) filed with the State Water Resource Control Board (State Water Board). The purposes of the petition are to request the State Water Board to review, petition for stay, and petition to submit supplemental evidence and to conduct a hearing - In the matter of *Cleanup and Abatement Order No. R4-2011-0046 (CAO)* (Exhibit No. 1).

Irrespective of the State Water Board ruling on Barclay's petition, the Regional Board's review of the Environmental Impact Report (EIR) and the Remedial Action Plan (RAP) of the Carousel Tract is proceeding accordingly. There is no definite date when the Regional

Board will release the final version of the EIR and the RAP to the public. Additionally, Shell Oil (Shell) activities in the Carousel Tract will continue as previously approved by the Regional Board.

Testing of property in the Carousel Tract is continuing and the latest reports are posted on the Regional Board's website at:

<http://geotracker.waterboards.ca.gov/profile_report.asp?

As of March 10, 2015, the completed Residential Sampling Activity is as follows:

- 272 homes have been screened for Methane. (95%)
- 273 homes have had soils sampled and vapor probes installed. (96%)
- 273 homes have had vapor probes sampled. (95%)
- 261 homes have had indoor air sampled. (91%)
- 244 of 261 homes have had their 2nd round of indoor air sampling. (94%)

Timeline of Activities

A general timeline that tracks past and current activities of the Carousel Tract environmental investigation is included as (Exhibit No. 2).

V. FISCAL IMPACT

None.

VI. EXHIBITS

1. Barclay Petition to the State Water Board. (pgs. 3-277)

2. Carousel Tract Environmental Investigation Timeline. (pgs. 278-286)

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CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the Matter of Revised Cleanup and Abatement Order No. R4-2011-0046 Requiring Shell Oil Company and Barclay Hollander Corporation to Cleanup and Abate Waste Discharged to Waters of the State Pursuant to California Water Code Section 13304 at the Former Kast Property Tank Farm, Carson, California (File No. 97-043)	**PETITION FOR REVIEW OF REVISED CLEANUP AND ABATEMENT ORDER NO. R4-2011-0046 PURSUANT TO WATER CODE § 13320 AND 23 C.C.R. § 2050** **[Wat. Code, § 13320, 23 C.C.R. § 2050]**

EXHIBIT NO. 1

3

Pursuant to section 13320 of the California Water Code and section 2050 of Title 23 of the California Code of Regulations (CCR), Barclay Hollander Corporation ("Barclay" or "Petitioner") hereby petitions the State Water Resources Control Board ("State Board") to review and vacate the Revised Cleanup and Abatement Order No. R4-2011-0046 ("Revised CAO"), issued by Deborah Smith, Chief Deputy Executive Officer of the California Regional Water Quality Control Board for the Los Angeles Region ("Regional Board") on April 30, 2015. The Revised CAO was issued pursuant to California Water Code section 13304 and entitled Revised Cleanup and Abatement Order No. R4-2011-0046 Requiring Shell Oil Company and Barclay Hollander Corporation to Cleanup and Abate Waste Discharged to Waters of the State Pursuant to California Water Code section 13304 at the Former Kast Property Tank Farm, Carson, California (File No. 97-043).

I. NAME AND ADDRESS OF PETITIONER

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II. THE SPECIFIC ACTION OR INACTION OF THE REGIONAL BOARD WHICH THE STATE BOARD IS REQUESTED TO REVIEW AND A COPY OF ANY ORDER OR RESOLUTION OF THE REGIONAL BOARD WHICH IS REFERRED TO IN THE PETITION

The State Board is requested to review the Regional Board's issuance of the Revised CAO. A true and correct copy of this order is attached to this Petition as Exhibit A. Additionally, true and correct copies of the following orders and draft orders of the Regional Board, which are referred to in this Petition, are attached hereto: Cleanup and Abatement Order No. R4-2011-0046, dated March 11, 2011 ("CAO"), attached to this Petition as Exhibit B; Draft Cleanup and Abatement Order No. R4-2011-0046, dated October 31, 2013 ("Draft CAO"), attached to this Petition as Exhibit C; and Revised Draft Cleanup and Abatement Order No. R4-2011-0046, dated December 8, 2014 ("Revised Draft CAO"), attached to this Petition as Exhibit D.

III. THE DATE ON WHICH THE REGIONAL BOARD ACTED OR REFUSED TO ACT OR ON WHICH THE REGIONAL BOARD WAS REQUESTED TO ACT

The date of the Regional Board's issuance of the Revised CAO is April 30, 2015.

IV. A FULL AND COMPLETE STATEMENT OF THE REASONS THE ACTION OR FAILURE TO ACT WAS INAPPROPRIATE OR IMPROPER

As set forth in detail in the Statement of Points and Authorities (see Part VII, *infra*), the issuance of the Revised CAO by the Regional Board was inappropriate and improper for the following reasons: (1) the Regional Board failed to afford Barclay the due process to which it was entitled under the United States and California Constitutions and the California Administrative Procedure Act ("APA"), Govt. Code, §§ 11340 *et seq.*; (2) the Regional Board's finding that Barclay is liable under section 13304(a) of the Water Code for "spread[ing] the waste" or "contribut[ing] to the migration of the waste" is not supported by evidence; (3) the Regional Board's finding that Barclay merely "spread the waste" or "contributed to the migration of the waste" does not support liability under section 13304(a) of the Water Code; and (4) Barclay is exempt from liability under section 13304 because all of the acts for which the Revised CAO purports to hold it responsible occurred before 1981, were lawful at the time, and are therefore protected by the safe harbor of section 13304(j) of the Water Code.

V. THE MANNER IN WHICH PETITIONER IS AGGRIEVED

Petitioner is aggrieved because of the reasons set forth in Section IV above.

VI. THE SPECIFIC ACTION BY THE STATE OR REGIONAL BOARD WHICH PETITIONER REQUESTS

Petitioner respectfully requests that the State Board accept this Petition and vacate the Revised CAO.

VII. STATEMENT OF POINTS AND AUTHORITIES IN SUPPORT OF LEGAL ISSUES RAISED IN THE PETITION

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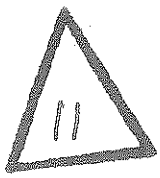

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I. Introduction

The Porter-Cologne Water Quality Control Act ("Porter-Cologne") limits the jurisdiction of both the State Board and the nine Regional Water Quality Control Boards, of which the Regional Board is one. Water Code section 13304(a), which is part of Porter-Cologne, provides in part: "Any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has caused or permitted . . . waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates . . . a condition of pollution or nuisance, shall upon order of the regional board, clean up the waste or abate the effects of the waste. . . ." (Wat. Code, § 13304, subd. (a).) Barclay is not liable under any of these criteria.

It is beyond dispute that Shell Oil Company ("Shell"), not Barclay, discharged 100% of the petroleum hydrocarbon contaminants at the Kast Property in what is now Carson, California ("Property" or "Site"). After 40 years of storing oil in leaky reservoirs, Shell sold the Property to a predecessor of Barclay without disclosing the leaks. The developers built houses on the Property and sold them in the late 1960s and early 1970s. In 2008, after discovering contamination nearby, the Regional Board directed Shell to conduct environmental testing at the Site, which revealed the presence of petroleum hydrocarbons. In 2011, the Regional Board named Shell as the responsible party. With no basis to challenge the CAO, Shell began pressuring (and illegally paying for) the Regional Board to investigate and name Barclay as another responsible party, first alleging—without a shred of evidence—that Barclay brought contaminated fill soil onto the Property. Later, other parties with a purely financial interest in having Barclay named—parties to litigation pending in the Los Angeles County Superior Court of which the staff and Regional Board are aware (the "*Acosta* Litigation"[1] and the "*Carson* Litigation"[2])—joined forces with Shell to improperly influence the Regional Board to name Barclay for their own financial gain.

The Revised CAO is the result of an unfair process that denied Barclay due process. It is unsupported by the evidence, it is contrary to clearly established law, and it must be vacated.

[1] See *Adelino Acosta, et al. v. Shell Oil Company, et al.*, Case No. NC053643 and Related Cases.
[2] See *City of Carson v. Shell Oil Company et al.*, Case No. BC499369.

A. Barclay Was Denied Due Process.

The Revised CAO is the product of a fundamentally flawed and unfair proceeding—paid for by Shell, a party adverse to Barclay—that deprived Barclay of due process. Under the United States and California Constitutions and the APA, Barclay's due process rights were violated by the Regional Board.

First, Barclay was denied due process because Shell—an adverse party which pressured the Regional Board solely because it had a direct financial interest in having Barclay named—was illegally reimbursing the Regional Board for the efforts that the Prosecution Team, including their counsel, spent considering whether to name Barclay, building an administrative record to do so, and drafting the necessary documents, including the Revised Draft CAO itself and the recommendation to Smith to name Barclay. (Part V.A.1, *infra*.) As a result of these payments—unauthorized and illegal under the Cost Recovery Program—the Regional Board had a financial incentive to investigate and name Barclay, a violation of Barclay's due process rights. (Wat. Code, § 13304, subd. (c); *People v. Vasquez* (2006) 39 Cal.4th 47, 64 [holding that "pecuniary conflicts of interests on a judge's or prosecutor's part pose a constitutionally more significant threat to a fair trial than do personal conflicts of interest"].)

Second, Barclay's right to an impartial adjudicator was violated because the Regional Board failed to adequately separate its adjudicative and prosecutorial functions and because Sam Unger, the Executive Officer of the Regional Board and the leader of the Prosecution Team, appointed Deborah Smith, his direct subordinate, as adjudicator. (Part V.A.2, *infra*; Govt. Code, §§ 11425.10, subd. (a)(4), 11425.30, subd. (a)(2).) Indeed, Unger confirmed in his deposition that "there was never really any establishment of the [prosecutorial] team, per se." (Ex. E [Unger Dep.] at 197:12-19.) And Smith assumed the role of prosecutor—a separate and independent due process violation (Govt. Code, §§ 11425.10, subd. (a)(4), 11425.30, subd. (a)(1)—when she modified the Draft Revised CAO, without notice to Barclay, to include new and previously undisclosed purported facts and purported violations of law.

Third, the Regional Board's nearly five-year delay in naming Barclay to the CAO deprived Barclay of any opportunity to challenge the Remedial Action Plan ("RAP") to which Shell, the

Acosta Plaintiffs, and the City of Carson agreed, but with which Barclay disagrees. Subjecting Barclay to pay for or implement a RAP that it opposes and that it had no role in crafting (and no reason to do so at the time) would be a profound violation of due process. (Part V.A.3, *infra*; Govt. Code § 11425.10, subd. (a)(1).)

Fourth, in issuing the Revised CAO, the Regional Board failed to develop and rely upon an adequate administrative record, and what record exists does not support naming Barclay. (Part V.A.4, *infra*; Govt. Code, §§ 11425.10, subd. (a)(6), 11425.50.)

Fifth, in developing the inadequate administrative record that does exist, the Regional Board used biased and unfair procedures, which repeatedly favored Shell and the *Acosta* Plaintiffs and disfavored Barclay. (Part V.A.5, *infra*.) This included extensive improper ex parte contacts with representatives of adverse parties, who provided the Prosecution Team with responses to Barclay's comments and other information of which Barclay had no notice and to which it had no opportunity to respond. (*Id.*)

And sixth, the Regional Board failed to hold an evidentiary hearing, which due process and the State Board counsel require under these circumstances. (Part V.A.6, *infra*.)

B. The Revised CAO's Findings Do Not Support Liability Under Porter-Cologne.

The Revised CAO's findings lack evidentiary support and a factual basis. The Revised CAO both misstates critical facts and fails to support its findings with evidence. The law requires more.

1. The Revised CAO Is Wrong On The Facts.

The Revised CAO bases its determination that Barclay is a responsible party in part on its finding that Barclay had "explicit *knowledge* of . . . the presence of residual petroleum hydrocarbons and conducted various activities, including partially dismantling the concrete in the reservoirs and grading the onsite materials. These activities spread the waste at the site, and contributed to the migration of the waste through soil and groundwater." (Ex. A [Revised CAO] at p. 10, italics added.)[3] Yet there is no evidence that Barclay knowingly "spread the waste" or "contributed to the migration of the waste" in any manner that caused or contributed towards the conditions that mandate the clean-

[3] Exs. A-D refer to exhibits attached to the Petition for Review, filed concurrently on June 1, 2015. Exs. E-UUU refer to exhibits attached to the Authenticating Declaration of Patrick W. Dennis in Support of Petition for Review, filed concurrently on June 1, 2015.

up today. Indeed, all of the available evidence shows that Barclay spread fill soil that it did not believe had any petroleum when it graded the Site. In the *Acosta* Litigation, the only four surviving eyewitnesses to Barclay's placement and compaction of the berm fill soil testified that they had a good vantage point from which to observe the soil as it was spread out broadly in shallow lifts, and they saw no oil and detected no oil in the soil; it was clean when put in place. There is no evidence to the contrary. (See Part V.B.1, *infra*.)

Moreover, Dr. Jeffrey Dagdigian, an expert on the movement of oil in the environment, has determined that the fill soil placed by Barclay in the areas located above the former reservoir bottoms became contaminated only after it was put there when contamination left by Shell moved upward into the clean fill soil through capillary action, buoyancy, and other upward pressures. Dr. Dagdigian has gathered and reviewed substantial evidence that lead to his conclusions, but the most compelling proof of Dr. Dagdigian's opinion arrived in the form of a 1997 report prepared for the Regional Board by Shell as part of the approval process for the decommissioning of two similar oil reservoirs. The report described an upward movement of similar contaminants through soil in nearly identical circumstances. Specifically, Shell Reservoirs 1 and 2 were built at the same time as the reservoirs at issue here, constructed in the same concrete-and-berm style, and operated as storage receptacles for 30 years longer than Shell Reservoirs 5, 6, and 7 at the Site. Shell's 1997 report confirms that Reservoirs 1 and 2 leaked in the same manner as those located at the Site—i.e., contaminants escaped through weak points in the bottoms of the reservoirs, leaving high concentrations of contamination in the deeper soil for many years until it was able to migrate upward when the reservoir bottom was broken up and fill soil was compacted on top of it. Because the burden of proving Barclay's responsibility is on the Regional Board, the Revised CAO cannot be issued in contravention of this expert evidence without proof that the facts are to the contrary, but the Revised CAO is silent on the subject. (See Part V.B.1.b, *infra*.)

2. The Revised CAO Is Wrong On The Law.

Even if the Revised CAO's finding had been supported by evidence, which is not the case, there is no State Board precedent for holding Barclay liable for supposedly "spread[ing] the waste" or "contribut[ing] to the migration of the waste." The Revised CAO cites State Board decisions that, in

rare circumstances inapplicable here, hold current owners and former owners who were in possession of property at the time of a discharge responsible for the clean-up and abatement of contaminants discharged by others. (Ex. A [Revised CAO] at p. 11, fn. 13.) Barclay is neither. Barclay is not a current owner nor did any discharges occur during its brief prior ownership of the Property. The undisputed facts are that Shell contaminated the Property before selling it to Barclay's predecessor. Accordingly, the Revised CAO goes beyond the limits of the Regional Board's jurisdiction, as established by section 13304(a) and as interpreted by State Board precedent. (See Part V.B.2.a, *infra*.)

There is also controlling case law holding that after contaminants have already been discharged, there is no liability under section 13304(a) for inadvertently causing those contaminants to be moved to another location through an action intended to achieve an innocent purpose. (*Redev. Agency of the City of Stockton v. BNSF Ry. Co.* (9th Cir. 2011) 643 F.3d 668, 677-78.) In *City of Stockton*, a railroad had installed a french drain under a track for water drainage, but that had the unintended effect of serving as a conduit for the transport from one property to another of petroleum contaminants that had been discharged from a neighboring facility. (*Id.*) The court held that the railroad had no liability as a "discharger" under section 13304(a) on those facts. The same rule applies for Barclay, which, assuming the Regional Board's incorrect facts were true, would have only moved contaminants that had already been discharged by Shell for the innocent purpose of refilling the reservoirs to bring them to grade and in a manner that would promote adequate drainage. (See Part V.B.2.b, *infra*.)

Moreover, the plain meaning of the statute limits the jurisdiction of the Regional Boards to issue clean-up and abatement orders only to dischargers. It therefore prohibits orders such as the Revised CAO, which require someone who has discharged nothing to be responsible for the discharges of someone else. Over fifteen years ago, however, the State Board adopted an interpretation of this language that departed from the statute's plain meaning when it held owners accountable for clean-up and abatement of contamination discharged by someone else.

Following enactment of Porter-Cologne, which became effective in 1970, until enactment of the 1980 amendments, which became effective January 1, 1981, not a single State Board decision held a non-discharging owner responsible for the discharges of others under section 13304(a). Our

review of the legislative history of the 1980 amendments to Porter-Cologne found no mention even of the idea of expanding the categories of persons that could be subject to a Regional Board order despite the fact that, at about the same time, the terms "owners, operators and arrangers" were specifically being adopted to define responsible persons in CERCLA and its California equivalent, the Hazardous Substances Account Act ("HSAA"), which were enacted, respectively, in 1980 and 1981. In other words, there was no change in the language of section 13304(a) to justify the change in the State Board's interpretation; nor is there anything in the legislative history of the 1980 amendments to section 13304 to support the State Board's view.

The State Board decisions cited in the Revised CAO that purport to expand the definition of what it means to "cause or permit . . . waste to be discharged" have never been tested in any reported decisions of the California Courts of Appeal or the California Supreme Court, but we intend to test them in this case if necessary. There are so many reasons why it is wrong to hold Barclay responsible on the evidence before the Regional Board that it hardly seems fitting to bring up a ground as fundamental as statutory interpretation. But we do so, in part, because it provides us with the opportunity to emphasize that holding Barclay responsible as described in the Revised CAO requires an unprecedented and unsupported expansion of State Board precedent. The Regional Board should not have expanded the rules laid down by State Board precedent because those precedents need to be narrowed, not expanded, insofar as they are based on the State Board's indefensible departure from the plain meaning of section 13304(a). (See Part V.B.2.c, *infra*.)

C. Barclay Is Protected By The Safe Harbor Of Water Code Section 13304(j).

Even if Barclay could be properly identified as a discharger under section 13304(a), which is not the case, Barclay nevertheless has no liability under Porter-Cologne because its conduct was lawful at the time. Water Code section 13304(j) provides: "This section does not impose any new liability for acts occurring before January 1, 1981, if the acts were not in violation of existing laws or regulations at the time they occurred." (Wat. Code, § 13304, subd. (j).)

All of Barclay's activities at issue here occurred well before 1981 so the burden of proof is on the Regional Board to establish Barclay's liability in light of section 13304(j), and the Revised CAO fails to meet that burden. The Revised CAO makes only the conclusory statement that "[i]ncluding

[Barclay] as a responsible party is consistent with Water Code section 13304(j) because Lomita or [Barclay]'s actions that resulted in creating pollution and nuisance were unlawful since at least 1949." (Ex. A [Revised CAO] at p. 11.) In support, the Revised CAO cites in a footnote three code provisions that Barclay allegedly violated: Health and Safety Code section 5411, Fish and Game Code section 5650, and Los Angeles County Code section 20.36.010. (*Id.* at p. 11, fn.14.) The Revised CAO does not cite any specific provisions or elements of those laws or any case or interpretive authority as to how they were enforced in 1965-66, much less any relevant evidence to satisfy the Regional Board's burden of proof that Barclay's acts from 1965-66 were indeed in violation of any existing laws at the time they occurred.

In fact, the evidence establishes that Barclay complied with existing laws at the time. Multiple public agencies oversaw Barclay's development of the Carousel project, and all confirmed that there were no "violation[s] of existing laws or regulations at the time" Carousel was graded and built in the late 1960s. Two of these agencies, the Los Angeles County Engineer, governed by the County Building Code, U.B.C. § 7014, subd. (c) (1965), and the California State Real Estate Commissioner, governed by the Subdivided Lands Law, Business & Professions Code §§ 11000-11200, were required by statute to confirm whether the project complied with applicable laws, and they confirmed it. The Planning Commission and Regional Board of Supervisors also held public hearings before giving subdivision map approval and granting Barclay's request for a zoning change. All of these agencies were well informed about the project and exercised their discretion to approve it. Indeed, every soils report was reviewed by the County Engineer, including the memorandum in which the soils engineer observed "oil stains" as part of its investigation of soil permeability. Each agency signed off on the project. Because the Real Estate Commissioner and County Engineer were required to confirm compliance with the law, sign-off meant that Barclay was found to be in compliance with the laws then in existence. And because the Planning Commission and its staff were familiar with applicable law, it is inconceivable that they would have approved Barclay's subdivision map and a zoning change from heavy industrial (M-2) to residential (R-1) if they had believed Barclay had violated any laws. In contrast, the lack of the Regional Board's familiarity with the applicable laws at the time is clear given that the Revised CAO asserts Barclay violated Fish and Game Code section

5650, despite the fact that section did not apply to groundwater contamination at the time. (Part V.C.2.b, *infra*.) These facts alone establish that all of the elements for safe harbor protections under section 13304(j) have been met, and the Revised CAO identifies no evidence to contradict these facts or otherwise meet the Regional Board's burden of proof.

Section 13304(j) was adopted to protect compliant dischargers against the effects of the 1980 amendments to Porter-Cologne. Those amendments allowed the Regional Boards to hold dischargers responsible for cleaning up and abating the consequences of past discharges, and without the safe harbor, previously-compliant dischargers would be liable under the amendments for the contaminating effects of their otherwise lawful discharges.

If Barclay was a discharger, and it was not, then it was a discharger in compliance with all then-applicable laws, and is therefore protected by the safe harbor provision under section 13304(j). (See Part V.C, *infra*.)

II. Factual Background

"To meet the requirement of fairness, the Regional Board, before acting on . . . proposed orders, must ensure that there is a factual and legal basis in the record for its decision and must indicate its reasoning and the factual basis for its decision to the affected parties." (*In the Matter of Project Alpha*, State Board Order No. WQ 74-1, at *3; see also *Topanga Ass'n for a Scenic Cmty. v. City of L.A.* (1974) 11 Cal.3d 506, 514-15 [an agency "must render findings sufficient both to enable the parties to determine whether and on what basis they should seek review and, in the event of review, to apprise a reviewing court of the [legal] basis for the [agency's] action," and the findings must "bridge the analytic gap between the raw evidence and ultimate decision or order," disclosing "the analytic route the . . . agency traveled from evidence to action"]; *City of Brentwood v. Centr. Valley Reg'l Water Quality Control Bd.* (2004) 123 Cal.App.4th 714, 720 [Regional Boards bear the burden of proving the elements of an offense under Porter-Cologne].)

The Revised CAO does not satisfy these requirements. It purports to recite the facts concerning Barclay's activities at the Site on pages 4 and 10-11, but these descriptions gloss over the details in ways that mischaracterize the facts, utterly failing to "bridge the analytical gap between the raw

evidence and ultimate decision or order." There is a significant disparity between what is thus described in the Revised CAO and what the evidence shows.

This lack of clarity is exacerbated by the failure to cite evidence in anything but the most general terms. Although the Revised CAO occasionally refers to "the record" in general terms, there is no reference to admitting evidence, identification of a record, or specification of what parts of any evidence or record are relied upon to support finding Barclay to be a responsible party under section 13304(a).[4] When asked for factual support at their depositions, members of the Regional Board's Prosecution Team were repeatedly unable to point to any specific documents or witness testimony to support the Regional Board's factual assertions. (Ex. F [Ayalew Dep.] at 73:10-74:3, 74:18-76:16, 159:6-9, 243:22-244:5, 84:15-22, 229:22-230:5, 109:18-110:3, 166:17-20; Ex. E [Unger Dep.] at 213:2-217:20, 97:8-14, 232:20-233:15, 234:7-10, 235:5-12.) Such "conclusory findings without reference to the record are inadequate." (*Envtl. Prot. Info. Ctr. v. Cal. Dep't of Forestry & Fire Prot.* (2008) 44 Cal.4th 459, 517, citation omitted.)

In light of these crippling shortcomings in the Revised CAO, below is a summary of the historical and procedural facts in this matter. If anything in the statement of facts below is contrary to any of the findings in the Revised CAO, it should be treated as an objection to the findings, for each of the facts below is supported by substantial evidence. The Revised CAO does not refer to any evidence in the record that contradicts these facts, and Barclay is not aware of any.[5]

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[4] The Regional Board's decision must be based "exclusively on evidence of record in the proceeding and on matters officially noticed in the proceeding." (Govt. Code, § 11425.50, subd. (c); see also Govt. Code, § 11425.10, subd. (a)(6) ["The decision shall be in writing, be based on the record, and include a statement of the factual and legal basis of the decision as provided in section 11425.50."].) It is axiomatic that evidence must be admitted, and therefore be admissible, to form part of the record. (See Govt. Code, § 11513 [providing rules governing admissibility of evidence in administrative adjudications].)

[5] The law places the burden of proof on the Regional Board to establish that Barclay meets the definition of a "discharger" in Water Code section 13304(a) before it may issue a clean-up and abatement order naming Barclay. (*City of Brentwood v. Center Valley Reg'l Water Quality Control Bd.* (2004) 123 Cal.App. 714, 720.) Accordingly, even were the Regional Board to disregard the evidence cited in support of the facts presented below, which it should not do because the evidence is both overwhelming and credible, disregarding competent evidence alone would not be enough to sustain liability, for the Regional Board must also have affirmative evidence to sustain its findings, and there is none. (See, e.g., *Schutte & Koerting, Inc. v. Reg'l Water Quality Control Bd.* (2007) 158 Cal.App.4th 1373, 1383-84 [citing Civ. Proc. Code, § 1094.5(c) and stating abuse of discretion is established if the administrative order "is not supported by the findings, or the findings are not supported by the evidence"].)

III. Historical Facts

The following chronology summarizes the evidence relating to work performed at the Site.[6]

A. Between 1923 And 1928 Shell Purchased The Site And Constructed Three Large Reservoirs On It.

- In 1923 Shell purchased the Site from Mary Kast, and thereafter referred to this oil storage facility as the Kast Tank Farm or the Kast Property. (Ex. TTT [1/21/14 ltr.] at Tab 16 [SOC 1-3].)
- Between approximately 1924 and 1928 Shell excavated three large reservoirs on the Site using the soil from the excavation to form the reservoir berms. (*Id.* at Tab 137 [1923 Ground level photo]; Tab 138 [1928 Aerial Photograph].)
  - The inside of each reservoir was lined with concrete about four inches thick, which was "reinforced" with thin wiring, and covered with a roof. (*Id.* at Tab 7 [Bach Dep.] at 34:7-35:11; 40:22-41:15; Tab 8 [Vollmer Dep.] at 104:10-105:16.)
  - The three reservoirs had a combined reported capacity of 3.5 million barrels. (*Id.* at Tab 60 [COLA 1].)
  - Additional soil taken from the Site was used to form so-called "safety berms" between each tank and another berm around the perimeter of the entire property. The purpose of the safety berms was to contain the contents of the reservoirs in the event of a breach of one of the primary berms. (*Id.* at Tab 7 [Bach Dep.] at 48:12-49:20, 42:3-17.)
  - In 1966 the reservoirs were described as follows:
    - "The earthen walls of the reservoir are generally about fifteen feet in height and have a slope ratio of 1-1/2:1."
    - "The bottom and sides of the reservoir are lined with a four inch blanket of reinforced concrete."
    - "The reservoirs are nearly 30 feet deep and covered by wood roofs." (*Id.* at Tab 66 [CARSON 348-354].)

B. Shell Actively Operated The Site As An Oil Storage Facility From 1928 Until 1959.

- The Site was an integral part of Shell's refinery facilities, some of which were located less than a mile away along Lomita Boulevard at a refinery that was sometimes called the "Shell Wilmington Refinery." (*Id.* at Tab 4 [Schultz Dep.] at 68:13-69:3, 69:17-70:23.)
- Shell numbered the reservoirs on the Site beginning from the south at Lomita Boulevard, and moving toward the north, as Reservoir 6, Reservoir 5, and Reservoir 7, respectively. (*Id.* at Tab 60 [COLA 1]; *id.* at Tab 8 [Vollmer Dep.] at 34:25-35:12, 36:4-9, 36:19-37:3.)

[6] All of the fact citations in this section refer to documents submitted with Barclay's January 21, 2014 submission to the Regional Board, attached to the Declaration of Patrick W. Dennis in Support of Petition For Review as Exhibit TTT. This exhibit includes Barclay's letter, Tabs 1-359, the Dagdigian Report, the Shepardson Report, and the Williams Report.

- Reservoirs 1 through 4 were located at the Shell Wilmington Refinery and were constructed by Shell at around the same period in the 1920s as Reservoirs 5, 6, and 7. (*Id.* at [Dagdigian Report] at p. 3.)

- Although available information indicates that the reservoirs were primarily used to store crude oil, there is evidence that other materials, including heavy 160 degree flash point oil, heavy oils, and bunker fuels were also stored in the reservoirs. (*Id.* at Tab 25 [SOC 120577]; Tab 26 [SOC 120575]; Tab 28 [SOC 120556]; Tab 330 [8/31/2010 Shell Chemical Storage and Use Questionnaire].)

- The reservoirs leaked during Shell's operations.

  - The pattern of contamination now known to exist in columns of high-concentration petroleum hydrocarbons beneath the bottoms of the reservoirs shows that most of the contamination leaked from joints where the concrete walls and floors in the reservoirs were joined. (*Id.* at [Dagdigian Report] at p. 31.)

  - Shell has produced two documents in the *Acosta* Litigation that confirm these leaks were known by Shell as early as 1943. (*Id.* at Tab 23 [SOC 120589-590] at 120589 ["Reservoir No. 6 . . . 1943 Repair leak in concrete lining"]; Tab 22 [SOC 120591-594] at 120593 ["Reservoir No. 6 . . . 1943 Repair leak in concrete lining"].)

  - In fact, Reservoir 6, which Shell reported to be leaking in 1943, was also reported by Shell to be leaking 16 years later in 1959. (*Id.* at Tab 24 [SOC 120584-585] at 120584.)

- Shell ceased its active operation of the Site in 1959. (*Id.* at Tab 26 [SOC 120575] ["The reservoirs are essentially empty at this time, and are held on the basis of stand-by storage."].)

  - While documents indicate that Shell kept the property available even after that time for potential use as a standby storage facility, there is no evidence as to whether it actually used the Site again or, if it did, for what purpose.

  - Throughout the late 1950s and early 1960s, Shell received various offers to purchase or otherwise use the Site. Shell organized inspections of the Site for potential purchasers and obtained appraisals of the likely value of the Site during this time. (*Id.* at Tab 48 [SOC 120536]; Tab 29 [SOC 120544-120545].)

  - In 1959, someone at Shell, in an internal memo, pointed out that the Site was no longer being used for crude oil storage purposes and Reservoir 7 "constitute[s] an *attractive nuisance* which is a matter of some concern to Wilmington Refinery officials because of the possibility of children entering and being injured or killed." (*Id.* at Tab 24 [SOC 120584-120585] at 120585, italics added.)

C. Activity Increased At The Site After A Tragic Death Occurred In March 1965.

- In March 1965 there was an unfortunate accident at the Site resulting in the death of a young child. (*Id.* at Tab 1 [Harkavy Dep.] at 286:12-23, Ex. 38.)

  - Changes were made between January 1965 and September 1965 that served to eliminate sumps and other low points on the property. Shell owned the Site at the time and presumably did this work. (*Id.* at [Dagdigian Report] at pp. 92, 95-97; Tab 7 [Bach Dep.] at 35:24-40:5; Tab 8 [Vollmer Dep.] at 34:25-39:5, 87:2-88:13 ["the berm that runs right through there…had been removed already"].)

D. Barclay Signed An Agreement To Purchase The Site From Shell On October 20, 1965.

- Richard Barclay signed a formal offer to purchase the Site from Shell on October 20, 1965.[7] (*Id.* at Tab 33 [SOC 22-23].) Terms of the agreement included, among other things:
  - All underground pipes on the property to be removed.
  - Close of escrow contingent on zone changing from heavy industrial (M-2) to residential (R-1).
  - Barclay to obtain engineering report on the Site.
- Barclay was not told at the time of purchase (nor at any other time) about leaks in the reservoirs. (*Id.* at Tab 2 [Curci Dep.] at 52:8-23; Tab 7 [Bach Dep.] at 64:16-65:16; Tab 8 [Vollmer Dep.] at 67:1-11.)

E. Between December 15, 1965 And January 1966, After Shell Gives Barclay Permission, Barclay's Soils Engineer Entered The Site, And Barclay's Supervisor And Grading Contractor Followed Later In January 1966.

- In a letter dated December 15, 1965, Shell gave Barclay permission to enter the Site to begin decommissioning the former reservoirs so that the land could be used for residential housing. (*Id.* at Tab 42 [SOC 58-61].)
- Barclay's soils engineer, Pacific Soils Engineering, Inc. ("Pacific Soils") entered the property sometime before January 7, 1966 to perform its preliminary soils investigation. (*Id.* at Tab 66 [CARSON 348-354].)
  - In the Preliminary Soils Report, dated January 7, 1966, Pacific Soils indicates the "results of [its] field investigation." (*Id.* at Tab 66 [CARSON 348-354] at 348.) That investigation took place between December 15, 1965, the date of the letter in which Shell gave Barclay permission to have its contractors enter the Site, and January 7, 1966, the date of the report.
  - The Preliminary Soils Report states that "[w]ork is underway at the present time to waste from the site the water and sludge present in the reservoirs." (*Id.*)
  - A second soils report was issued on January 27, 1966, modifying the first in certain respects. (*Id.* at Tab 44 [CAR 293-294].)

[7] As described in our 2011 Letter, at this time, Richard Barclay was representing a development business, which acted through Lomita Development as the purchaser of the Site. (Ex. TTT [1/21/14 Ltr.] at Tab 2 [Curci Dep.] at 31:14-32:6, 46:9-47:8, 296:6-297:25; Tab 1 [Harkavy Dep.] at 69:16-22.) Lomita Development was a joint venture formed between entities controlled by Richard Barclay, his brothers Donald and Robert, Mike Hollander, and Shurl Curci. (*Id.* at Tab 134 [BHC 50-82]; Tab 43 [SOC 71-72].) All of these entities were rolled up into a corporation that was later incorporated as the entity now named Barclay Hollander Corporation, which was acquired by Castle & Cooke, Inc. in 1969, and Castle & Cooke, Inc. later changed its name to Dole Food Company, Inc. (*Id.* at Tab 133 [BHC 3-6]; Tab 135 [BHC 106-107]; Tab 136 [BHC 133-134]; Tab 355 [Amended Statement and Designation by Foreign Corporation dated 8/12/1991].) The Revised CAO properly does not name Dole as a responsible party since Dole had nothing to do with the Carousel development; it is only Barclay's present-day corporate parent. (*Id.* at Tab 333 [9/15/2011 Ltr.] at pp. 12-13.) Accordingly, it would have been improper to name Dole in the Revised CAO no matter what the outcome with respect to Barclay. (*Id.* at Tab 333 [9/15/2011 Ltr.] at pp. 23-25.)

- Barclay's grading contractor, Lee Vollmer, and Barclay's job supervisor at that time, George Bach, both recall in their sworn testimony that they arrived to begin demolition and grading operations in late January 1966. (*Id.* at Tab 7 [Bach Dep.] at 37:19-24; 50:7-12; 318:12-21; 320:14-18; Tab 8 [Vollmer Dep.] at 36:10-14; 37:16-19; 92:20-23; 146:25-147:3; 275:18-23.)

- Both Bach and Vollmer also recall that Reservoirs 5 and 6 were completely clean when they arrived; Reservoir 6 (next to Lomita Boulevard) and Reservoir 5 (the middle reservoir) had no residual materials remaining in them. (*Id.* at Tab 8 [Vollmer Dep.] at 34:25-35:12; 37:7-15; 141:17-142:4; Tab 7 [Bach Dep.] at 40:12-24, 50:18-51:1.) "[B]oth of them were very clean, really . . . [j]ust plain concrete . . . [and] looked like they had never been used for anything. They were that clean" and required no further work to rid them of oil or other materials. (*Id.* at Tab 8 [Vollmer Dep.] at 34:25-35:12; 37:7-15; 141:17-142:4.)

  - In a letter to Barclay dated October 25, 1965, however, Shell indicated that certain quantities of liquids remained in all three of the reservoirs at the Site. (*Id.* at Tab 36 [SOC 45-46] at 45.)

- It is not known who removed the residual materials that had been reported in the October 25, 1965 letter to be present in Reservoirs 5 and 6, but which was no longer present when Vollmer and Bach arrived in January. Nor does the soils report dated January 7, 1966 identify who was performing the "work" during the time of its own preliminary soils investigation (12/15/65 to 1/7/66), which it reported was "underway at the present time to waste from the site the water and sludge present in the reservoirs."

F. The Pacific Soils January 7, 1966 Preliminary Soils Report Set The Stage For Demolition And Burial Of The Concrete In Place, Followed By Spreading And Compaction Of Berm Soil In Former Reservoirs, None Of Which Demonstrates "Explicit Knowledge" By Barclay Of Contamination.

- Pacific Soils issued its "Preliminary Soils Report" on January 7, 1966. (*Id.* at Tab 66 [CARSON 348-354].)

- The "preliminary soils investigation" described in the Preliminary Soils Report included the following:

  - "Due to the low permeability of the surface soils, water tends to pond in the topographically low areas of the tract." (*Id.* at p. 349.)

  - "An old sump, reported to be only three feet in depth" was identified immediately to the east of Reservoir 5. (*Id.*)

  - Eight 24-inch borings were taken, ranging in depth from 21 to 35 feet. (*Id.*) Logs of the borings were attached. (*Id.* at pp. 352-54.) There was no mention of oil in the logs.

  - "In addition, several cuts were made in the earth berms thereby allowing the material to be classified." (*Id.* at p. 349.) There was no mention of oil in this berm soil anywhere in the construction files.

- The Preliminary Soils Report also "includes . . . recommendations for developing the parcel of property." (*Id.* at p. 348.) These included the following:

  - "In order to develop the property it will be necessary to fill in the reservoirs and flatten the existing berms." (*Id.* at p. 349.)

  - Pacific Soils provided two options for disposing of the concrete lining: "The concrete lining of the reservoirs may either be [1] wasted from the site or [2] buried in the fill." (*Id.*)

- Although the decision to bury the concrete as the means of disposal had not yet been made, it is Pacific Soils' discussion of what would be required if this second alternative were adopted that formed the basis on which the requirements for handling the concrete were eventually built by Pacific Soils and the County Engineer. In this introduction to the subject of burying the concrete as a means of disposal, Pacific Soils recommended that if a decision was made to bury the concrete in place, the following safeguards would be needed:

  - The concrete must be broken up "so as not to impede percolation of subsurface water." (*Id.* at 350.)

  - The concrete must be "buried deep enough in the fill so as not to interfere with future construction" and "[n]o concrete shall be placed within 4 feet from the final finished grade." (*Id.*)

- Because the developers eventually chose to bury the concrete in place, various aspects of this protocol, with a few modifications, were carried forward and repeated in soils reports dated January 27, 1966, January 31, 1966, and March 11, 1966. (*Id.* at Tab 44 [CAR 293-294]; Tab 68 [CARSON 259]; Tab 74 [CARSON 251-258].)

- This protocol does not differ significantly from the ones used for decommissioning reservoirs at the time in other nearby locations and is consistent with the protocol used for decommissioning Reservoirs 1 and 2 at the Shell Refinery even as recently as the mid-1990s, which was approved by this Regional Board. (*Id.* at [Shepardson Report] at pp. 25-28; [Dagdigian Report] at pp. 20, 101.)

G. The County Engineer Took Firm Control Of The Oversight Of Demolition And Grading Of The Former Reservoirs Between January 28 And February 4, 1966.

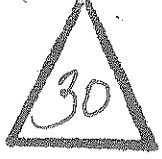
- On January 28, 1966, Eugene Zeller, the head of the County Engineer's Grading Office, issued a hand-written Grading Correction Sheet commenting on Pacific Soils' reports dated January 7 and 27, 1966. (*Id.* at Tab 67 [CARSON 293].)

  - Zeller approved the plan to leave the ripped concrete in place. He imposed as conditions that Barclay "crack the slab for purposes of drainage and compaction," as Pacific Soils had recommended, and he added a new condition of approval that "[a] called inspection is required for concrete placement." (*Id.*)

  - Zeller also required Barclay to bury the concrete even farther below ground than Pacific Soils recommended, requiring a minimum of seven feet of soil above the ripped concrete tank bottoms instead of the four feet recommended by Pacific Soils. (*Id.* at Tab 67 [CARSON 293] ("No concrete shall be placed in the fill within 7' of finish grade.").) Zeller testified that the County was "impos[ing] a more strict requirement than what the soils engineer recommended." (*Id.* at Tab 9 [Zeller Dep.] at 34:1-9; 37:23-38:7.)

- The requirement for a "called inspection" establishes that the County Engineer exercised considerable oversight over this project. In his deposition, Zeller explained that the County Engineer's office "wanted to be out there to see how they were doing it before . . . [the reservoir] was all filled up" with fill soil. (*Id.* at Tab 9 [Zeller Dep.] at 38:17-25; 39:20-40:22.)

  - Each time Barclay or its subcontractors undertook to place the broken concrete at the bottom of a reservoir before covering it with fill soil, it was necessary to notify the County Engineer's office so that an inspector could be present to observe. (*Id.* at Tab 9 [Zeller Dep.] at 40:14-22.) In other words, the County Engineer's office supervised this process closely. (*Id.* at Tab 8 [Vollmer Dep.] at 109:6-11.)



- On January 31, 1966, Pacific Soils issued another soils report memorandum making the changes Zeller required and complying with the requirements. (*Id.* at Tab 68 [CARSON 259].)

- The County Engineer inspector in the field with whom Zeller communicated was Bill Berg. (*Id.* at Tab 9 [Zeller Dep.] at 40:23-41:6; 41:24-44:3.)

- In a hand written memorandum from Zeller to Bill Berg dated February 2, 1966, only five days after the date of the Grading Correction Sheet, Zeller gave the following direction to Berg: "The site of this grading will eventually be a subdivision. Extensive concrete will be placed in the fill (see Notes 27-30 and reports). Please contact me when concrete is to be placed in fill." (*Id.* at Tab 69 [CARSON 274].)

  - Zeller testified that the purpose of this note was to make sure that Berg, who was the inspector in the field, was aware of Zeller's directive that an inspector from the County Engineer be present during concrete placement "to see how it complied or how they were dealing with it in reference to the submitted soils engineer's plans." (*Id.* at Tab 9 [Zeller Dep.] at 44:8-13.)

  - Berg was the County Engineer's "most accomplished grading inspector." (*Id.* at Tab 9 [Zeller Dep.] at 42:19-43:2.)

  - Berg would not have approved any procedures if he thought they would cause conditions to become unsafe for future homeowners at the Site. (*Id.* at Tab 9 [Zeller Dep.] at 45:10-24.)

- Thereafter, the County Engineer had an inspector in the field each time there was concrete placement, and Barclay's grading contractor testified that they "did come [to the site] on a several-times-a-week basis." (*Id.* at Tab 12 [Anderson Dep.] at 38:14-39:20; Tab 8 [Vollmer Dep.] at 71:13-72:1; 112:6-12.)

H. Despite Intermittent Delays, A Shell Inspector Confirmed In A Memorandum Dated August 15, 1966 That The Last Of The Residual Materials Left Behind By Shell In Reservoir 7 Had Been Removed Completely.

- When Barclay arrived at the Site to begin grading, the only reservoir where residual materials still remained was Reservoir 7. (*Id.* at Tab 66 [CARSON 348-354] at 350; Tab 2 [Curci Dep.] at 86:22-87:17; Tab 7 [Bach Dep.] at 96:20-97:1; 117:13-119:3; Tab 8 [Vollmer Dep.] at 37:7-24).

- Shell sent inspectors to the property to check on progress until Barclay's work on the reservoirs was completed. A Shell memorandum confirmed in April 1966 that Reservoirs 5 and 6 were "empty" and "clean." (*Id.* at Tab 47 [SOC 120420-120421] at 120420.)

- Reporting on the status of the reservoir work, a Shell inspector confirmed that Reservoirs 5 and 6 were empty in May 1966. (*Id.* at Tab 49 [SOC 120418-120419].)

- Removal of the materials from Reservoir 7 was achieved as follows:

  - Readily-flowing liquid in the reservoir was siphoned out with vacuum trucks provided by Barclay's subcontractor, Chancellor & Ogden. (*Id.* at Tab 8 [Vollmer Dep.] at 153:11-21, 159:24-160:3; Tab 7 [Bach Dep.] at 135:12-25.) Using hoses to connect the liquid to their vacuum trucks, Chancellor & Ogden siphoned out as much liquid as they were able, but mostly only water was removed, leaving a "tarry substance," an oil-based "gunk" reportedly similar to what could be seen at the "La Brea Tar Pits" in the bottom of Reservoir 7, and which was too thick for the vacuum trucks to siphon up without assistance. (*Id.* at Tab 7 [Bach Dep.] at 117:3-118:3; Tab 8 [Vollmer Dep.] at 162:4-9; 163:1-9; 249:12-17.)

    - That assistance was provided by the grading operator, Vollmer Engineering, which used earthmoving equipment to create a small dam or berm out of sand and soil and used that to

"crowd" the thick "gunk" toward the Chancellor & Ogden vacuum trucks until it formed a critical mass. (*Id.* at Tab 8 [Vollmer Dep.] at 165:2-166:18.) Then a heating coil was used to lower the viscosity of the mass so that it could be siphoned up into the trucks and taken offsite for disposal. (*Id.* at Tab 7 [Bach Dep.] at 117:13-118:3.) All of the remaining liquid and waste materials from inside Reservoir 7 were taken off site in this manner. (*Id.* at Tab 7 [Bach Dep.] at 119:15-22; Tab 8 [Vollmer Dep.] at 151:21-152:3; 153:11-21; 159:14-160:3.)

- The make-shift soil berm used to "crowd" the liquid was pushed across the top of the concrete tank bottom and "any of the dirt that had been contaminated with the gunk was hauled off-site." (*Id.* at Tab 7 [Bach Dep.] at 117:13-119:3; Tab 8 [Vollmer Dep.] at 166:5-18; 167:13-18.)

- By July 1, 1966, a Shell inspector reported only "a shallow layer of oil" in Reservoir 7. (*Id.* at Tab 50 [SOC 120415].) By August 15, 1966, the remainder of the material had been cleaned up entirely, and Shell reported internally in a memorandum that "[a]ll of the oil has been removed from the reservoirs." (*Id.* at Tab 52 [SOC 120410].)

I. The Concrete Floors Were Ripped Only After They Were Clean, And The Fact That They Were Ripped Has Been Confirmed By Multiple Sources.

- Arriving in late January 1966, Barclay personnel found a relatively clean Site.

  - Witnesses testified that areas that had previously been designated as oil sumps on maps were no longer active sumps. (*Id.* at Tab 7 [Bach Dep.] at 136:17-137:16; 139:24-140:16; 319:14-321:3; Tab 8 [Vollmer Dep.] at 134:2-17; 144:18-145:16; 278:22-280:22.)

  - They saw no ponding of oil and no oil sumps. (*Id.* at Tab 8 [Vollmer Dep.] at 96:7-11 ("What I remember is that there [was] no open ponding anywhere"), 95:11-96:2 ("I don't recall seeing any ponds anywhere"), 276:4-10 ("I never saw any oil."); Tab 7 [Bach Dep.] at 35:24-36:10; 38:7-17 ("there was no liquid in there"), 113:15-114:1 ("I never saw ponding.").)

- While Barclay was removing the materials from Reservoir 7, it also began the grading work on Reservoirs 5 and 6, which were already clean. (*Id.* at Tab 8 [Vollmer Dep.] at 34:25-35:12; 37:7-15; 141:17-142:4; Tab 7 [Bach Dep.] at 40:12-24, 50:18-51:1; 128:22-130:12; Tab 47 [SOC 120420-120421]; Tab 344 [CARSON 463-464; CARSON 467-469; CARSON 477]; Tab 348 [County of Los Angeles supervised grading certifications for 28086 dated 3/1/1967, 4/3/1967, and 4/17/1967].)

  - Only after the materials in Reservoir 7 had been removed was the concrete ripped in the manner described for Reservoirs 5 and 6. (*Id.* at Tab 8 [Vollmer Dep.] at 86:2-87:1; 136:6-138:19; Tab 7 [Bach Dep.] at 161:22-165:12].)

  - A witness provided this description of the process: "break up or crack the existing [bottom] slab, . . .and then to bring down the concrete that was lining the sides broken up and mix that with soil and make a . . . layer of material . . . [t]he soil and the broken-up concrete from the side walls, that was approximately 1 foot thick. And that was all compacted and watered and compacted in place, and then additional fill placed over the top of it." (*Id.* at Tab 7 [Bach Dep.] at 163:5-17.)

  - Once the side walls were brought down, the "weight of the . . . [f]ifty-ton Caterpillar D9 bulldozer crushed it up pretty good" and then they used "a vibrating sheep's foot . . . to effectively concentrate the dirt . . . between any cracks in the distribution of the concrete that was on the top of the original floor." (*Id.* at Tab 8 [Vollmer Dep.] at 136:15-137:6.)

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- The fundamental reason for breaking the concrete was so that "when you're finished [it] would allow moisture, water, rainwater to ultimately seep through the concrete floor and not create any problems in terms of it being overly wet underneath houses that would be built there." (*Id.* at Tab 8 [Vollmer Dep.] at 100:25-102:7.)

- Not only do all of the witnesses confirm that the concrete was broken up, but there is significant documentary evidence corroborating their recollections. (*Id.* at Tab 62 [CARSON 411]; Tab 118 [CARSON 419]; Tab 69 [CARSON 274]; Tab 66 [CARSON 348-354] at 349-350; Tab 44 [CAR 293-294]; Tab 74 [CARSON 251-258]; Tab 87 [CARSON 378-380]; Tab 100 [CARSON 445-450]; Tab 99 [CARSON 430-433]; Tab 102 [CARSON 397-403]; Tab 108 [CARSON 387-391]; Tab 110 [CARSON 340-344]; Tab 105 [CARSON 552-557].)

- In addition:

  - Berg approved the broken concrete following his personal inspection. (*Id.* at Tab 62 [CARSON 411]; *id.* at Tab 118 [CARSON 419].)

  - Pacific Soils confirms in its reports that the trenching was performed. (*Id.* at Tab 74 [CARSON 251-258] at 252 ("Nearly 6000 lineal feet of trench were punched through the concrete floor using a truck mounted rig."); Tab 87 [CARSON 378-380] at 379 ("Two of the punched trenches mentioned in the referenced report ran through the test area.").)

  - All of the supervised compaction reports located in the City of Carson's files confirm that "[p]rior to placement of compacted fill in the reservoir . . . trenches were punched through the concrete floor . . . Broken concrete, from the reservoir wall, was placed in the reservoir bottom. The concrete was thoroughly mixed with soil, watered and compacted in-place with a vibratory roller." (*Id.* at Tab 108 [CARSON 387-391] at 387-388; Tab 110 [CARSON 340-344] at 341; Tab 99 [CARSON 430-433] at 430; Tab 102 [CARSON 397-403] at 397-398; Tab 105 [CARSON 552-557] at 552-553; Tab 100 [CARSON 445-450] at 445-446.)

- The purpose of cracking the concrete was to avoid drainage problems, and the fact that there never were drainage problems at Carousel is strong evidence that the concrete protocol was followed. (*Id.* at Tab 10 [Banfield Dep.] at 55:6-56:7.)

- Pacific Soils also provided specific measurements to confirm that concrete was buried below at least seven feet of fill, some of which confirmed that in some locations there was over seven feet of soil above each tank bottom. (*Id.* at Tab 105 [CARSON 552-557] at 553.)

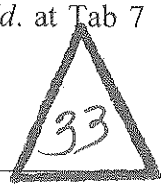
- Pacific Soils documented compliance with its protocols in the Final Report it prepared for each tract, where it confirmed in each instance that the method of concrete burial was performed according to the protocol. (*Id.* at Tab 110 [CARSON 340-344]; Tab 105 [CARSON 552-557].)

- In one instance in Reservoir 5, Barclay contractors completely removed the concrete tank floors where a 7 foot fill cover was not possible. (*Id.* at Tab 110 [CARSON 340-344] at 341.)

J. Between February and August 1966, During Grading Of The Site, Barclay Implemented A Protocol For Removing Oil-Saturated Soil From The Site.

- Barclay and its contractors instituted a protocol for segregating and removing from the Site any oil saturated soil that was found. (*Id.* at Tab 7 [Bach Dep.] at 326:4-327:1; Tab 8 [Vollmer Dep.] at 167:13-18.)

  - The concern at that time was that oil-saturated soil would not provide an adequate foundation for building because it would not compact sufficiently to support a structure. (*Id.* at Tab 7 [Bach Dep.] at 105:8-110:11; Tab 8 [Vollmer Dep.] at 238:20-239:12.)



- There were no concerns regarding the potential human health hazards caused by oil-saturated soil. (*Id.* at Tab 7 [Bach Dep.] at 73:6-75:14; Tab 8 [Vollmer Dep.] at 239:13-24; [Williams Report] at 12-21.)

- If any soil "was questionable, [Barclay] would put it into the stockpile and get rid of it" off site. (*Id.* at Tab 7 [Bach Dep.] at 106:19-107:16.) No oil-saturated soil was kept on site. (*Id.* at 110:13-111:7.)

- There is only one instance of firsthand testimony regarding a specific incident where oil-saturated soil was encountered on site. That soil was, however, removed from the site in accordance with that procedure. (*Id.* at 114:2-115:6; 55:16-56:8.)

K. The Only Report Of Oil In Any Pacific Soils Report Is Found In A Memorandum Dated March 11, 1966 Describing The Results of A "Drainage Study" Where "Oil Stains" And "Oily" Soil Were Encountered In Borings To Test Soil Permeability.

- As another safeguard against drainage problems arising from disposal of the concrete in place, Pacific Soils performed a drainage study, which it reported on in a March 11, 1966 memorandum. (*Id.* at Tab 74 [CARSON 251-258].) As part of the drainage study, Pacific Soils tested the permeability of the soil beneath the reservoir floor. Six borings were dug beneath the recently ripped concrete floor, and the logs of those borings, attached to the memorandum, reveal references to "oil stain[s]," "oily" soil, and smells of oil and petroleum. (*Id.* at 255-56.) Based on these six logs, Pacific Soils reported that "the first three feet found directly beneath the slab tend to be silty and clayey sands which are highly oil stained." (*Id.* at 252.)

  - "The purpose of this investigation," the memorandum explains, "was to determine the extent and type of subdrainage system necessary because of the existing bottom slab." (*Id.* at 251.) Because of the results of the study, it was determined that no subdrainage system was necessary. (*Id.* at 253.)

  - Soil extracted from four of those borings was taken to the lab and tested for permeability. (*Id.* at 251.)

  - "The laboratory results show[ed] that even though the soils [we]re oil stained they [we]re still permeable." (*Id.* at 252.)

  - Based on these lab results and certain identified assumptions, which it "considered conservative," Pacific Soils concluded that "the available drainage area is sufficient to handle all expected percolating water." (*Id.* at 253.)

  - A test in the field later confirmed these laboratory results. (*Id.* at Tab 7 [Bach Dep.] at 183:12-184:3.)

  - The memorandum says nothing further about the oil stains—nothing about further investigation, no concern about toxicity or human health, and no mention of the possibility that the "oil stains," which show less oil as one goes deeper, are evidence of a larger contamination. (*Id.* at Tab 74 [CARSON 251-258].) Eventually, the oil stains were left where they were found, buried no less than seven feet below the surface. (*Id.* at Tab 87 [CARSON 378-380].)

- The County Engineer was fully aware of the oil stains and participated in consideration of their possible effect on permeability. The memorandum dated March 11, 1966 was copied in triplicate to the County Engineer, naming Eugene Zeller's boss. (Tab 74 [CARSON 251-258] at 253.) Zeller testified that any document sent to his boss would have come also to him and he therefore would have seen it. (*Id.* at Tab 9 [Zeller Dep.] at 71:16-72:19.) Bach, a licensed engineer employed by Barclay, recalls discussing the oil stains with Bill Berg, the inspector for the Co[illegible]

Engineer at the Site during the field test performed to confirm the results of the laboratory test. (*Id.* at Tab 7 [Bach Dep.] at 182:15-185-20.)

- Barclay did not view the "oil stains" as significant either in amount or effect. (*Id.* at Tab 7 [Bach Dep.] at 347:1-22; 350:15-351:5.)
  - Specifically, Bach, who at the time had reviewed the March 11, 1966 memorandum and discussed it with the soils engineer who made the physical observations reported in the documents, concluded that "none of it was really significant at that time" and "[o]ther than [verifying we had percolation], there wasn't anything that we were really concerned about." (*Id.* at Tab 7 [Bach Dep.] at 347:8-22.)

L. In Reservoir 6, After The Concrete Floor Had Been Ripped, The Walls Broken On Top Of The Floor, And A Vibrating Sheep's Foot Used To Settle Berm Soil Into The Cracks, Barclay Began Spreading More *Clean* Fill Soil In 8-Inch Lifts On Top Of The Broken Concrete In A Portion Of The Former Reservoir.

- The soil used to fill the former reservoirs came from the reservoir berms, and was spread in 8 to 12-inch lifts and compacted until the ground surface was brought to level grade. (*Id.* at Tab 7 [Bach Dep.] at 142:11-19; 143:8-11; Tab 8 [Vollmer Dep.] 86:2-87:1; 117:13-118:10; 137:14-138:19; Tab 102 [CARSON 397-403] at 397-398; Tab 87 [CARSON 378-380] at 378-379; Tab 100 [CARSON 445-450] at 445-446; Tab 105 [CARSON 552-557] at 552-553; Tab 110 [CARSON 340-344] at 340-341; Tab 99 [CARSON 430-433] at 430-431; Tab 108 [CARSON 387-391] at 387-388.)

- The fill soil used to place compacted fill in the former reservoirs was taken first from the primary berms forming each reservoir, which was used until the reservoirs reached "what elevation it was needed to bring . . . the tank to [daylight grade]" and soils from other areas of the property were only used to achieve "finish grade." (*Id.* at Tab 12 [Anderson Dep.] at 20:9-21:1; 27:1-31:5.)

- All of the witnesses who were physically present during grading in the former reservoirs testified that the fill soil taken from the berms was clean when they put it in place. Only four individuals are still living, who still have the capacity to testify, and who were present during this grading and compaction process. All four have given deposition testimony in the Litigation, under oath and subject to cross-examination by lawyers for both Shell and plaintiffs. All four of them testified that they had a clear view of the soil each time one of the shallow lifts was spread, and they saw no oil in the fill soil. (*Id.* at Tab 7 [Bach Dep.] at 105:8-107:16; 143:23-144:4; Tab 8 [Lee Vollmer Dep.] at 86:2-87:1; Tab 12 [Anderson Dep.] at 35:9-36:8; Tab 13 [Al Vollmer Dep.] at 44:3-15.)

M. Title Passed On October 1, 1966; Rough Grading Was Completed By the End of 1968; And Grading Bonds Were Released By January 23, 1970.

- Barclay's designee took title to the Site on October 1, 1966. (*Id.* at Tab 340 [SOC 120814].)

- Based on the date of the last compaction tests reported in Pacific Soils' soils reports, the three reservoirs were completely filled in to level grade by May 1968. (*Id.* at Tab 108 [CARSON 387-391]; Tab 102 [CARSON 397-403]; Tab 99 [CARSON 430-433]; Tab 100 [CARSON 445-450]; Tab 105 [CARSON 552-557]; Tab 110 [CARSON 340-344]; Tab 112 [CARSON 345-347]; Tab 123 [1/30/1967 report for Tract 28086]; Tab 125 [3/10/1967 report for Tract 28086].) Certain compaction tests post-date May 1968 and were completed by November of 1968, but these tests relate to installation of utilities as opposed to filling in the reservoir profiles. (*Id.* at Tab 112 [CARSON 345-347].) Rough grading to fill in the reservoirs and bring the property up to the rough grade level was completed approximately in November 1968, based on the date available documents show the County approved all rough grading at the site. (*Id.* at Tab 341 [CARSON 275]; Tab 344 [CARSON 463-464, 467-469, 477]; Tab 348 [County of Los Angeles supervised

grading certifications for Tract 28086 dated 3/1/1967, 4/3/1967, and 4/17/1967].) The last date showing final grading approval on the documents retained in files of the County is in August 1969. (*Id.* at Tab 342 [CARSON 278-282, 285]; Tab 343 [CARSON 283]; Tab 344 [CARSON 463-464, 467-469, 477]; Tab 345 [CARSON 421, 465-466, 470-472, 478-483]; Tab 346 [CARSON 473-476]; Tab 347 [CARSON 562, 565, 567-570]; Tab 348 [County of Los Angeles supervised grading certifications for Tract 28086]; Tab 349 [County of Los Angeles final grading certification for Tract 28086].)

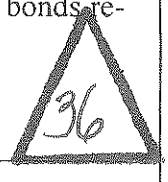
- The County Engineer released all remaining grading bonds by January 23, 1970,[8] which signified "[c]ompletion of the job and final approval by the inspector" and that the "project was not being left in a hazardous condition." (*Id.* at Tab 6 [Nehrenberg Dep.] at 90:18-91:9.) By that date, Barclay, Pacific Soils, and the County Engineer had determined that conditions in the soil were safe to proceed with construction of the residential subdivision. (*Id.* at Tab 55 [CAR 112]; Tab 117 [CARSON 320]; Tab 116 [CARSON 422]; Tab 114 [CARSON 455]; Tab 6 [Nehrenberg Dep.] at 90:18-91:9; [Williams Report] at 35-36, 57; [Shepardson Report] at 9.)

IV. Procedural Facts

A. The Regional Board Orders Shell To Investigate The Site.

On May 8, 2008, the Regional Board issued a Water Code Section 13267 Order to Shell requiring an investigation of the Site. (*Id.* at Tab 328 [May 8, 2008 Section 13267 Regional Board Order to Shell].) In response to that 2008 Order, with the assistance of its consultants URS and Geosyntec, Shell has conducted a series of investigations to evaluate impacts associated with the former oil storage operations at the Site. (Ex. F [Ayalew Dep.] at Ex. 12 [URS 9/29/2010 Plume Delineation Report].) These investigations were begun in 2008 and are continuing through the present day and now subject to the CAO. They resulted in considerable data, which have been provided to the Regional Board in publicly available reports. That data have revealed the presence of residual petroleum hydrocarbons both in the deep soil beneath the former reservoir bottoms ("Deep Contamination") and in the shallow zone above the former reservoir bottoms ("Shallow Contamination"). (*Id.* at 6-1.) As discussed below, these recently-discovered residual petroleum hydrocarbons, both shallow and deep, were not known to Barclay during the limited time it owned and redeveloped the Site. (Ex. TTT [1/21/14 Ltr.] at [Dagdigian Report] at pp. 6-8.)

[8] Files produced by Shell and the City of Carson include Bond Releases for three of the four tracts. (*Id.* at Tab 55 [CAR 112]; Tab 117 [CARSON 320]; Tab 116 [CARSON 422]; Tab 114 [CARSON 455].) While we do not have a Bond Release for Tract 28086, we have the associated white papers, which provide assurance that grading was properly completed and any required bonds released.



B. The *Acosta* Plaintiffs File Suit Against Shell, Barclay And Others.

In October 2009, over 1,400 current and former residents of the Site filed suit against Shell, Barclay, Dole Food Company, and others, alleging claims for property damages and personal injuries based on Shell's contamination of the Site. (Ex. UUU.) In January 2013, the City of Carson filed its own suit against the same defendants, alleging public nuisance and seeking remediation of the property. (Ex. UUU [Complaint].)

C. Shell Demands That The Regional Board Name Dole And Barclay As Dischargers.

On July 28, 2010, Shell sent a letter to the Regional Board urging it to name Dole and Barclay as dischargers. (Ex. TTT [1/21/14 Ltr.] at Tab 132 [7/28/10 Ltr.] at p. 1.) The factual investigations by Shell revealed that most of the contamination was located beneath the former reservoir bottoms, where oil had apparently leaked from the reservoirs during Shell's operations. (Ex. C [Draft CAO] at p. 5 ["The CPT/ROSY logs also showed that the highest apparent soil impacts occurred at depths of 12 feet bgs, 36 feet bgs, and 40 feet bgs."].) Shell claimed, however, that contaminants were also found in the fill soil, which had been placed by Barclay above the former reservoir bottoms and within the perimeters of the former reservoirs. (Ex. TTT [1/21/14 Ltr.] at Tab 132 [7/28/10 Ltr.] at p. 1.) While Shell did not deny its own status as a discharger, it asked the Regional Board to name Barclay as a discharger as well because, according to Shell, Barclay brought contaminated fill soil to the Site. (*Id.* at pp. 10-11.) But as Barclay's submissions to the Regional Board have shown, Shell's accusation was false. (Ex. TTT [1/21/14 Ltr.] at Tab 333 [9/15/11 Ltr.] at pp. 8-9.) In fact, as the filing of Shell's lawsuit against Barclay later confirmed, Shell's real reason for asking to have Barclay named was to get someone other than Shell to pick up the tab for cleaning up Shell's mess.

D. The Regional Board Issues The CAO And It Becomes Final As To Shell.

On March 11, 2011, the Regional Board issued the CAO naming Shell as a responsible party. (Ex. B [CAO].) Shell never sought review of the CAO, and it became final on April 11, 2011. (Wat. Code, § 13320, subd. (a).) Less than two weeks later, on April 22, 2011, the Regional Board issued a Water Code Section 13267 letter to Dole and Barclay, requesting further information regarding Shell's allegations. (Ex. TTT [1/21/14 Ltr.] at Tab 332 [4/22/11 ltr.] at p. 1.) By letter dated Sep-

tember 15, 2011 ("2011 Letter"), Gibson Dunn, representing Dole and Barclay, refuted Shell's false allegations and demonstrated that no new fill soil had been brought onto the Site by the developer, Barclay. (Ex. TTT [1/21/14 Ltr.] at Tab 333 [9/15/11 ltr.] at pp. 8-9.) This fact—that no fill soil was brought onto the Site by the developer—has since been confirmed by all other witnesses who have a recollection of the events. (Ex. TTT [1/21/14 Ltr.] at Tab 7 [Bach Dep.] at 143:8-22; *id.* at Tab 8 [Vollmer Dep.] at 167:13-168:5; 136:6-138:19.) It is thus now clear that all contaminants at the Site had been discharged by Shell during its 40 plus years of operations, and not by Barclay's development of the Site. (Ex. TTT [1/21/14 Ltr.] at Tab 333 [9/15/11 Ltr.] at pp. 6-9; see also Ex. F [Ayalew Dep.] at 65:19-66:5 ["In my opinion Barclay Hollander did not bring contaminants into the site."].)

E. The Regional Board Charges Shell For Its Time Investigating Barclay.

After refuting Shell's charges in 2011, Barclay received no further communications from the Regional Board for nearly two years. In the meantime, Shell was investigating the Site under the CAO. Thus, as far as Barclay knew, the matter had been put to rest. Indeed, a lawyer for the Regional Board's Prosecution Team has acknowledged that once the CAO against Shell became final, the Regional Board had what it needed to move forward with clean-up of the Kast site: "Shell never petitioned or challenged the original cleanup and abatement order. So they'll – they're still responsible, regardless of who else might be added." (Ex. E [Unger Dep.] at Ex. 22 [6/12/14 Regional Board Meeting Tr.] at p. 15.)

Notwithstanding, beginning sometime in late 2013, the Regional Board re-opened its investigation of Barclay, illegally charging its staff's time for that work to Shell. In 2008, the State Board's Site Cleanup Program ("SCP") began invoicing Shell for the Regional Board's "oversight" work. (Ex. G [Site Detail Report] at p. 1.) Ostensibly, the invoices were being submitted as part of the State Board's Cost Recovery Program for Spills, Leaks, Investigations, and Site Cleanups ("Cost Recovery Program"), which the State Board instituted pursuant to section 13304(c)(1) of the Water Code. But recently obtained time entries and invoices (obtained pursuant to a court order and despite the Regional Board's objections and motion to quash), indicate that the Regional Board billed Shell for more than just cleanup and abatement costs.

The documents establish that the Regional Board billed Shell for the time it spent considering whether to name Barclay as discharger, the time it spent building an administrative record to do so, and the time it spent drafting the necessary documents to do so—including even the Revised CAO. (Ex. G [Site Detail Report] at pp. 11, 34, 38, 82-83.) Prosecutor Teklewold Ayalew testified that "*[w]henever [he] work[s] on the [Kast Property Tank Farm] project*," "*Shell is paying for [it]*." (Ex. F [Ayalew Dep.] at 179:8-180:1, italics added.) When asked whether that included the time he spent considering whether to name Barclay, Ayalew confirmed that time was billed to "*Shell's account yes*." (*Id.* at 179:23-180:1, italics added.) A comparison of the Regional Board's Prosecution Team's time entries and the invoices that the State Board sent to Shell confirm that the Regional Board sought reimbursement from Shell for the time it spent investigating and naming Barclay as a discharger. (Ex. G [Site Detail Report] at pp. 11, 34, 38, 82-83.) Indeed, the Regional Board even charged Shell for the time it spent responding to subpoenas that Barclay served in the *Acosta* Litigation that were seeking information about Shell's illegal payments to the Regional Board. (See, e.g., Ex. F [Ayalew Dep.] at Ex. 3 at p. 4 [noting Ayalew's time discussing the subpoenas with McChesney was billed to Shell].)

F. The July 2013 Notification.

In July 2013, the Regional Board's counsel informally advised Barclay of the possibility that an amended order naming Barclay would be circulated for comment. (See Ex. TTT [1/21/14 Ltr.] at p. 24.) After receiving the July 2013 correspondence from the Regional Board, Barclay presented to the Regional Board staff much of the same evidence Barclay later submitted in response to the Draft CAO. (*Id.*) Staff members showed particular interest in the source of contaminants in the fill soil above the former reservoir bottoms—the fill soil that was put in place by Barclay from 1966 to 1968 to fill in the three former oil reservoirs. (See *id.* at p. 24.) That focus carried over to the Revised CAO, which contains a finding that Barclay had "explicit knowledge of . . . the presence of residual petroleum hydrocarbons, and conducted various activities, including partially dismantling the concrete in the reservoirs and grading the onsite materials. These activities *spread the waste* at the site, and *contributed to the migration of the waste* through soil and groundwater." (Ex. A [Revised CAO] at p. 10, italics added.)

1. Dr. Jeffrey Dagdigian, An Expert In The Fate And Transport Of Petroleum Hydrocarbons, Explains How The Fill Soil Placed By Barclay In The Former Reservoirs First Became Contaminated Only After Compaction Was Complete Through Upward Movement of Contaminants That Had Been Located Beneath The Reservoir Floor Bottoms Without Barclay's Knowledge.

In response to this focus on the source of contamination in the fill soil placed by Barclay in the reservoirs, counsel for Barclay introduced the staff to Dr. Jeffrey Dagdigian of Waterstone Environmental, an expert in the movement of petroleum hydrocarbons in the soil. Dr. Dagdigian explained why the evidence showed that Barclay did not knowingly "spread the waste around" when it moved soil from the reservoir berms into the former reservoirs.

Counsel for Barclay also provided the Regional Board with evidence that all of the eyewitnesses to those grading operations reported that they saw no oil in the soil, including providing the Regional Board with deposition testimony from the only individuals who had testified on the subject, Lee Vollmer, George Bach, Al Vollmer, and Lowell Anderson, all of whom testified that the fill soil was clean. (Ex. TTT [1/21/14 Ltr.] at Tab 7 [Bach Dep.] at 105:8-107:16; 143:23-144:4; *id.* at Tab 8 [Vollmer Dep.] at 86:2-87:1; *id.* at Tab 12 [Anderson Dep.] at 35:9-36:8; *id.* at Tab 13 [Al Vollmer Dep.] at 43:25-44:15.) All four men testified that they had good vantages from which to observe the soil taken from the berms after it had been spread, and they were in a position to see oil contamination if there had been any. (*Id.* at Tab 12 [Anderson Dep.] at 35:24-36:8; *id.* at Tab 13 [Al Vollmer Dep.] at 44:7-19.). The testimony of all four witnesses was given in deposition subject to cross-examination by lawyers for Shell and the *Acosta* Plaintiffs. Each one of the four witnesses testified that they did not see any oil in the fill soil. These are the only four living witnesses who actively participated in the grading and decommissioning of the tanks at the Site, and their testimony is unanimous on the subject.

Moreover, as shown in the chronology above, there were soil samples taken from the berm soil as part of the preliminary soils investigation, and while it was not the purpose of that sampling to look for oil, the cuts taken from the berms provided yet another opportunity for a trained eye to see oil contamination in the berm soil if it was there. (See Part III.F, *supra*). Yet no mention is made of oil in any of the soils reports other than the "oil stains" referenced on page 4 of the Revised CAO, which were found beneath the reservoir floors, not in the berm soil. Although there were many soils

reports prepared after those samples were taken, and hundreds of pages of documents placed in the construction file after that, not one page of those documents says anything about oil in the berm soil. This corroborates the testimony of the four eyewitnesses. (Ex. TTT [1/21/14 Ltr.] at Tab 66 [CARSON 348-54]; *id.* at [Shepardson Report] at p. 26.)

With this uncontradicted evidence from the *Acosta* Litigation as background, Dr. Dagdigian spent nearly four hours with various members of the Regional Board's staff demonstrating how it is possible, indeed likely, for both to be true at the same time: (1) the eyewitnesses testified that they saw no oil in the fill soil when they put it in place and compacted it, yet (2) it is contaminated today. The answer, according to Dr. Dagdigian, is that the Deep Contamination is the source of the Shallow Contamination. (Ex. TTT [1/21/14 Ltr.] at [Dagdigian Report] at p. 141.) In fact, Dr. Dagdigian explained why that is the only explanation that makes sense out of all of the facts that are known.

According to Dr. Dagdigian, after Barclay placed and compacted clean fill on top of the broken reservoir bottoms, contamination that had remained immediately beneath the reservoir bottoms at high concentrations was able to move upward through openings that had been ripped in the former reservoir concrete bottoms and around the bottoms in the places where the walls had been removed. (*Id.* at p. 116.) At high concentrations, these contaminants moved into the clean fill via capillary action, and also aided by buoyancy whenever water from irrigation or rain was introduced. (*Id.* at p. 142.) That this occurred is demonstrated by the pattern of contamination shown by the data, which confirms that higher concentrations are found just above the former reservoir bottoms with smaller amounts as one ascends in the fill soil, in a reverse of the pattern that occurs when the source of contamination comes from the top and migrates down. (*Id.* at p. 116.)

All of this was explained in more detail in Dr. Dagdigian's report, which was provided to the Regional Board. (*Id.* at pp. 124-128.) There, he cited scientific literature confirming that the upward movement of oil and other liquids has been shown to have occurred at other sites, proven in the laboratory and accepted by regulatory agencies, including both EPA and California's Regional Boards. (*Id.* at pp. 142-159.) Dr. Dagdigian further explained how he ruled out the theory that contaminated berm soil could have been a significant source of the Shallow Contamination because the regular patterns of contamination observed in the fill soil were inconsistent with the random distribution of con-

tamination that would have occurred if the berm soil had already been contaminated when it was spread in lifts. (*Id.* at pp. 80-82, 117-121, 173.)

No other narrative explains the evidence as comprehensively as does Dr. Dagdigian's opinion. It is established that the berm soil was not contaminated when Barclay moved it from the reservoir berm to the floor of the reservoir because: (1) those who spread it saw no oil; (2) those who tested it reported no oil; (3) the patterns of contamination observed by Dr. Dagdigian are not consistent with the theory that contaminated berm soil was the source of the Shallow Contamination; and (4) the patterns of contamination demonstrate that it is much more likely that the source of the current contamination in the shallow fill above the reservoir bottoms came from the bottom up. (*Id.* at pp. 166-167, 173.)

By contrast, the Revised CAO cites no evidence to support its finding that Barclay had "explicit knowledge" of "residual petroleum hydrocarbons" but engaged in grading activities that "spread the waste" despite that knowledge; indeed, the finding is contradicted by the same facts that provide such a comprehensive fit with Dr. Dagdigian's conclusions.

2. In 1997 Shell Sent The Regional Board "A Report To Complete A Repair Of The Backfill Of Reservoirs No. 1 And No. 2," Which The Regional Board Approved, Describing Upward Movement Of Oil In Nearly Identical Circumstances.

In support of his analysis, Dr. Dagdigian provided an August 1997 report produced by a Shell consultant, Brown and Caldwell, to this Regional Board, which demonstrates that the very same type of reservoir can leak during its years of operation, leaving a build-up of high-concentration hydrocarbon contamination beneath the reservoir floor where it will remain available to upward movement into newly placed fill soil if the reservoir floor is broken up and the fill soil is spread and compacted on top of the broken concrete in the manner that Barclay did at Reservoirs 5, 6 and 7.[9] (Ex. TTT [1/21/14 Ltr.] at Tab 163 [1997 Report].)

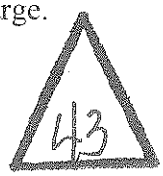
The 1997 report is focused on Shell Reservoirs 1 and 2, located at Shell's former Wilmington Oil Refinery, about one mile east of the Site on Lomita Boulevard. Reservoirs 1 and 2 were constructed at about the same time as Reservoirs 5, 6, and 7; they are nearly identical to the three reser-

[9] The report refers to another report from 1996, which likely has additional details. Dr. Dagdigian asked the Regional Board if he could have a copy, but the Regional Board was unable to locate it.

voirs at the Site except that they were operated for almost twice the time period—68 years—as the reservoirs at the Site (some 36 years), and were decommissioned beginning in 1991. (Ex. TTT [1/21/14 Ltr.] at Tab 163 [1997 Report] at Appendix A, at p. 1.) As part of the 1991 decommissioning, it was discovered that Reservoirs 1 and 2 had leaked, just as Reservoirs 5, 6, and 7 leaked, contaminating the soil below their floors with hydrocarbons which, over time, built up high concentrations beneath the reservoirs. At Reservoirs 1 and 2, after the concrete was broken up and placed on the reservoir bottoms, the berm soil was used as fill and compacted on top of the former reservoir bottoms. A semi-permeable clay cap was placed near the top of the fill before about two more feet of dirt was placed on it. (*Id.* at Appendix B, Amendment No. 1, at pp. 1-2; Chapter 3, Low Permeability Cap Construction.) Within a year after the clay cap was put in place, however, petroleum hydrocarbons had seeped up to the cap then migrated around it to the surface. (*Id.* at Appendix B, Amendment No. 1, at p. 2.)

This answered a number of questions posed by Regional Board staff who had appeared skeptical about Dr. Dagdigian's conclusions. First, it proved that oil does indeed travel upward in soil. Second, oil can travel a substantial distance. Third, oil moving upward will also move sideways along the path of least resistance (or the upward path with greater capillary forces). Some staff members questioned how patterns of contamination showing columns that are not always shaped in a straight vertical line from an opening in the concrete bottom could occur, and sideways movement along a path of least resistance seemed the logical explanation. Theory met fact in Reservoirs 1 and 2 when the upward movement of oil was stopped at the clay cap but then the oil moved sideways many feet to the edge of the cap, around the edge and upward again until it seeped out of the surface.

Once again, by finding that Barclay engaged in "spreading around" contaminants in fill soil, the Revised CAO is based upon facts that are the exact opposite of what the foregoing evidence shows. Shell's 1997 report is further, overwhelming proof that Dr. Dagdigian is right. Because the Revised CAO offers no evidence of its own to support what appears to be an essential basis for its conclusions—that Barclay knowingly moved contaminants around at the Site—it does not provide a lawful basis for holding Barclay responsible for clean-up and abatement of Shell's discharge.



G. The Regional Board Issues The Proposed Draft Order.

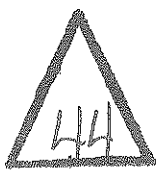
Disregarding the overwhelming proof that Dr. Dagdigian was correct and the absence of evidence showing that Barclay knowingly moved contaminants around at the Property, the Regional Board, while being paid for its time illegally by Shell, sent a letter dated October 31, 2013, which attached a Notice of Opportunity to Submit Comments on Proposed Draft Order in the Matter of Cleanup and Abatement Order No. R4-2011-0046, Former Kast Property Tank Farm (SCP No. 1230, Site ID No. 2040330, File No. 11-043). (Ex. J [10/31/13 Notice of Opportunity to Submit Comments] at p. 2.) The Draft CAO added Barclay as an additional responsible party. On January 21, 2014, Gibson Dunn responded on behalf of Barclay, setting forth the factual and legal reasons why Barclay cannot be held responsible for Shell's contamination and should not be added to the CAO. (Ex. TTT [1/21/14 Ltr.].)

1. The Draft CAO Mischaracterized Barclay's Activities At The Site.

On page 4 of the Draft CAO an attempt was made to summarize a part of the history of the Site as follows:

> In 1965, prior to the purchase of the property from Shell, Richard Barclay and/or Barclay Hollander Curci requested permission from Shell to remove the liquid waste and petroleum residue from the property and to begin to grade the property for development. Shell agreed to allow the activities with some conditions, including that "all work done by or for [Barclay Hollander Curci] be done in a good, lawful and workmanlike manner." After purchasing the property in 1966, Lomita, as the owner of the property, actively participated in the decommissioning and grading activities. Lomita conducted the waste removal and grading activities and obtained the required permits from the County. Available information indicates that by August 15, 1966 all three reservoirs had been fully cleaned out. The Pacific Soils Engineering Reports dated January 7, 1966; March 11, 1966; July 31, 1967; and June 11, 1968 [FN omitted] documented that: (1) Lomita emptied and demolished the reservoirs, and graded the Site prior to it developing the Site as residential housing; (2) part of the concrete floor of the central reservoir was removed by Lomita from the Site; and (3) where the reservoir bottoms were left in place, Lomita made 8-inch wide circular trenches in concentric circles approximately 15 feet apart to permit water drainage to allow the percolation of water and sludge present in the reservoirs into the subsurface. Various documents from the soil engineer describe the process of removing water and sludge in the reservoirs, burying concrete and compacting the concrete and soil, and drilling holes in the concrete fill must be at least seven feet below grade. Boring logs beneath the concrete slab in Reservoir 7 were "highly oil stained" and that soils in the borings had a "petroleum odor, however the amount of actual oil contained in the soil is unknown." [FN omitted] One of the soil engineering reports also indicated that soil used to fill in the reservoirs and return the Property to its natural grade came from the berms surrounding each reservoir and surrounding the perimeter of the Property. [FN omitted]

(Ex. C [Draft CAO] at p. 4.)



When this factual summary is compared to the historical chronology presented above, there can be no question that the Draft CAO did not accurately portray what occurred at the Site because it omitted important details and was ambiguous about sequencing. Most egregious was the assertion that the concrete floors of the reservoirs were broken "to allow the percolation of water *and sludge* present in the reservoirs *into the subsurface*." (*Id.*, italics added.) While "percolation of water" was an objective of the trenching, it was clear from the first moment it was raised in the Preliminary Soils Report dated January 7, 1966, that the objective of such percolation was precipitation after the grading had occurred; it was never a part of the process to clean out residual materials "present in the reservoirs." (Part III.K, *supra*.) Also, there is no evidence that any sludge was "present in the reservoirs" by the time the trenching took place or that Barclay or anyone else ever intended to "allow the percolation of . . . *sludge* . . . into the subsurface" through the concrete. The only evidence on this subject shows that when Barclay arrived in late January 1966, Reservoirs 5 and 6 were already clean; that Barclay's subcontractor, Chancellor & Ogden, cleaned out residual materials from Reservoir 7 with the assistance of the grading contractor, Vollmer Engineering; and that no ripping took place in any of the reservoir bottoms until they were cleaned out. (Part III.I, *supra*.)

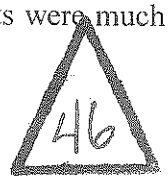
There is no evidence that any sludge ever contaminated the sub-floor area, or any other area of the Site during the time Barclay was on Site. (*Id.*) Accordingly, the following statement is simply false and there is no evidence to support it: "Lomita made 8-inch wide circular trenches in concentric circles approximately 15 feet apart to . . . allow the percolation of . . . sludge present in the reservoirs into the subsurface." (Ex. C [Draft CAO] at p. 4.) Since these and other findings were considered important enough to include in the Draft CAO and were demonstrably false, Barclay respectfully requested that the Draft CAO be reconsidered top to bottom and that Barclay be excluded as a responsible party from any further order. (Ex. TTT [1/21/14 Ltr.] at pp. 82-84.) However, when the Regional Board later issued the Revised CAO, these unsupported statements remained unchanged. (See Ex. A [Revised CAO] at p. 4.)

2. Barclay's Conduct Was Lawful And It Complied With The Applicable Environmental Standards At The Time.

The Draft CAO made no reference to historical circumstances of Barclay's activities. This was another ambiguity about context that rendered the findings in the Draft CAO insufficient to hold Barclay responsible. For example, the Draft CAO found that Barclay "purchased the Site with explicit knowledge of the presence of the petroleum reservoirs," but it never made clear whether that knowledge was considered in the context of the period in which Barclay performed its development work on the Carousel subdivision, which began in 1966. (Ex. C [Draft CAO] at p. 11.) In response, counsel for Barclay provided substantial evidence to the Regional Board indicating that the manner in which a developer would have used that information in the late 1960s would have been much different from how such information would be used today. (Ex. TTT [1/21/14 Ltr.] at pp. 13-14, 31-43; *id.* at [Williams Report]; *id.* at [Shepardson Report].) The evidence proved that Barclay's conduct was at all times in accordance with the laws and regulations existing at the time and conformed to the standards of practice of others working in similar circumstances given the state of public knowledge at the time of its grading work. Despite this evidence, the ambiguity about the historical circumstances of Barclay's activities remains in the Revised CAO (Ex. A [Revised CAO] at p. 4), even though Sam Unger, Executive Officer of the Regional Board and a member of the Prosecution Team, admitted at his deposition that "we [the Prosecution Team] have no opinion or knowledge of the standard of care that would be applicable at the time, meaning the mid-1960s." (Ex. E [Unger Dep.] at 85:1-7.)

a. The Standard Of Practice For Residential Builders In The 1960s Did Not Require Investigation For Pollution At Sites That Were Previously Used For Oil Operations.

In order to learn the context in which Barclay was operating in the late 1960s, Gibson Dunn, on behalf of Barclay, found people who worked in similar circumstances in or around those years. One such person is Don Shepardson, who has been a soils engineer in Southern California since the mid-1960s. Shepardson describes in his report the several ways in which laws and practices pertaining to environmental diligence during the development of residential real estate projects were much



different during the late 1960s from what they are today. (Ex. TTT [1/21/14 Ltr.] at [Shepardson Report] at pp. 26, 29-30.)

To supplement his own knowledge and memory, Shepardson conducted empirical research. Using old maps, he identified no fewer than eleven sites in the South Bay area of Los Angeles County where residential subdivisions had been built on property where oil operations were previously conducted. The homes were built about the same time as the Carousel subdivision, and searching records retained by local governments, Shepardson obtained soils engineering reports and other documents from those eleven projects.

Shepardson found that Barclay acted well within the standard of practice and standard of care for soils engineers engaged in similar activities in the area at the time. First, it was common at the eleven sites he reviewed for developers to leave oil in the ground at residential subdivisions; in some cases, contaminated soil was blended with clean soil to facilitate compaction. (*Id.* at p. 25.) When oil was taken off site, as Barclay did during grading at the Carousel project, it reflected a judgment by the soils engineer that the soils could not be used for competent compaction; no decisions concerning the handling of oil in the eleven examples reflected concern about the toxicity of oil pollution. (*Id.* at pp. 25-26.) Based on that empirical research and his own experience, Shepardson concluded that it was well within the standard of practice and standard of care at the time for Pacific Soils to allow, with the County Engineer's approval, that the "oil stains" be buried in place even without an express recommendation. Indeed, much larger quantities of oil were allowed to remain at residential sites reviewed by Shepardson. (*Id.*) Nor did the observation of oil stains beneath the floor in Reservoir 6 trigger the need for further investigation. (*Id.* at p. 5.) According to Shepardson, the only purpose of any investigation that he observed in the eleven examples was to assure competence of the soil for residential construction purposes, and Barclay did not need to do more than it did to achieve that. (*Id.* at pp. 25-28.)

Gibson Dunn, on behalf of Barclay, also asked another expert, Marcia Williams, to bring her knowledge of historical changes in environmental law, regulation and public knowledge to bear on the questions presented by the Revised CAO. Ms. Williams began working at the U.S. EPA in 1970 and stayed there until 1988. Since then she has worked for private industry and in private consulting,

but always focused on environmental law and public knowledge of environmental subjects. A career divided between government service and private consulting has provided Ms. Williams with a deep appreciation for the disparity between what was known and focused upon by environmental regulators in one era compared to another. In the opinion of Ms. Williams, Barclay's activities developing the Site during the late 1960s "were compliant with existing laws and regulations including the Dickey Act" and therefore Barclay "would not qualify as a discharger under the current Water Code." (Ex. TTT [1/21/14 Ltr.] at [Williams Report] at p. 65; Part III.C., *supra.*) In addition, based on her thorough evaluation of historical evidence, Ms. Williams concludes that Barclay had "no reason to be aware of the presence of soil or groundwater conditions constituting a nuisance or pollution that required abatement at the time it purchased or developed the Kast property." (Ex. TTT [1/21/14 Ltr.] at [Williams Report] at p. 12.)

Ms. Williams cites historical evidence demonstrating that in 1966 environmental diligence was virtually an unknown practice in the circumstances presented here; there were no Phase 1 or Phase 2 environmental site investigations, and the technology and expertise to conduct such investigations was rudimentary. "At the time the Kast property transaction occurred, there was no guidance on how to go about conducting an environmental assessment on the Kast property and the concept of such an assessment had not yet been developed." (*Id.* at p. 48.) Moreover, the technical disciplines for obtaining and evaluating the information had not yet been developed, and even the framework for developing a useful risk assessment did not exist. (*Id.* at pp. 40, 47.) Consequently, Barclay did not even have the tools to evaluate what was known in a way that would have caused Barclay to conclude that further steps had to be taken by an owner in these circumstances. (*Id.* at pp. 40-48.)

Surprisingly, the Prosecution Team devoted very little attention to Shepardson's or Williams' opinions, generally claiming that they were "irrelevant" to their assignment. (Ex. F [Ayalew Dep.] at 36:4-37:20, 47:12-48:19.) But that would be consistent with the Prosecution Team's repeated testimony that they paid no attention to whether Barclay violated any law. (Ex. S at Attachment 14 at pp. 13-16; Ex. E [Unger Dep.] at 63:7-15, 64:5-65:6, 66:10-67:23, 70:25-72:8; Ex. F [Ayalew Dep.] at 41:2-22.)

b. Barclay Obtained All Necessary Approvals From Public Agencies, None Of Which Required Environmental Investigation, And None Of Which Showed Concern That The Property May Be Unsafe For Residents.

When Barclay obtained its zoning and subdivision map approvals from the Planning Commission, it was not a secret to anyone that Barclay was converting the former oil storage facility on the Site into a residential subdivision. (Ex. TTT [1/21/14 Ltr.] at Tab 75 [CARSON 818-820] at p. 819.) During the land use approval process, no one from the surrounding community, the public at large, nor any of the public planning agencies expressed any concern about the risk that contamination from the prior use of the Site would make conditions unsafe for Carousel residents. These actions of the public planning agencies demonstrate louder than words that an assumption that some might try to make today—that toxic pollution is a natural and obvious consequence of over 30 years of oil storage operations—was not on anyone's mind when Carousel was being built during the late 1960s. Nor did Barclay or anyone else at the time believe that oil was something that made conditions unsafe for residents at Carousel.

(i) The Planning Commission And Regional Board Of Supervisors Approved Barclay's Zoning Change Applications Following Public Hearings.

The zoning change required approvals from both the Planning Commission and the Regional Board of Supervisors. (Ex. TTT [1/21/14 Ltr.] at Tab 72 [CARSON 370-374]; Tab 91 [CARSON 790].) Throughout the rezoning process, multiple hearings were held, allowing the public access to information about the project and an opportunity to comment on the proposed zoning change. (Ex. TTT [1/21/14 Ltr.] at Tab 75 [CARSON 818-820]; *id.* at Tab 91 [CARSON 791]; *id.* at Tab 355 [CARSON 786-787]; *id.* at Tab 90 [CARSON 721-722]; *id.* at Tab 53 [SOC 120811].) It was no secret that the Carousel development was being built on the site of a former oil tank farm. A public hearing request on a related zoning issue specified that residential development was being built on property with "existing hazardous oil storage tanks." (*Id. at* Tab 63 [CARSON 870-873].) The Planning Commission was fully aware that "[t]he subject property is developed" from "an oil company tank farm" into a residential subdivision. (*Id.* at Tab 64 [CARSON 863-865]; *id.* at Tab 70 [CARSON 859]; *id.* at Tab 71 [CARSON 845-846].)

Barclay ultimately received approval for R-1 zoning on October 20, 1966, shortly after it took title to the Property. (*Id.* at Tab 86 [CARSON 789]; *id.* at Tab 91 [CARSON 790].) When giving their approvals, neither the Supervisors nor the Planning Commission imposed any special limitations or requirements because of the prior use. (*Id.* at Tab 86 [CARSON 789]; *id.* at Tab 91 [CARSON 790].) Neither Barclay nor Shell was required to conduct any form of environmental investigation as a condition of approval. And nothing was said by either Regional Board to suggest that the prior use of the Site as an oil storage operation had made it unsafe for future residents. (*Id.* at Tab 86 [CARSON 789]; *id.* at Tab 91 [CARSON 790].)

(ii) Over 900 Residents From The Local Community Signed Either Letters Or Petitions Supporting Barclay's Zoning Change Application; None Expressed Any Concerns About Potential Health Effects From Pollution.

The community was actively involved in the decision to change the zoning at the Site from M-2 to R-1, and therefore to develop residences on the former tank farm. (*Id.* at Tab 65 [CARSON 743-783]; *id.* at Tab 76 [CARSON 726-739]; *id.* at Tab 85 [CARSON 741]; *id.* at Tab 83 [CARSON 796]; *id.* at Tab 80 [CARSON 718-720]; *id.* at Tab 84 [CARSON 801]; *id.* at Tab 78 [CARSON 802]; *id.* at Tab 79 [CARSON 803-805]; *id.* at Tab 81 [CARSON 812-814].) Before it ruled on Barclay's application for rezoning, the Planning Commission considered at least 23 letters (14 in favor of the rezoning, 9 opposed) and 925 signatures on petitions (all in favor of Barclay's zoning request) submitted by people and businesses that lived or were located in the area. (*Id.* at Tab 65 [CARSON 743-783]; *id.* at Tab 76 [CARSON 726-739]; *id.* at Tab 85 [CARSON 741]; *id.* at Tab 83 [CARSON 796]; *id.* at Tab 80 [CARSON 718-720]; *id.* at Tab 84 [CARSON 801]; *id.* at Tab 78 [CARSON 802]; *id.* at Tab 79 [CARSON 803-805]; *id.* at Tab 81 [CARSON 812-814].) No one who commented on rezoning, for or against, even mentioned the possibility that pollution from the prior use might make conditions unsafe for residents. (*Id.* at Tab 65 [CARSON 743-783]; *id.* at Tab 76 [CARSON 726-739]; *id.* at Tab 85 [CARSON 741]; *id.* at Tab 83 [CARSON 796]; *id.* at Tab 80 [CARSON 718-720]; *id.* at Tab 84 [CARSON 801]; *id.* at Tab 78 [CARSON 802]; *id.* at Tab 79 [CARSON 803-805]; *id.* at Tab 81 [CARSON 812-814].)

One resident made this plea:

> I've lived in the area since birth. I went to Wilmington Jr. High School the first year it was open in the first ninth grade class. At that time the land now under question by your commission was *old oil tanks*. Now I'm a mother of two children and am *very happy to see this land being leveled for new homes*. I understand there is a question "Homes against Industry" – Please not Industry – We need homes, "attractive homes" to enhance Wilmington. We love our little city and want to continue to rear our children here. Please let us have some lovely homes. I cannot be with you on the day of the hearing for we will be north on our vacation. But we do want and pray for a more attractive and happier Wilmington.

(*Id.* at Tab 76 [CARSON 726-739] at pp. 735-36, italics added.) Another resident wrote, "[w]e purchased our home in this [neighboring] tract as it is the only area with new homes of this value and with the belief that the oil tanks were to be removed and new homes built immediately." (*Id.* at Tab 76 [CARSON 726-739] at p. 729.)

Opponents of Barclay's rezoning application likewise did not raise even the possibility that pollution from the prior use might affect resident safety. (*Id.* at Tab 80 [CARSON 718-720]; *id.* at Tab 82 [CARSON 794]; *id.* at Tab [CARSON 795]; *id.* at Tab 84 [CARSON 801]; *id.* at Tab 78 [CARSON 802]; *id.* at Tab 79 [CARSON 803-805]; *id.* at Tab 81 [CARSON 812-814].) This is significant because opponents, motivated by their desire to prevent the project, made the best arguments they could to try to persuade public agencies to disallow Barclay from proceeding with its project. A good example is a letter from Purex Corporation, which opposed the Carousel project because its subsidiary, Turco, owned "approximately 30 acres of land which directly abuts on the west side" of the proposed Carousel development. (*Id.* at Tab 79 [CARSON 803-805] at 803.) Purex foresaw the advantages of an oil storage facility, which would not protest the noise and odors that would accompany Turco's anticipated expansion, over the human inhabitants of the residential use proposed by Barclay. (*Id.* at Tab 79 [CARSON 803-805].) Purex argued that rezoning should be denied, among other reasons, because of *safety* and *health* risks to residents of the proposed residential development. Yet Purex did not contend that those safety and health risks included possible pollution or other impacts from operations at the former oil storage facility; indeed, Purex did not mention oil at all. Instead, Purex argued that the "human health" concerns were attributable exclusively to "[t]he noise, truck traffic, and lights upon Purex's land required for its [own] manufacturing operations," which

Purex feared "would . . . [cause] loss of sleep and the impairment of the health of the residents" at Carousel. (*Id.* at p. 804.)

Purex threatened the Planning Commission (and Barclay) that "[f]amilies purchasing [Carousel] residences would not realize this unsuitability for residential use until such purchase had actually taken place," and therefore Carousel homebuyers "will be defrauded." (*Id.*) Having thus speculated improperly and without evidence that Barclay and the Planning Commission would conceal facts from purchasers, the facts Purex expected them to conceal were *not* the *prior use* of the property as an oil storage facility, which it did not mention at all, but rather, according to Purex, the *planned expansion of its Turco factory.* (*Id.* at Tab 79 [CARSON 803-805].) It was inconsequential to Purex in 1966 that the Carousel homes were being built on a former oil tank farm. No one, not even the highly motivated opponents of the residential development, thought that toxic pollution was an inherent risk of building homes on this property.

(iii) The Planning Commission Did Not Require Any Environmental Diligence When It Approved Barclay's Subdivision Map.

The Planning Commission conditionally approved Barclay's Tentative Tract Map on February 23, 1966. (*Id.* at Tab 73 [CARSON 363-367] at 363.) A subsequent approval was obtained on November 1, 1966. (*Id.* at Tab 72 [CARSON 370-374] at 370.) Both approvals referred to the fact that the concrete lining in the former oil storage reservoirs (called "sumps" in the approval orders) would be broken up and buried in place beneath compacted fill. (*Id.* at Tab 73 [CARSON 363-367] at 366; *Id.* at Tab 72 [CARSON 370-374] at 372.) In granting both approvals, the Planning Commission imposed a number of conditions on Barclay. (*Id.* Tab 73 [CARSON 363-367]; *id.* at Tab 72 [CARSON 370-374]; see also Govt. Code § 66415; Los Angeles County, Cal., Ord. No. 4478 art. 2 § 12 (1945).) None of those conditions were directed toward mitigating potential adverse effects from the prior use of the property on future residents. (Ex. TTT [1/21/14 Ltr.] at Tab 73 [CARSON 363-367]; *id.* at Tab 72 [CARSON 370-374].) Neither approval order required Barclay to investigate whether the Site had become contaminated when it was an oil storage operation. (*Id.* at Tab 73 [CARSON 363-367]; *id.* at Tab 72 [CARSON 370-374].) And the lack of any requirement for an environmental investigation was consistent with the development standards of the day. (*Id.* at [Wil-

liams Report] at pp. 21-22, 35, 40, 70; *id.* at [Shepardson Report] at pp. 26, 29-30.) There was no legal or industry standard that would have required such investigations in 1966. (*Id.* at [Williams Report] at pp. 21-22, 35, 40, 70; *id.* at [Shepardson Report] at pp. 26, 29-30.) In fact, had the City of Carson or the County of Los Angeles suggested that such an investigation needed to occur, it would have been requiring well-beyond what was being done at that time in the development community. (See *id.* at [Williams Report] at pp. 21-22, 35, 40, 70; see also *id.* at [Shepardson Report] at pp. 26, 29-30.)

(iv) The Department Of Real Estate Issued Final Reports Allowing Barclay To Sell Carousel Homes, Knowing The Former Use Of The Property And Everything Else Its Diligence Revealed.

At all times relevant to this case, the Carousel development was governed by the Subdivided Lands Law ("SLL"), California Business & Professions Code §§ 11000-11200 [enacted 1943]. The State Real Estate Commissioner ("Commissioner") "administers the Subdivided Lands Law to protect purchasers from fraud, misrepresentation, or deceit in the initial sale of subdivided property." *See* Cal. Bus. & Prof. Code § 11018.2. (Ex. TTT [1/21/14 Ltr.] at Tab 339 [Department of Real Estate Reference Book] at p. 445.)

Under the SLL, no home at Carousel could be offered for sale by Barclay until the Commissioner had issued a final public report, sometimes referred to as a "White Report." (Bus. & Prof. Code § 11018.2; Department of Real Estate Subdivision Public Report Application Guide, 35 (2011) [listing "appropriate color" for public reports].) The staff of the Department of Real Estate ("DRE") prepares the final public report for the Commissioner. (See Bus. & Prof. Code § 11018.2; Ex. TTT [1/21/14 Ltr.] at Tab 339 [Department of Real Estate Reference Book] at p. 445.) The "public report includes important information and disclosures concerning the subdivision offering." (Ex. TTT [1/21/14 Ltr.] at Tab 339 [Department of Real Estate Reference Book] at p. 445.) "The Commissioner does not issue the final public report until the subdivider has met all statutory requirements, including . . . a showing that the lots . . . can be used for the purpose for which they are being offered." (*Id.*) Copies of the White Report for all tracts included in the Carousel subdivision were included with Barclay's submissions below. (Ex. TTT [1/21/14 Ltr.] at Tab 335 [White Reports for Tracts

28441 (8/1/1967), 28564 (2/21/1968), 24836 (1/22/1969), and 28086 (5/22/1967)].) These demonstrate that the Commissioner, with full information about the project, which included access to all of the associated files and records, determined Carousel to be fully compliant with all applicable laws and regulations as required by the SLL.

(v) The Area Surrounding The Site Was "Oil Country," Where Close Proximity Of Humans And Oil Was Common And Not Viewed As Unsafe During The Late 1960s.

At the time Barclay was developing the Site, it was common to have oil storage facilities and oil refineries located near, indeed immediately adjacent to, residences, schools, and sports fields. In fact, just before Barclay purchased the Site, large numbers of homes had been built and sold right up to the property line of the eastern border of the Site, completing a residential build-out that had begun working toward the three reservoirs from the east since at least 1958. (Ex. TTT [1/21/14 Ltr.] at Tab 336 [Tract maps for Tracts 21144, 29377 and 24605].) It is telling that the proximity of the visible reservoirs, the berms of which reportedly extended fifteen feet above the surface, was not preventing sales of residences on the open market. There had also been an expansion of residential housing to the north of the Site. (*Id.* at Tab 75 [CARSON 818-820].)

To the south, across Lomita Boulevard, homes were being built on individual lots, many of which had oil wells on them. (*Id.* at Tab 4 [Schultz Dep.] at 17:10-17:15; 47:8-50:25.) That neighborhood was zoned "R-1-O," which allowed single family residences to be built on the same lot as an oil well. (*Id.* at 17:15-18:2, 30:5-31:24, 32:4-14.) Indeed, oil wells are an important part of the history of Carson. Next door to the southwest of the Site, next to Lomita Boulevard, the former Schultz property had multiple uses in 1966; a family residence existed on the same lot as an oil well, and both of those shared the lot with the family business. (*Id.* at Tab 4 [Schultz Dep.] 20:23-21:10, 23:16-25:7, 27:22-28:13; *id.* at Tab 353 [Schultz Ex. 3]; *id.* at Tab 354 [Schultz Ex. 4].) That well had a sump next to it, which was a shallow hole used by maintenance crews when working on the well; they would place waste oil in the hole and allow it to seep into the ground. (*Id.* at Tab 4 [Schultz Dep.] at 29:8-21; 74:4-75:23.) Two other oil wells were found on the industrial properties to the west of the former Schultz property. (*Id.* at Tab 4 [Schultz Dep.] at 30:5-31:24.) Across the street was (and still

is) the Wilmington Intermediate School, and next to the playground were three more oil wells. (*Id.* at Tab 4 [Schultz Dep.] at 17:10-18:2, 30:5-31, 32:4-14; *id.* at Tab 352 [Schultz Ex. 1].)

It is not surprising that oil wells were plentiful in what would soon become the City of Carson since that area was built in significant part on the oil industry. Carson was located in an area that some referred to as "oil country" because of its obvious ties with oil production. (*Id.* at Tab 5 [Smith Dep.] at 32:13-33:24, 40:20-40:25, 41:1-9.) In 1966 there was still ample evidence of that history. At the corner of Lomita and Main Street, just one block from the Carousel site, was the fully operational Fletcher Oil Refinery, built in 1939. (*Id.* at Tab 359 [My Carson Your Carson] at 65; *id.* at Tab 4 [Schultz Dep.] at 63:25-65:20, 113:20-115:6; *id.* at Tab 355 [CARSON 786-787]; *id.* at Tab 5 [Smith Dep.] at 97:14-98:16.) There was a significant explosion at that refinery on March 27, 1969, while the homes at Carousel were still being sold. (*Id.* at Tab 350 [Los Angeles Times Article, March 28, 1969]; *id.* at Tab 351 [Daily Breeze Article, March 28, 1969]; *id.* at Tab 358 [Los Angeles Times Article, March 29, 1969].) Located between the refinery and the Carousel subdivision was a business called Oil Transport Company, which provided trucking services for hauling petroleum hydrocarbons for the energy industry. (*Id.* at Tab 4 [Schultz Dep.] at 30:5-31:24.)

This community environment is consistent with the undisputed evidence that no one at Barclay believed that oil was toxic to humans: "[T]he state of the knowledge at that time was that . . . oil certainly was not a hazardous material to health." (*Id.* at Tab 2 [Curci Dep.] at 215:1-15.) "[N]o, at the time it was not considered harmful and I didn't consider it harmful." (*Id.* at Tab 7 [Bach Dep.] at 75:6-14.) "In the late 1960s, early 1970s, oil wasn't the bad word it may be today, and it wouldn't have been a concern—the same concern . . . at that point in time as it might be today." (*Id.* at Tab 1 [Harkavy Dep.] at 111:11-112:10.) This attitude that oil was not toxic was corroborated by Mrs. Schultz, when she recalled her childhood in nearby Torrance where boys built rafts to float atop huge sumps of waste oil and she and her friends chewed tar, which was nothing but dried oil, as though it were bubble gum. (*Id.* at Tab 4 [Schultz Dep.] at 152:2-17.)

This co-existence of residential living and open oil operations may seem unusual by today's standards, but there was no sense at the time that such co-existence was problematic in any way. As explained by Ms. Williams in her report, at the time when the Property was being developed and

houses were being sold, no one in the environmental, public health or legal community was even considering the possible health effects of exposure to petroleum-related contaminants such as benzene. (*Id.* at [Williams Report] at pp. 12-21.) Concerns about most environmental issues, particularly those related to petroleum releases, were just not as important as other concerns, such as pesticides, back in 1967. (*Id.* at pp. 21-39.) Nearly two years after the last house in the Carousel tract was sold, the United States Environmental Protection Agency ("EPA") studied oil dumped in backyards from automobile motor oil change outs and concluded that data simply did not exist to allow a quantitative assessment of human health risks resulting from exposure to oil contamination in the soil. (*Id.* at p. 17.) Further, around the time of Barclay's work on the Site, it was common for virgin and waste oil to be used to coat roadways to prevent dust and that practice was not viewed as one giving rise to any health concerns. (*Id.* at pp. 12-15.) And this lack of concern regarding human contact with oil contamination lasted a long time even after that, as regulators were far more concerned about other contaminants and other exposure pathways. (*Id.* at pp. 21-31.) The EPA and other regulators still do not regulate petroleum in the same way as they do other chemicals. (See, e.g. CERCLA, 42 U.S.C. § 9601(14) ["The term [hazardous substance] does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance . . ."]; HSAA, Health & Saf. Code, § 25317 ["'Hazardous substance' does not include...Petroleum, including crude oil or any fraction thereof . . ."].) It is within this context that Barclay entered the Site to begin decommissioning the tanks.

Despite all of this evidence that Barclay provided to the Regional Board indicating that Barclay's conduct was lawful and complied with the environmental standards of the time in which it was active at the Site, the Regional Board ultimately still issued the Revised CAO naming Barclay, and the Regional Board's factual findings remained largely unchanged.

H. The Regional Board Is Put Under Intense Political Pressure To Name Barclay To The Order By Entities Who Have a Financial Stake in the Outcome.

On January 22 2014, Eric Boyd, the Deputy District Director for Congresswoman Janice Hahn, emailed Unger about an upcoming meeting with Carousel residents. (Ex. E [Unger Dep.] at Ex. 18 [1/22/14 email from E. Boyd to S. Unger].) Bob Bowcock, a consultant hired by Tom Girardi,

counsel for the *Acosta* Plaintiffs, was copied on the email. At the meeting the next day, Congresswoman Hahn said she was going to "call the 'head of the WaterBoard [sic]' [Sam Unger] tomorrow." (Ex. E [Unger Dep.] at Ex. 19 [PRA-RWQCB-002633].) At the same meeting, Bowcock told residents that Unger was "afraid of Hahn", "afraid of Shell", and that Unger and the Regional Board were "complacent and enabling Shell to behave badly." (*Id.* at [PRA-RWQCB-2638].) Notably, counsel for the *Acosta* Plaintiffs is a significant financial contributor to Congresswoman Hahn. Girardi, and other lawyers representing the *Acosta* Plaintiffs, are also significant contributors to the Political Action Committee of the American Association for Justice's Political Action Committee, which in turn is one of Congresswoman Hahn's largest contributors. (Ex. K; Ex. E [Unger Dep.] at Ex. 20 at p. 1.) Later, when the trial court judge overseeing the *Acosta* Litigation determined that Shell's $236 million settlement with the *Acosta* Plaintiffs was in "good faith" under California law, Congressman Hahn posted a congratulatory message to the Plaintiffs on her Facebook page. (Ex. E [Unger Dep.] at Ex. 21.)

I. The Comment Period On the Draft CAO Closes, Shell Sues Barclay, And Shell And The *Acosta* Plaintiffs Continue To Communicate With The Regional Board.

The comment period on the Draft CAO officially closed on January 21, 2014, with Barclay being the only entity to provide any comments.[10] Notwithstanding, representatives of Shell and the *Acosta* Plaintiffs continued to communicate ex parte with the Regional Board after the comment period closed, trying to persuade the Prosecution Team to name Barclay. Then, on May 6, 2014, Shell sued Barclay for contribution and indemnity, seeking its "costs and expenses" in complying with the CAO, which Shell alleged were "in excess of $40 million." (Ex. P [5/6/14 Shell Complaint] at p. 2.) Days later, on May 9, 2014, Bowcock, the *Acosta* Plaintiffs lawyers' consultant, emailed Shell's complaint to Unger, Executive Officer of the Regional Board and a member of the Prosecution Team. (Ex. E [Unger Dep.] at Ex. 13.) And just a few days after that, on May 14, 2014, there was a meeting

[10] Initially, the comment period was set to close on December 6, 2013. (Ex. J [10/31 Draft CAO Ltr.] at p. 2.) On November 8, 2013, counsel for Barclay asked the Regional Board for an extension until January 13, 2014. (Ex. L [11/8/13 Ltr.] at p. 1.) On November 15, 2013, the Regional Board approved this extension. (Ex. M [11/15/13 Ltr.] at p. 1.) On January 6, 2014, counsel for Barclay wrote to the Board again asking for an extension until January 21, in order to submit comments after the deposition of Al Vollmer. (Ex. N [1/6/14 Ltr.] at pp. 1-2.) On January 8, 2014, the Regional Board granted the extension and the comment period officially closed on January 21, 2014. (Ex. O [1/8/14 Ltr.] at pp. 1-2.)

attended by members of the Prosecution Team and representatives of Shell to discuss "the Dole issue." (Ex. F [Ayalew Dep.] at 185:24-187:1; Ex. E [Unger Dep.] at Ex. 14.) The evidence suggests that at the meeting, with members of the Prosecution Team having their time reimbursed by Shell to sit in the meeting, Shell's experts tried "to refute the hypothesis" of Barclay's expert in order to convince the Prosecution Team to name Barclay on the order. (Ex. F [Ayalew Dep.] at 189:3-9 ["Q. Do you remember anything Johnson said about the possibility of naming Barclay or Dole on the order? A. From my recollection -- I may be wrong but I think his presentation was trying to refute the hypothesis that was ordered by Waterstone, the Barclay technical hypothesis of capillary ride buoyancy (rise.)"].)

J. The Regional Board Reopens The Comment Period For Shell.

On June 3, 2014, two weeks after meeting with Shell, the Regional Board reopened the comment period on the Draft CAO specifically "to provide an opportunity for Shell to submit comments." (Ex. S [12/8/14 Memo] at p. 4; Ex. T [6/3/14 Notice of Opportunity for Additional Comment].) Even the Regional Board staff time to draft the re-opening notice for Shell was paid for by Shell. (Ex. F [Ayalew Dep.] at Ex. 3.) Shell submitted comments on June 16, 2014. Shell's comments were the only response to Barclay's January 21, 2014 submission, and they responded only to a few, narrow points, specifically regarding the Waterstone report. On June 30, 2014, Barclay timely responded to Shell's submission, refuting the issues raised by Shell and noting that the remaining technical and legal points made in Barclay's January 21, 2014 letter and the associated attachments were uncontested by Shell and everyone else. (Ex. U [6/30/14 Ltr.] at p. 1.)

K. The Regional Board Continues To Communicate With, And Invites Comments From, The *Acosta* Plaintiffs.

The second comment period closed on June 30, 2014. Notwithstanding, representatives of Shell and the *Acosta* Plaintiffs continued to communicate ex parte with the Regional Board after that date, urging them to name Barclay on the order. By way of example, on July 9, 2014, Unger emailed Bowcock (the *Acosta* Plaintiffs' consultant) and asked him to "*let us [Unger and Teklewold Ayalew] know if you have any comments*" on Shell's June 16, 2014 submission. (Ex. E [Unger Dep.] at Ex. 15 at [PRA-RWQCB-007030], italics added.) Later, Unger assured Bowcock that while "there will be

an 'official' comment period *we can talk whenever you wish.*" (*Id.*, italics added.) Shortly thereafter, Bowcock replied:

> *Is the Board going to issue a COA to Dole? If so when?*
>
> These documents are embarrassing to the profession. . . *can you believe a professional like Dr. Dagdigian would actually prostitute himself and spend six (6) pages of a technical report defending a liar like George Bach Appendix A . . . makes me ill.*
>
> Bottom line . . . as I have said from the beginning, *it doesn't take a rocket scientist to see they (Shell & Dole) were co-conspirators in the development of the site.*
>
> I'll get to our comments soon… it's just such a flood of garbage documents.
>
> *Our fear is that Dole causes further delay. How do we prevent that?*

(*Id.* at PRA-RWQCB-007029, italics added.) That same day, Bowcock also sent Unger comments on Barclay's submissions, stating that the declaration of Jeffrey Dagdigian is "SHAMEFUL," that the declaration of George Bach is "dishonest," that Barclay has "clearly manipulated and compound[ed] liar's lies," and that Barclay should be "added as a responsible Party to the Cleanup and Abatement Order." (Ex. E [Unger Dep.] at Ex. 14 at PRA-RWQCB-004012.)

L. Shell Submits A Revised Remedial Action Plan, And The *Acosta* Plaintiffs And The City Of Carson Settle With Shell.

On June 30, 2014, after submitting a RAP that was rejected by the Regional Board, Shell submitted a revised RAP (Ex. V [6/30/14 Shell Revised RAP]), and on October 15, 2014, Shell submitted an addendum to the revised RAP (Ex. W [10/14/14 Shell Addendum to Revised RAP]). The revised RAP requires, among other things, excavation up to 5 feet below ground surface "at approximately 207 properties," and excavation up to 5-10 feet below ground surface at approximately 85 homes. (Ex. V [6/30/14 Revised RAP] at pp. 3-4.) In turn, the addendum to the revised RAP provides that displaced residents will be accommodated and compensated if their homes are sold at less than fair market value. (Ex. W [10/15/14 Addendum to Revised RAP].) Shell estimates that it will cost $146 million to implement the RAP. (*Id.* at p. 3 at Table 6-1.)

As recently as March 2014, the *Acosta* Plaintiffs' counsel had described Shell's proposed RAP as a "joke," and called Shell "disgusting" and "despicable" for proposing it. (Ex. X [3/24/14 Daily Breeze Article].) Similarly, when Shell's revised RAP was first announced, the City of Carson claimed it was insufficient to secure the "Carousel residents' health, safety and welfare." (Ex. Y

[9/7/14 Daily Breeze Article] at p. 2.) Yet, on October 21, 2014, Shell announced to the parties in the *Acosta* Litigation that it had reached a tentative settlement with the *Acosta* Plaintiffs and the City of Carson. (Ex. PPP [12/12/14 Decl.].) From that day on, it appears that no *Acosta* Plaintiffs, Girardi consultants like Bowcock, or the City of Carson offered any criticism of Shell's RAP to the Regional Board.

On or about November 10, 2014, Girardi Keese LLP, on behalf of the *Acosta* Plaintiffs, formally entered into settlement with Shell. Under the agreement, Shell agreed to pay $90 million to Girardi Keese LLP in "full and final settlement of all Claims," (Ex. Z [*Acosta* Agreement] § 3.2), and to implement the RAP (*id.* at § 4.8). At the same time, the City of Carson, also represented by Girardi Keese LLP, entered into a settlement with Shell. Under the agreement, Shell and the City of Carson agreed to "Mutual Releases" in which each party released the other from "any and all Claim(s)" related to the City of Carson's lawsuit against Shell and the Water Board proceedings. (Ex. AA [*Carson* Agreement] § 3.4.) Shell also agreed, as part of the settlement, to remediate the Site. (*Id.* § 4.9.) Critically, as part of the *Acosta* settlement, the *Acosta* Plaintiffs agreed "to cooperate in good faith in the ongoing regulatory proceedings overseen by the Water Board" (Ex. Z [*Acosta* Agreement] § 3.6), and to "waive and release any rights to challenge any decision of the Water Board in evaluating and approving the RAP for the Carousel Tract." (*Ibid.*) Likewise, the City of Carson's settlement required the City to "cooperate in good faith" in the Water Board proceedings and "implementation of the RAP." (Ex. AA [*Carson* Agreement] § 3.5.)

News of the settlements, including Shell's agreement to implement the revised RAP, quickly spread. In late November and early December 2014, The Los Angeles Business Journal, The Daily Breeze, PressTelegram.com, and RoyalDutchShellPlc.com all reported that Shell had offered "$90 million to settle a lawsuit brought by Girardi & Keese on behalf of the 1,491 current and former residents of the Carousel Tract." (Exs. BB-DD [Articles]; Ex. E [Unger Dep.] at Ex. 17.) The Daily Breeze article quoted the *Acosta* Plaintiffs' counsel and a Shell spokesperson regarding the settlement, and described "a confidential letter to residents from Girardi & Keese" stating that "the $90 million would be split between attorneys and residents, with a court-appointed 'special master' to de-

termine how much each plaintiff will receive based on their personal injury and property damage claims." (Ex. CC [Article].)

M. The *Acosta* Plaintiffs Designate The Regional Board Prosecution Team As Experts And Submit As Evidence The Revised CAO.

On November 14, 2014, the *Acosta* Plaintiffs served their expert disclosures for the Phase II experts on movement of contaminants, exposure, and dose issues. (Ex. EE [11/14/14 Disclosure].) In their disclosures, the *Acosta* Plaintiffs identified four members of the Prosecution Team as "non-retained expert[s]": Samuel Unger, Paula Rasmussen, Thizar Williams, and Teklewold Ayalew. (*Id.* at pp. 2-3.) Critically, the *Acosta* Plaintiffs designated each member of the Prosecution Team as experts *even though the Revised Draft CAO had not been issued and even though they had no way of knowing based on the public record that Barclay would be recommended by the Prosecution Team for inclusion on the order some three weeks later.*

N. The Prosecution Team Learns Of The Settlement With Shell.

On November 24, 2014, Albert Robles, the current Mayor of the City of Carson and then a member of the City Council, emailed Unger a news article about the settlement. (Ex. E [Unger Dep.] at Ex. 17.) The City of Carson, of course, was then (and still is) an adverse party to Barclay in the *Carson* Litigation, making the communication particularly inappropriate. Robles wrote: "FYI sam. Talk to you soon." (*Id.*) Unger then forwarded the email to Ayalew, instructing him to "dig up this article and send to [the prosecution] team." (*Id.*) Minutes later, Ayalew circulated the email to the entire Prosecution Team. (*Id.*)

O. The Prosecution Team Recommends Approval Of The Revised CAO.

Approximately two weeks later, on December 8, 2014, the Regional Board released a memorandum from Unger to Deborah Smith, Chief Deputy Executive Officer. (Ex. S [12/8/14 Memo].) The Memorandum recommended that Smith, who reports to Unger, approve and issue the Revised CAO naming Barclay as a responsible party by January 9, 2014, the same day that the comment period on Shell's proposed RAP was set to close. (*Id.* at pp. 2, 5.) Unger set that aggressive deadline even though he undoubtedly knew that Smith was heading out of town on a year-end vacation and

would not return until after the holidays, giving her effectively about a week to review the extensive file with all the comments from Barclay and approve the Revised Draft CAO. (Dennis Decl. ¶ 36.)

As part of the recommendation, the Prosecution Team staff produced a 98-page chart purporting to respond to the comments submitted by Barclay and others regarding the naming of Barclay as a responsible party. (Ex. S [12/8/14 Memo] at Attachment 14; see also *id.* at pp. 4-5 [providing summary of factual conclusions from Prosecution Team staff].) The December 8 Memorandum identified Samuel Unger, Paula Rasmussen, Thizar Tintut-Williams, and Teklewold Ayalew, among others, as Regional Board staff who participated in the preparation of the Revised CAO. (*Id.* at p. 1.) Notably, Shell illegally paid for the Regional Board's staff time to prepare the 98-page chart to try to support their decision. (Ex. F [Ayalew Dep.] at Ex. 3.)

P. Barclay's Requests to Submit Evidence And For A Hearing Are Denied.

On December 24, 2014, Gibson Dunn, on behalf of Barclay, wrote Smith, asking to "(1) submit additional critical evidence, that was previously unavailable, and that must be considered by [the Regional Board] before making any decision on this issue; and (2) schedule a formal hearing before you in order to give Barclay an opportunity to present the key evidence directly to you and to explain why Barclay is not a 'discharger' under the Water Code." (Ex. HH [12/24/14 Ltr.] at p. 2.) On January 6, 2015, Gibson Dunn, on behalf of Barclay, submitted another letter, this time explaining in greater detail the importance of the new evidence, attaching that evidence, and repeating its request for a hearing. (Ex. N [1/6/15 Ltr.].) On January 15, 2015, Frances McChensey wrote to Smith, stating that she had no opinion on whether Smith should hold a hearing, but that she opposed the consideration of any additional evidence. (Ex. MM [1/15/15 Ltr.].) Remarkably, McChesney stated that Barclay should have submitted the Waterstone 3-D model in the fall of 2014, *after* the close of the official comment period. (*Id.* at 2.) On January 16, 2015, Gibson Dunn, on behalf of Barclay, submitted another letter, clarifying the scope of its request that the Regional Board to consider additional evidence and repeating the request for a hearing. (Ex. NN [1/16/15 Ltr.] at pp 1-2.)

On February 27, 2015, Smith agreed to accept the 2014 Bach deposition transcript into the record, but rejected all of the other evidence presented by Barclay, and denied Barclay's requests for a hearing. (Ex. GG [2/27/15 Ltr.] at pp. 1-2.)

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Q. The *Acosta* Plaintiffs File The Revised CAO In The *Acosta* Litigation.

On December 22, 2014, the Plaintiffs in the *Acosta* Litigation submitted a supplemental disclosure of their Phase II experts. (Ex. at FF [12/22/14 Supplemental Disclosure].) As part of this supplemental disclosure, the *Acosta* Plaintiffs submitted rebuttal reports by two of their experts, Lorne Everett and Mark Kram, which relied on the December 8, 2014 opinions of the Prosecution Team staff, and their recommendations. For example, Dr. Everett used the December 8 memorandum and associated chart from the Prosecution Team staff as evidence that "the professional environmental scientists and engineers at the State of California (Regional Board Water Quality Control Board) agree with" his opinions concerning Barclay's liability. (Ex. RR [12/22/14 Everett Rebuttal Report] at p. 2; see also Ex. SS [Kram 12/18/14 Rebuttal Report] at p. 19 ["the RWQCB (2014c) characterizes Dr. Dagdigian's upward mobility theory as '*speculative and incomplete*' [and] questions the theoretical underpinnings used to support the theory"].)

Since then, the *Acosta* Plaintiffs' counsel and experts have continued to submit declarations relying upon the factual conclusions of the Prosecution Team staff. For instance, on January 22, 2015, the *Acosta* Plaintiffs submitted declarations that rely upon the Prosecution Team staff's factual conclusions as "evidence" purportedly establishing Barclay's liability. (Ex. TT [1/22/15 Finnerty Decl.] at ¶¶ 8 ["The Water Board documents contain information that is pertinent to this case."]; Ex. UU [1/22/15 Koffman Decl.] at ¶ 1-10, 13 ["These documents . . . further strongly support my previous position that Developer Defendants discovered a substantial amount of contamination within the soil of the oil tank farm prior to development."]; Ex. VV [1/22/15 Cheremisinoff Decl.] at ¶¶ 8-13, 15-23, 26 ("In accordance with comments submitted by the Los Angeles Regional Water Quality Control Board, it is my opinion that the Developer Defendants qualify as a discharger pursuant to Water Code section 13304 and should be treated as such in this litigation."]; Ex. WW [1/23/15 Suppl. Wallace Decl.] at ¶ 19 ["The Water Board's conclusion is based on evidence that amply illustrates Barclay Hollander Corporation's actions and inactions pertaining to the demolition of the Kast property tank farm and development of the Carousel Housing tract."].)

R. Barclay Seeks Discovery From The Regional Board.

On January 8, 2015, Barclay issued subpoenas in the *Acosta* Litigation for documents and depositions of the four members of the Prosecution Team designated as "non-retained experts" by the *Acosta* Plaintiffs: Samuel Unger, Teklewold Ayalew, Paula Rasmussen, and Thizar Tintut-Williams. Although the Regional Board sought to quash the subpoenas, the court ordered the Regional Board to produce documents and allow depositions of two of the members of the Prosecution Team—Unger and Ayalew—thus far. On April 22, 2015, Barclay submitted a letter to Smith requesting that Smith defer determining whether to name Barclay until after the pending depositions—scheduled for early May and just weeks away—had occurred. (Ex. XX [4/22/15 Ltr.].)

S. Deborah Smith Unilaterally Changes The Revised Draft CAO Before Issuing It.

The Revised CAO was issued on April 30, 2015. (Ex. A [Revised CAO].) In a cover letter accompanying the Revised CAO, Smith noted that the Regional Board declined to postpone its decision until after receipt of the transcripts from Unger's and Ayalew's depositions as requested by Barclay, claiming that "substantial additional time would be necessary to obtain certified transcripts and allow parties and interested persons a reasonable time to review and respond to the testimony[.]" (Ex. OO [4/30/15 Cover Ltr.].) Thus, Smith refused to wait a few more weeks for this additional probative evidence, despite the fact that expediting the naming of Barclay to the CAO at that point would have no effect on the actual cleanup procedures of the site, since Shell had already been named in the CAO, and was already complying with it (Ex. E [Unger Dep.] at Ex. 22 [6/12/14 Regional Board Meeting Tr.] at 15:3-9), and the comment period on the RAP had closed.

While many of the Revised Draft CAO's unsupported findings, discussed above, remained unchanged, the Revised CAO includes a number of changes that were made without any notice to Barclay or an opportunity to comment. The Revised Draft CAO circulated on December 8, 2014 included this statement: "Available information indicates that by August 15, 1966, all three reservoirs had been fully cleaned out of liquid residue." (Ex. D [Revised Draft CAO] at p. 5.) In the Revised CAO, this sentence now states that "all three reservoirs had been emptied of liquid residue." (Ex. A [Revised CAO] at p. 4.) Ayalew testified that he wrote in the Draft CAO that all the reservoirs had been "fully cleaned out." (Ex. F [Ayalew Dep.] at 141:23-143:22.) He testified that this information

was extracted from the Pacific Soils reports from the time. (Ex. F [Ayalew Dep.] at 142:25-143:22.) The Revised CAO by Deborah Smith does not explain, or provide a record citation, to support this change. (See Ex. A [Revised CAO] at p. 4.)

The Revised CAO also includes findings that Barclay violated various code provisions that had not ever been mentioned in the Revised Draft CAO prepared by the Prosecution Team. The Revised CAO states that Barclay's actions violated the Fish and Game Code section 5650 and Los Angeles County Code section 20.36.010. (Ex. A [Revised CAO] at p. 11, fn. 14.) The Revised Draft CAO recommended by the Prosecution Team did not mention any of these alleged violations. (Ex. D [Revised Draft CAO].) Both Unger and Ayalew testified that they had no part in researching or determining whether Barclay violated these acts or any others. (Ex. F [Ayalew Dep.] at 60:16-61:10, 61:14-21; Ex. E [Unger Dep.] at 56:19-24, 70:7-14.)

V. Legal Argument

There is no dispute that Shell is the only discharger of the contaminants being remediated under the current order. The Revised CAO therefore makes no finding that Barclay actually "discharged" waste, in the usual sense that it "'relieve[d] . . . a charge, load or burden'" (*Lake Madrone Water Dist. v. State Water Res. Control Bd.* (1989) 209 Cal.App.3d 163, 174 [quoting WEBSTER'S NEW INT'L DICT. 644 (3d ed. 1961)]), and does not find that Barclay "deposited" waste, as most people understand that term—"'the act of depositing . . . something laid, placed, or thrown down'." (*People ex rel. Younger v. Super. Ct.* (1976) 16 Cal. 3d 30, 43 [quoting WEBSTER'S THIRD INT'L DICT., UNABRIDGED (1963)]). The Revised CAO thus is based on something other than literal compliance with the language in the statute that defines the Regional Board's jurisdiction. (Wat. Code, § 13304, subd. (a) [authorizing the Regional Boards to issue clean-up and abatement orders against "[a]ny person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who *caused or permitted* . . . any waste to be *discharged* or *deposited* where it is, or probably will be, *discharged* into the waters of the state."], italics added.)

Instead, the Revised CAO seeks to justify holding Barclay responsible for clean-up and abatement of contamination that it did not discharge or even know about on the basis of its finding

that Barclay "conducted various activities, including partially dismantling the concrete in the reservoirs and grading the onsite materials. These activities spread the waste at the site, and contributed to the migration of the waste through soil and groundwater." (Ex. A [Revised CAO] at p. 11.) The Revised CAO should be vacated for four separate and independent reasons:

(1) The Regional Board denied Barclay due process. First, Barclay was denied due process because Shell—an adverse party which pressured the Regional Board to name Barclay and which had a direct financial interest in having Barclay named—was illegally reimbursing the Regional Board for the efforts the Prosecution Team spent considering whether to name Barclay, building an administrative record to do so, and drafting the necessary documents, including the Revised Draft CAO itself and the recommendation to Smith to name Barclay. As a result of these payments—unauthorized and illegal under the Cost Recovery Program—the Regional Board had a financial incentive to make staff available to investigate and name Barclay, which violates Barclay's due process rights. (Part V.A.1, *infra*.) Second, Barclay's right to an impartial adjudicator was not respected because the Regional Board failed to adequately separate its adjudicative and prosecutorial functions and because Sam Unger, the Executive Officer of the Regional and the purported leader of the Prosecution Team, appointed Deborah Smith, his direct subordinate, as presiding officer. (Part V.A.2, *infra*; Govt. Code, §§ 11425.10, subd. (a)(4), 11425.30, subd. (a)(2).) Third, the Regional Board's nearly five-year delay in naming Barclay to the CAO deprived Barclay of any opportunity to challenge the RAP that Shell, the *Acosta* Plaintiffs, and the City of Carson agreed upon as part of an omnibus settlement agreement, but with which Barclay disagrees. Subjecting Barclay to pay for or implement a RAP that it opposes and that it had no role in crafting (nor any reason to do so) would be a profound violation of due process. (Part V.A.3, *infra*; Govt. Code § 11425.10, subd. (a)(1).) Fourth, in issuing the Revised CAO, the Regional Board failed to create and rely upon an adequate administrative record, and what record exists does not support naming Barclay. (Part V.A.4, *infra*; Govt. Code, §§ 11425.10, subd. (a)(6), 11425.50.) Fifth, in developing the limited and inadequate administrative record that does exist, the Regional Board used biased and unfair procedures, which repeatedly favored Shell and the *Acosta* Plaintiffs and disfavored Barclay. (Part V.A.5, *infra*.) This included extensive improper ex parte contacts with representatives of adverse parties, who provided the Prosecution Team with

responses to Barclay's comments and other information of which Barclay had no notice and to which it had no opportunity to respond. (*Id.*) And sixth, the Regional Board failed to hold an evidentiary hearing, which due process requires under the circumstances present here. (Part V.A.6, *infra*.)

(2) The Regional Board's finding that Barclay is liable as a discharger under section 13304(a) for "spread[ing] the waste" and "contribut[ing] to the migration of the waste through the soil and groundwater" is not supported by the evidence. The Regional Board must have affirmative evidence to sustain its findings, and there is none. (Part V.B.1, *infra*; see also, e.g., *Schutte & Koerting, Inc. v. Reg'l Water Quality Control Bd.* (2007) 158 Cal.App.4th 1373, 1383-1384 [citing Cal. Civ. Proc. Code § 1094.5, subd. (c) and stating abuse of discretion is established if the administrative order "is not supported by the findings, or the findings are not supported by the evidence"].)

(3) The Regional Board's finding that Barclay is liable as a discharger under section 13304(a) for "spread[ing] the waste" and "contribut[ing] to the migration of the waste through the soil and groundwater" is not supported by the law. Even if the quoted finding had been supported by evidence, which is not the case, inadvertently spreading contaminants already discharged by someone else while engaged in activity intended for another, innocent purpose does not give rise to liability under Water Code section 13304(a). No decision of the State Board has ever found a party responsible as a discharger for such conduct, and judicial precedent likewise prohibits an interpretation of section 13304(a) that would be required to hold Barclay responsible for such conduct. (*Redev. Agency of City of Stockton v. BNSF Ry. Co.* (9th Cir. 2011) 643 F.3d 668, 677-678.) Moreover, the plain meaning of the statute limits the jurisdiction of the Regional Boards to issue clean-up and abatement orders only to dischargers. It therefore prohibits orders—such as the Revised CAO—which require someone who has discharged nothing to be responsible for the discharges of someone else. (Part V.B.2, *infra*.)

(4) Even if Barclay could be properly identified as a discharger under section 13304(a), which is not the case, Barclay is exempt from liability under the safe harbor provided in section 13304(j) because the acts for which the Revised CAO hold Barclay responsible took place in the late 1960s and did not violate the laws and regulations that existed at the time. The Regional Board Failed to

meet its burden of proof that Barclay violated any laws in existence at the time, and the affirmative evidence establishes that the safe harbor should apply. (Part V.C, *infra.*)

A. The Regional Board Denied Barclay Due Process Of Law.

The State Board recognizes that the issuance of cleanup and abatement orders is an action that is "of an adjudicative nature" and therefore governed by due process protections of the United States and California Constitutions and the rules for administration adjudications in the APA. (Ex. KK [State Water Resources Control Board, Office of Chief Counsel, M. A.M. Lauffer Chief Counsel Memorandum (Aug. 2, 2006)]; *In the Matter of the Petitions of California Department Of Transportation And MCM Construction, Inc.*, State Board Order No. WQ 2014-0015, at *4-5 [acknowledging that "distinct prosecution and advisory teams" are required "to comply with the separation of functions and ex parte communication requirements of [the APA's] adjudicative provisions, and the due process provisions of the United States and California constitutions."].)

"The constitutional guarantee of due process requires an administrative agency conducting adjudicative proceedings to act as a fair and impartial tribunal." (*Nick v. City of Lake Forest* (2014) 232 Cal.App.4th 871, 887.) "A fair tribunal is one in which the judge or other decision maker is free of bias for or against a party." (*Morongo Band of Mission Indians v. State Water Resources Control Board* (2009) 45 Cal.4th 731, 737.) "Although administrative decision makers are ordinarily presumed to be impartial, a bias resulting in the denial of a fair hearing may arise when an administrative agency fails to adequately separate its prosecutory and adjudicatory functions in the same proceeding." (*Nick v. City of Lake Forest, supra*, 232 Cal.App. at p. 887.) Moreover, "[v]iolation of this due process guarantee can be demonstrated not only by proof of actual bias, but also by showing a situation 'in which experience teaches that the probability of actual bias on the part of the judge or decisionmaker is too high to be constitutionally tolerable.'" (*Morongo Band of Mission Indians v. State Water Resources Control Board, supra*, 45 Cal.4th at p. 737, quoting *Withrow v. Larkin* (1975) 421 U.S. 35, 47.) "'Of all the types of bias that can affect adjudication, pecuniary interest has long received the most unequivocal condemnation and the least forgiving scrutiny.'" (*Today's Fresh Start, Inc. v. Los Angeles County Office of Education* (2013) 57 Cal.4th 197, 215, quoting *Haas v. County of San Bernardino* (2002) 27 Cal.4th 1017, 1025.)

The APA codifies many of these same due process rights, but in some instances goes further. For instance, consistent with constitutional requirement of due process, section 11425.10, subdivision (a)(4) of the Government Code provides that "the adjudicative function shall be separated from the investigative, prosecutorial, and advocacy functions within the agency." (Govt. Code, § 11425.10, subd. (a)(4).) But section 11425.30, subdivision (a)(2), goes further, providing that "[a] person may not serve as presiding officer in an adjudicative proceeding in any of the following circumstances: . . . (2) The person is subject to the authority, direction, or discretion of a person who has served as investigator, prosecutor, or advocate in the proceeding or its preadjudicative stage." (Govt. Code, § 11425.30, subd. (a)(2).) The APA also requires a decision "in writing" that "includes a statement of the factual and legal basis for the decision." (Govt. Code, § 11425.50, subd. (a).)

1. The Regional Board Illegally Invoiced Shell, An Adverse Party With A Financial Interest In Naming Barclay, For Its Time Investigating And Naming Barclay.

The Revised CAO is the product of a fundamentally flawed and unfair proceeding—illegally paid for by Shell, a party adverse to Barclay—that deprived Barclay of due process. Under the guise of "cost recovery," Shell literally paid for the Regional Board to follow its bidding to investigate and name Barclay as a discharger. Any suggestion that the Cost Recovery Program authorized the Regional Board to seek reimbursement from Shell for investigating and naming Barclay is refuted by the bare language of section 13304, subdivision (c) of the Water Code, and by fundamental principles of constitutional due process.

Shell's payments to the Regional Board in connection with the investigation and naming of Barclay were unquestionably illegal. No court has ever held that section 13304, subdivision (c) permits the Regional Board to recover its costs in investigating, evaluating, and determining who should be named as a discharger—let alone where the cost recovery is sought from a party that already has been named as a discharger and that has a direct financial interest in having one or more additional dischargers named. Indeed, the statute clearly provides that recovery is limited to costs incurred in connection with "remedial activities": where "*necessary remedial action* is taken by a governmental agency," a discharger is "liable to that governmental agency to the extent of the reasonable costs actually incurred in *cleaning up* the waste, *abating* the effects of the waste, *supervising cleanup or*

abatement activities, or *taking other remedial action*." (Wat. Code, § 13304, subd. (c), italics added.) Being paid to investigate and name another party as a discharger, at the urging of a party *already named* as a discharger, is plainly not "cleaning up waste", "abating the effects of the waste", "supervising cleanup or abatement activities", or "taking other remedial action." Indeed, McChesney and Unger have both admitted that naming Barclay would have no effect on "cleaning up waste", "abating the effects of the waste", "supervising cleanup or abatement activities", or "taking other remedial action." because Shell was already on the hook for the clean-up regardless of whether Barclay was ultimately named. (Ex. E [Unger Dep.] at Ex. 22 [6/12/14 Regional Board Meeting Tr.] at 15; Ex. E [Unger Dep.] at 191:20-192:6 ["Q. And Ms. McChensney says: oh, none. The – Shell never petitioned or challenged the original cleanup and abatement order, so they're still responsible regardless of who else may be added. . . Do you agree with Ms. McChesney's statement? A. Yes."].)

Regardless, Shell's payments violated Barclay's due process rights. The United States Supreme Court has long recognized that a "scheme injecting a personal interest, financial or otherwise, into the enforcement process may bring irrelevant or impermissible factors into the prosecutorial decision and in some contexts raise serious constitutional questions." (*Marshall v. Jerrico, Inc.* (1980) 446 U.S. 238, 249-50.) Likewise, the California Supreme Court has recognized that "pecuniary conflicts of interests on a judge's or prosecutor's part pose a constitutionally more significant threat to a fair trial than do personal conflicts of interest." (*People v. Vasquez* (2006) 39 Cal.4th 47, 64.) More recently, in *County of Santa Clara v. Superior Court* (2010) 50 Cal.4th 35, the California Supreme Court reaffirmed the "bedrock principle that a government attorney prosecuting a public action on behalf of the government must not be motivated solely by a desire to win a case, but instead owes a duty to the public to ensure that justice will be done," and that "[a] fair prosecution and outcome in a proceeding brought in the name of the public is a matter of vital concern both for defendants and for the public, whose interests are represented by the government and to whom a duty is owed to ensure that the judicial process remains fair and untainted by an improper motivation on the part of attorneys representing the government." (*Id.* at p. 57.)

The California Supreme Court addressed the propriety of private-party financing of government proceedings in *People v. Eubanks* (1997) 14 Cal.4th 580. The Court affirmed, inter alia, the

lower court's finding that it was an impermissible conflict of interest where a victim paid a prosecutor's expenses. (*Id.* at p. 598.) The court stressed that a disinterested prosecutor was one who was not "under the influence or control of an interested individual" or "under the influence of others who have . . . an axe to grind" against a particular entity. (*Id.* at p. 590.) Subsequently, in *County of Santa Clara*, the Supreme Court held that the hiring of private contingent-fee counsel to assist government attorneys in prosecuting public-nuisance abatement actions did not violate due process—despite the obvious conflict of interest—because "neutral, conflict-free government attorneys retain[ed] the power to control and supervise the litigation." (*County of Santa Clara v. Superior Court*, *supra*, 50 Cal.4th at p. 58.) The court distinguished *Eubanks* on the grounds that the case before it did not involve "a party with a strong personal interest in the outcome of the case and an expectation that the provision of financial assistance would incentivize the public attorneys to pursue the [financing parties'] desired outcome even if justice demanded a contrary course of action."[11] (*County of Santa Clara v. Superior Court*, *supra*, 50 Cal.4th at p. 59, fn. 13.)

The facts here present the very circumstance absent in *County of Santa Clara*. The Regional Board was billing *Shell* for its own staff's efforts spent investigating and naming *Barclay*, at the same time Shell had a substantial financial interest in having Barclay named on the CAO. Shell had been named in the original CAO; Barclay had not. Shell had demanded that the Regional Board name Barclay as a discharger, and had even filed suit against Barclay seeking indemnification and contribution with respect to its alleged "costs and expenses" in complying with the CAO and implementing the RAP. Clearly, Shell was seeking to have Barclay named as a discharger to support its meritless claims for contribution and indemnification. The Regional Board—and specifically Sam Unger—knew that Shell had filed suit against Barclay for the express purpose of recovering its alleged "costs" in complying with the CAO including implementing the RAP, but nonetheless sought (and obtained)

[11] In *County of Santa Clara*, the Supreme Court expressly held that "a heightened standard of neutrality is required for attorneys prosecuting public-nuisance cases on behalf of the government." (*Id.* at p. 57.) Because proceedings before the Regional Board are analogous to actions for abatement of a public nuisance (see *Santa Clara Valley Water District v. Olin Corp.* (N.D.Cal. 2009) 655 F.Supp.2d 1048, 1064 ["Section 13304 is to be read in light of the common law principles of nuisance"]), that standard squarely applies here (see *Nightlife Partners v. City of Beverly Hills* (2003) 108 Cal.App.4th 81, 90 ["Just as in a judicial proceeding, due process in an administrative hearing also demands an *appearance* of fairness and the absence of even a *probability* of outside influence on the adjudication"], italics in original.).

reimbursement from Shell for the time its prosecutorial staff spent investigating and naming Barclay at Shell's urging. Under the circumstances, Shell surely had the expectation—later proven well-founded—"that [its] provision of financial assistance would incentivize the [Regional Board] to pursue [its] desired outcome even if justice demanded a contrary course of action." (*Id.*)

Without question, Shell's "financial assistance" incentivized the Regional Board to allocate precious staff time to investigating and naming Barclay. Unger testified that the Site Cleanup Unit's staff is "burdened from a workload standpoint" (Ex. E [Unger Dep.] at 117:2-13), and that as a result, the Site Cleanup Unit's time is almost always allocated to an entity from which the costs can be recovered under the Cost Recovery Program. (Ex. E [Unger Dep.] at 205:4-9 ["Q. And some of those projects have a cost recovery program component to them but not all? A Nearly all of them, as much as -- I don't know of any that -- I know very few, if any -- I can't think of one that does not have a cost component – cost recovery component to it."].) Unger further testified that cost recovery of staff time devoted to the Kast Property project began at some point "prior to the issuance of the 2011 order." (Ex. E [Unger Dep.] at 28:5-10.) Staff working on the Kast Property project would enter their time into a software program and electronically submit it to the State Board. (Ex. E [Unger Dep.] at 32:3-14; Ex. F [Ayalew Dep.] at 180:11-181:23.) As such, Shell's illegal payments clearly diverted scarce Regional Board staff resources from their true mission of cleaning up water resources to building an administrative record that would help Shell, Carson, and the *Acosta* Plaintiffs financially. As Unger and Frances McChesney, the Prosecution Team's counsel, both stated, there was absolutely no reason to name Barclay on the CAO to achieve the Site's clean-up—"None." (Ex. E [Unger Dep.] at Ex. 22 [6/12/14 Regional Board Meeting Tr.] at 15; Ex. E [Unger Dep.] at 191:20-192:6 ["Q. And Ms. McChensney says: oh, none. The – Shell never petitioned or challenged the original cleanup and abatement order, so they're still responsible regardless of who else may be added. . . Do you agree with Ms. McChesney's statement? A. Yes."].)

Shell's illegal payments reimbursed the Regional Board for the time its staff spent in a wide variety of tasks they undertook in order to name Barclay. Unbeknownst to Barclay at the time, Shell's illegal payments paid for the Prosecution Team's staff (1) to sit in meetings with Barclay, (2) to sit in meetings with Shell while Shell was pressing the very same staff to name Barclay, (3) to

engage in purportedly privileged discussions with counsel (whose time was also paid for by Shell) about naming Barclay, (4) to draft the actual order, and (5) to prepare the 98-page Response to Barclay's comments. (Ex. F [Ayalew Dep.] at Ex. 3.) All of that staff time was bought and paid for by Shell illegally. The payments also reimbursed the Regional Board staff to develop purported "findings" that the *Acosta* Plaintiffs' experts now seek to use against Barclay's experts in the *Acosta* Litigation. (Ex. G [Site Detail Report] at pp. 11, 34, 38, 82-83.) While the *Acosta* Plaintiffs have styled the Regional Board staff as "non-retained" experts, they are in fact "retained" by Shell to aid in both Shell's and the *Acosta* Plaintiffs' separate lawsuits against Barclay.

Plainly, the result of this arrangement is that Shell was reimbursing the Regional Board for the time it spent investigating and naming Barclay as a discharger. Ayalew confirmed that "*[w]henever [he] work[s] on the [Kast Property Tank Farm] project*," "*Shell is paying for [it]*." (Ex. F [Ayalew Dep.] at 179:8-21, italics added.) When asked whether he billed Shell for the time he spent considering whether to name Barclay as a discharger, Ayalew conceded that time was billed to "*Shell's account yes*." (*Id.* at 179:22-180:1, italics added.) Indeed, Ayalew even billed Shell for the time he spent responding to Barclay's subpoenas in the *Acosta* Litigation. (Ex. F [Ayalew Dep.] at Ex. 3.)

Only Shell's substantial illegal financial inducements can explain why the Regional Board was willing to devote so many resources from an already "burdened" staff to name a party to an amended order that, according to the Regional Board's own counsel, will have no impact going forward on the clean-up of the Site. (Ex. E [Unger Dep.] at Ex. 22 [6/12/14 Regional Board meeting Tr.] at 15:3-9.) Absent Shell's illegal payments, the Regional Board staff never would have been able to spend the time (nor have the need to spend the time) attempting to build a record to name Barclay, and the "burdened" site cleanup unit staff could have devoted their scarce time to getting other sites cleaned up. Even though Unger knew that naming Barclay had nothing to do with improving water quality (Ex. E [Unger Dep.] at 117:2-13, 205:4-9), he diverted valuable staff time away from the Regional Board's main mission to further Shell's and the *Acosta* Plaintiffs' cost recovery efforts and did so using illegal payments from Shell.

Simply put, Shell's illegal payments to the Regional Board created both the appearance and the probability of outside influence—precisely what due process forbids. (*Nightlife Partners v. City of Beverly Hills*, *supra*, 108 Cal.App.4th at p. 90; see also *Hambarian v. Superior Court* (2002) 27 Cal.4th 826, 837 ["One risk of [private support of government prosecutions is that] the prosecution itself could be used as a strategic weapon to disrupt and distract a competitor for reasons wholly unrelated to the public administration of justice."].)

For this reason alone, the Revised CAO must be vacated.

2. The Composition And Functioning Of The Prosecution And Advisory Teams Violated Due Process.

Constitutional due process requires a decision made by a fair tribunal. (*Withrow v. Larkin* (1975) 421 U.S. 35, 46.) Due process is violated where the decision maker is actually biased or where "experience teaches that the probability of actual bias on the part of the judge or decision maker is too high to be constitutionally tolerable." (*Id.* at p. 47.) "[A] bias resulting in the denial of a fair hearing may arise when an administrative agency fails to adequately separate its prosecutory and adjudicatory functions in the same proceeding." (*Nick v. City of Lake Forest* (2014) 232 Cal.App.4th 871, 887.) "The overlap of these conflicting roles in the same proceeding violates due process because it creates an appearance of unfairness and a probability of outside influence." (*Ibid.*) Separate and apart from the constitutional requirement of due process, the APA also requires that "the prosecutory and, to a lesser extent, investigatory, aspects of administrative matters must be adequately separated from the adjudicatory function." (*Nightlife Partners v. City of Beverly Hills* (2003) 108 Cal.App.4th 81, 91-92. See also *Morongo Band of Mission Indians v. State Water Resources Control Bd.* (2009) 45 Cal.4th 731, 738; Govt. Code, § 11425.10, subd. (a)(4) ["During the conduct of administrative proceedings, the adjudicative function must be separated from the investigative, prosecutorial, and advocacy functions within an agency."].)

The proceedings below violated the required separation between adjudicative and prosecutorial functions in three distinct ways. First, from the start, there was no clear division between the Prosecution and Advisory/Adjudicatory Teams. In investigating and issuing the Revised CAO, the Regional Board loosely divided its staff into two teams: the Advisory/Adjudicatory Team and the

Prosecution Team. But this rough division was never memorialized in writing or clearly communicated to staff, and lacked the separation of functions required by due process and the APA—"circumstances [that] creat[ed] an unacceptable risk of bias." (*Morongo Band of Mission Indians v. State Water Resources Control Board, supra,* 45 Cal.4th at p. 741; cf. *In the Matter of the Petitions of California Department Of Transportation And MCM Construction, Inc.*, State Board Order No. WQ 2014-0015, at *4-5 [finding that the North Coast Water Board complied with the "separation of functions" requirements of the APA and due process because it "established distinct prosecution and advisory teams."].)

Key members of the Prosecution Team—Unger and Ayalew—were unable to identify when the teams were formed or who was on them. (Ex. E [Unger Dep.] at 35:8-9 ["Q. When was the prosecutorial team established? A. I can't recall when it was established."]; Ex. F [Ayalew Dep.] at 26:18-24 ["Q. Was there some point in time when you were told there's going to be a prosecutorial team in connection with considering whether to name Barclay on the order? A. That's correct, yes. . . . That was at a meeting. I don't remember the date. Sorry."].) Surprisingly, Ayalew testified that he thought Deborah Smith, the adjudicator, was actually the prosecutor (Ex. F [Ayalew Dep.] at 15:15-24 ["Q. Do you know who is part of the prosecutorial team? . . . A. Deborah Smith. Q. And she is part of the prosecutorial team; isn't that right? A. As far as I know, yes."]), and that he thought Unger was not even a member of either team (Ex. F [Ayalew Dep.] at 18:19-21; 20:15-18 [Q. Is Mr. Unger on either the prosecutorial team or the advisory team? A. No as far as I know."].) Unger, in turn, testified that "there was never really any establishment of the [prosecutorial] team, per se." (Ex. E [Unger Dep.] at 197:12-19.) Indeed, according to Unger, "[m]ost of the staff who were working day to day on the Carousel project de facto served as the prosecuting – prosecutorial team." (*Id.* at 37:5-10.) Plainly, when even the team members of the prosecutorial and adjudicatory teams do not even which side of the divide they are on, the required separation of functions is missing.

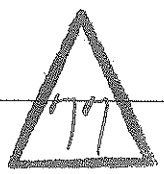
Second, no formalities were observed in creating the teams. Unger described the Prosecution Team in 2011 as "de facto." (*Id.* at 37:5-16.) There was no formal establishment of a Prosecution Team and any member of the Site Cleanup Unit could be called upon to render views about naming Barclay at any time. (*Id.* at 35:22-36:1 ["Q. Is there any -- is there anything in writing that estab-

lished the prosecutorial team here? A. memo, an email, something like that that said we're going to have a prosecutorial team and here's what it is? A. Not that I can recall."); Ex. F [Ayalew Dep. 27:6-9] (Q. Did you get anything in writing instructing you that there was going to be a prosecutorial team to consider naming Barclay in this matter? A. Not that I can recall, no."].) There was also no written guidance establishing a Prosecution Team or an Advisory Team. (*Id.* at 35:22-36:1 ["Q. Is there any -- is there anything in writing that established the prosecutorial team here? A memo, an email, something like that that said we're going to have a prosecutorial team and here's what it is? A. Not that I can recall."]; *id.* at 37:21-24 ["Q. Was there any written instruction issued to the de facto prosecution team not to have conversations with Ms. Smith? A. Not that I can recall."]; Ex. F [Ayalew Dep.] at 27:6-9 [Q. Did you get anything in writing instructing you that there was going to be a prosecutorial team to consider naming Barclay in this matter? A. Not that I can recall, no."].) Unger also testified that he could not remember any written instructions concerning ex parte communications with Deborah Smith. (Ex. E [Unger Dep.] at 37:21-24 ["Q. Was there any written instruction issued to the de facto prosecution team not to have conversations with Ms. Smith? A. Not that I can recall."].) The Regional Board's wholesale failure to observe *any* formalities in the creation of the prosecutorial and advisory teams is inconsistent with a finding that the required separation of functions is present.

Third, aside from the lack of clarity regarding the formation and composition of the teams, there was an underlying structural defect in the assignment of responsibilities. The Prosecution Team included Unger, the Executive Officer of the entire Regional Board. Unger is effectively the head of the agency, and every staffer in the agency ultimately answers to him. Expecting any of Unger's subordinates to evaluate a recommendation from him but not to be persuaded by his position over them to adopt his recommendation is a circumstance in "which experience teaches that the probability of actual bias on the part of the judge or decision maker is too high to be constitutionally tolerable." (*Withrow v. Larkin*, *supra*, 421 U.S. at p. 47.) Obviously, any recommendation coming from Unger would have carried extraordinary weight with any staff member assigned the role of adjudicator, "creat[ing] an unacceptable risk of bias." (*Morongo Band of Mission Indians v. State Water Resources Control Board*, *supra*, 45 Cal.4th at p. 741.)

Here, that "unacceptable risk of bias" was exacerbated by the selection of Deborah Smith, Unger's subordinate, as the adjudicator. Smith reports directly to Unger; he is her immediate superior. (Ex. E [Unger Dep.] at 39:13-20 ["Q. Between 2011 and today did Ms. Smith report to you in the chain of command at the regional board? A. Yes. . . . Q. In the organization chart, she reports directly to you in the chart; right? A. Yes."].) The APA expressly provides that "[a] person may not serve as presiding officer in an adjudicative proceeding" if "the person is subject to the authority, direction, or discretion of a person who has served as an investigator, *prosecutor*, or advocate in the proceeding or its preadjudicative stage." (Govt. Code, § 11425.30, subd. (a)(2), italics added.) Notwithstanding, Unger—the prosecutor who signed the recommendation to Smith that she name Barclay—designated Smith—his direct subordinate—as the presiding officer, a clear and direct violation of section 11425.30, subsection (a)(2) of the Government Code. (Ex. E [Unger Dep.] at 39:3-12 ["Q. You mentioned that by 2011, when the cleanup and abatement order was issued here, you understood Ms. Smith was in the advisory capacity; right? A. Yes. Q. My question for you is, do you recall who decided she should be in that capacity for this matter? A. It was a decision that senior staff and our counsel decided. Q. You're part of senior staff, are you not? A. Yes, I am."].) Under the circumstances, "the probability of actual bias on the part of the judge or decisionmaker [was] too high to be constitutionally tolerable." (*Withrow v. Larkin*, *supra*, 421 U.S. at p. 47.) As the Supreme Court has recognized, "[T]here is a serious risk of actual bias— based on objective and reasonable perceptions—when a person with a personal stake in a particular case had a significant and disproportionate influence in placing the judge on the case[,]" which is precisely what Unger did when he designated his subordinate as the adjudicator. (*Caperton v. AT Massey Coal Co., Inc.* (2009) 556 U.S. 868, 884.) Indeed, Smith's inexplicable and ex parte last-minute editing of the Revised CAO to add purported violations of law, and changes in the facts, to the Revised CAO—a prosecutorial, not adjudicatory, function—just confirms her lack of impartiality and independence, her failure to understand or execute the advisory function with which she was entrusted, and the Regional Board's wholesale failure to adequately separate the adjudicative and prosecutorial functions.

Smith's inexplicable and ex parte last-minute editing of the Revised CAO confirms the biased and unfair nature of this structure. The Revised Draft CAO from the Prosecution Team stated that



the reservoirs had been "fully cleaned out." (Ex. D [Revised Draft CAO] at p. 5.) But without any evidentiary foundation, or notice to Barclay, whatsoever, Smith changed the sentence to say that the reservoirs had been "emptied." (Ex. A [Revised CAO] at p. 4.] Smith also added more purported "violations" of law that are nowhere to be found in the Revised Draft CAO. (*Id.* at p. 11, fn. 14.) Smith's obvious zeal to please her superior and make his recommended order even more supportive of naming Barclay confirms her lack of impartiality and independence, and her failure to understand or execute the advisory function with which she was entrusted. This kind of obvious and improper bias in the selection of an adjudicator and prosecutor is specifically prohibited under the APA. Moreover, the fact that Smith added violations to the CAO—a prosecutorial function—while in a purportedly adjudicative capacity is further evidence of the Regional Board's blurred lines and lack of defined teams that clearly violates the APA.

For this reason alone, the Revised CAO must be vacated.

3. The Five-Year Delay In Naming Barclay To The Revised CAO Deprived It Of Any Meaningful Opportunity To Participate In The Development Of The RAP.

Due process requires an opportunity to be heard "'at a meaningful time and in a meaningful manner.'" (*Today's Fresh Start, Inc. v. Los Angeles County Office of Education* (2013) 57 Cal.4th 197, 212, quoting *Armstrong v. Manzoa* (1965) 380 U.S. 545, 552; see also *Cleveland Bd. of Educ. v. Loudermill* (1985) 470 U.S. 532, 546 ["The essential requirements of due process . . . are notice and an opportunity to respond. The opportunity to present reasons, either in person or in writing, why proposed action should not be taken is a fundamental due process requirement."]; *Arnett v. Kennedy* (1974) 416 U.S. 134, 178 ["A fundamental requirement of due process is the opportunity to be heard. It is an opportunity which must be granted at a meaningful time and in a meaningful manner," internal citations omitted].) Here, by deliberately delaying the naming of Barclay until after the RAP was developed by Shell and the comment period closed, Barclay was denied the opportunity to be heard on the RAP and as a result Barclay is now purportedly on the hook for a RAP it had no meaningful chance (nor reason) to contest.

After initially beginning its investigation in 2008, in mid-2010 the Regional Board was urged by Shell to name Barclay, and it chose not to do so. (Ex. TTT [1/21/14 Ltr.] at Tab 131 [6/9/10 Ltr.]

at p. 1.) Next, the Regional Board requested detailed information from Barclay in 2011 using Water Code section 13267. (Ex. XX [4/22/11 Request from Water Board].) After the Regional Board received that information, it again chose not to name Barclay. (Ex. TTT [1/21/14 Ltr.] at Tab 333 [9/15/11 Dole Submission].) Then, in October 2013, after nearly two years of complete silence from the Regional Board with respect to Barclay, the Regional Board sought public comment on naming Barclay. (Ex. J [10/31/13 Notice from Regional Board].) Barclay was the only member of the public to comment, and Barclay submitted a comprehensive package of both legal and technical information in January 2014 refuting any possible basis to name Barclay. (Ex. TTT [1/21/14 Ltr.].) Neither Shell nor the *Acosta* Plaintiffs advocated that Barclay be named during the official comment period.

In June 2014, at the apparent behest of Shell, the Prosecution Team suddenly "re-opened" the comment period on the October 2013 Draft CAO. (Ex. T [6/3/14 Notice from Regional Board].) There is no other explanation than that Shell, having failed to submit comments during the comment period that ended in January of 2014, desired to put comments in the record. Shell put in selected comments—only technical, not legal, and only responding to a few of Barclay's technical comments. (Ex. II [6/16/14 Shell Submission].) Barclay dutifully submitted a response to those comments, pointing out that Shell had failed to address any of its legal arguments and many of the technical comments contained in Barclay's January 2014 submission. (Ex. U [6/30/14 Barclay Submission].)

On December 8, 2014—nearly six months later and only after Shell settled with the *Acosta* Plaintiffs and the City of Carson—Unger issued a public recommendation to Smith to name Barclay. (Ex. S [12/8/14 Memo].) Unger's deadline for Smith was January 9, 2015—the very same day that the comment period on the RAP closed, which, by virtue of being a product of Shell's settlement with the *Acosta* Plaintiffs, requires more remediation than necessary. (See *id.* at pp. 2, 5.) Consistent with Unger's recommendation, Smith did not issue the Revised CAO until April 30, 2015—after the comment period on the RAP closed, depriving Barclay of any opportunity to challenge the RAP to which Shell, the *Acosta* Plaintiffs, and the City of Carson agreed.

To be clear, the Regional Board never should have named Barclay. There is no legal or factual basis for doing so. But the Regional Board's apparently deliberate decision to do so only after the comment period on the RAP closed is a separate and independent ground for vacating the Revised

CAO. There is no precedent for naming someone to an enforcement order that would require them to pay for a clean-up long after someone else's RAP has been approved. Even beyond that, there is no precedent where the public agency has been on notice to investigate that entity since before the original order was issued and has twice solicited detailed information from the entity and chose not to name it. The five-year delay clearly prejudiced Barclay, as it must now oppose implementation of a RAP that was crafted by its adversaries.

For this reason alone, the Revised CAO must be vacated.[12]

4. The Administrative Record Lacks An Evidentiary Basis For Naming Barclay.

"To meet the requirement of fairness, the Regional Board . . . must ensure that there is a factual and legal basis in the record for its decision and must indicate its reasoning and the factual basis for its decision to the affected parties." (*In the Matter of Project Alpha*, State Board Order No. WQ 74-1, at *3.) The findings must "bridge the analytic gap between the raw evidence and ultimate decision or order," disclosing "the analytic route the . . . agency traveled from evidence to action." (*Topanga Ass'n for a Scenic Cmty. v. City of L.A.* (1974) 11 Cal.3d 506, 514-515.) Indeed, the APA specifically requires that the Revised CAO contain "a statement of the factual and legal basis for the decision," and further provides that if "the statement is no more than mere repetition or paraphrase of the relevant statute or regulation, the statement shall be accompanied by a concise and explicit statement of the underlying facts of record that support the decision." (Govt. Code, § 11425.50,

[12] The Regional Board's five-year delay also triggers the equitable doctrine of laches. California has long recognized that laches may bar an administrative proceeding. (*City of Oakland v. Public Employees' Retirement System* (2002) 95 Cal.App.4th 29, 51; see also *Brown v. State Personnel Bd.* (1985) 166 Cal.App.3d 1151, 1158.) As in the litigation context, the "defense of laches requires unreasonable delay plus either acquiescence in the act about which plaintiff complains or prejudice to the defendant resulting from the delay." (*Conti v. Board of Civil Service Commissioners* (1969) 1 Cal.3d 351, 359.) In the administrative context, courts "will 'borrow' a closely analogous civil statute of limitations." (*City of Oakland v. Public Employees' Retirement System, supra*, 95 Cal.App.4th at p. 51.) When they do so, "it is to avoid unfairness due to delay by the public agency against whom laches was asserted." (*Ibid.*) Here, the most closely analogous statute of limitations is the three-year limitations period on nuisance claims. (See Code Civ. Proc., § 338, subd. (b).) The Regional Board began its investigation on May 8, 2008 (Ex. TTT [1/21/Ltr.] at Tab 328 [May 8, 2008 Notice from Regional Board]), but did not name Barclay until April 30, 2005—nearly seven years later, far exceeding the analogous three-year limitations period. (Ex. A [Revised CAO].) Moreover, the Regional Board's extraordinary delay plainly prejudiced Barclay by preventing it from participating in the development of the RAP, the financial burdens of which the Regional Board and Shell may now seek to impose on Barclay.

subd. (a).) "This enables the parties to determine whether, and on what basis, to seek review of a regional water board's decision," and "helps to encourage orderly analysis and reduce the likelihood of unfounded decisions." (*In the Matter of the Petition of Foothill/Eastern Transportation Corridor Agency*, State Board Order No. WQ 2014-0154, at *27.)

The Revised CAO does not satisfy any of these requirements. The Regional Board has not "ensure[d] that there is a factual and legal basis in the record." To the contrary, the Revised Draft CAO sent to Smith on December 8, 2014 fails to include a list of the evidence in the administrative record supporting its findings (Ex. D [Revised Draft CAO]), and both Ayalew and Unger repeatedly testified that they did not know where the evidence was collected to support key findings. (Ex. F [Ayalew Dep.] at 73:10-74:3, 74:18-76:16, 159:6-9, 243:22-244:5, 84:15-22, 229:22-230:5, 109:18-110:3, 166:17-20; Ex. E [Unger Dep.] at 213:2-217:20, 97:8-14, 232:20-233:15, 234:7-10, 235:5-12.) Moreover, the Revised CAO does not contain "a statement of the factual and legal basis" for the Regional Board's findings. For example, the Revised CAO does not provide a factual basis for the Regional Board's findings that Barclay "spread the waste," or "contributed to the migration of the waste."[13] The Revised CAO also does not contain a statement of the legal basis for finding Barclay liable as a discharger. The Revised CAO states only that the finding "is consistent with orders of the State Water Resources Control Board" and then cites State Board cases that do not at all support the Regional Board's finding.[14] Further, the Revised CAO does not even quote the statutes, let alone provide any factual or legal basis, for its finding that Barclay violated Health and Safety Code section 5411, Fish and Game Code section 5650, or Los Angeles County Code section 20.36.010. Both Unger and Ayalew testified that they had no part in researching or determining whether Barclay was in compliance with existing laws at the time of its activities at the Site. (Ex. F [Ayalew Dep.] at 60:21-25; 61:3-10; 61:14-21; Ex. E [Unger Dep.] at 56:19-24; 70:7-14.) Instead, Frances McChesney, the Prosecution Team's legal counsel, made those determinations. (Ex. E [Unger Dep.] at 55:2-58:18 ["Q. Are you the one who drew those conclusions about alleged violations of the Dickey Act? A. No.

[13] See Part V.B.1, *infra*, discussing in further detail the lack of evidence in support of the Regional Board's findings.

[14] See Part V.B.2, *infra*, discussing and distinguishing in further detail the State Board orders cited by the Regional Board.

Q. And do you know who on the prosecutorial team did? A. Our counsel, Frances McChesney."].) When asked for the factual and legal basis for these determinations—which the Regional Board is required to provide—Unger refused to answer on the grounds of the attorney-client privilege. (*Id.*) This is plainly insufficient under the APA.

Even more egregious, the Revised CAO alleges the violations of Fish and Game Code section 5650 and Los Angeles County Code section 20.36.010 for the first time.[15] (Cf. Ex. A [Revised CAO] at p. 11, fn. 14 with Ex. D [Revised Draft CAO].) Smith did not provide any basis or reasoning for including these additional alleged violations which were not part of the Revised Draft CAO sent to her by the Prosecution Team. The inclusion of these findings—for which Barclay had no notice or opportunity to respond, and for which the Regional Board has refused to provide any factual or legal basis—violates "the first and most universally recognized requirement of due process," namely, that a defendant have "real notice of the true nature of the charge against him." (*Smith v. O'Grady* (1941) 312 U.S. 329, 334; see also *In the Matter of Project Alpha*, State Board Order No. WQ 74-1, at *3 ["To meet the requirement of fairness, the Regional Board . . . must ensure that there is a factual and legal basis in the record for its decision and must indicate its reasoning and the factual basis for its decision to the affected parties"].)

The Revised CAO that was issued on April 30, 2015 also includes a number of other changes beyond simply naming Barclay. (Ex. A [Revised CAO].) The Revised Draft CAO circulated on December 8, 2014 included this statement: "Available information indicates that by August 15, 1966, all three reservoirs had been fully cleaned out of liquid residue." (Ex. D [Revised Draft CAO] at p. 5.) However, in the Revised CAO, Smith altered this statement to read "all three reservoirs had been emptied of liquid residue." (Ex. A [Revised CAO] at p. 4.) Smith's change has no support in the record. Ayalew testified that he wrote in the Revised Draft CAO that all the reservoirs had been "fully cleaned out." (Ex. F [Ayalew Dep.] at 141:23-143:22.) He testified that this information was extracted from the Pacific Soils reports from the time (Ex. F [Ayalew Dep.] at 142:25-143:22), and indeed the statement is supported by contemporaneous eyewitness testimony under oath and contemporaneously-generated documents. Without explanation or evidentiary support, Smith deleted it from

[15] These code provisions are not enforced by the Regional Board and are not in the Water Code.

the final order. (Ex. A [Revised CAO] at p. 4.) Barclay now has no opportunity to respond or comment upon this purported "finding," which is not supported by the evidence and was not recommended by the Prosecution Team.

The Prosecution Team's Response to Comments purports to rebut comments made by Barclay but it does not refer to specific evidence in support of the Prosecution Team's key findings, or the evidence it cites to does not support the Prosecution Team's contention. In fact, in some cases that evidence is directly contrary. For example, in the Response to Comments there is a reference to the Prosecution Team's belief that Barclay left petroleum hydrocarbons on the floors of the reservoirs when, in fact, all contemporaneous, eyewitness testimony directly refutes that conclusion. (Ex. TTT [1/21/14 Ltr.] at Tab 8 [Vollmer Dep.] at 34:25-35:12, 37:7-15, 141:17-142:4; *id.* at Tab 7 [Bach Dep.] at 40:12-24, 50:18-51:1, 128:22-130:12; *id.* at Tab 47 [SOC 120420-120421]; *id.* at Tab 344 [CARSON 463-464, CARSON 467-469, CARSON 477]; *id.* at Tab 348 [County of Los Angeles supervised grading certifications for 28086 dated 3/1/1967, 4/3/1967, and 4/17/1967].) In the Response to Comments, the Prosecution Team actually quotes one of those eyewitnesses and that testimony directly refutes (instead of supports) the Prosecution Team's contention. (Ex. S at Attachment 14 at pp. 24-26, 33.) Such clearly unsupported "findings" cannot support the naming of Barclay.

Finally, although the Prosecution Team has admitted it substantially relied on an unsworn, hearsay statement that counsel for the *Acosta* Plaintiffs prepared for George Bach in 2011 (*Id.* at pp. 24, 26); Ex. E [Unger Dep.] at 106:6-21; Ex. F [Ayalew Dep.] at 71:19-72:6 ["Q. Did you read his 2014 deposition? A. Yes, I did. Q. Did you read it before December 8 of 2014? A. No. Q. So when you made the recommendation and did the response to comments in this Exhibit 9, you had not read Mr. Bach's deposition; right? From 2014? A. The 2014 -- yes, I did not read."]), the Revised CAO fails to mention any reliance on George Bach's statement, let alone detail the Regional Board's basis for relying on it despite Bach's 2014 deposition testimony repudiating the statement and explaining the suspect circumstances under which it was drafted. (See Ex. U [6/30/14 Ltr.] at p. 4).[16] While Smith allowed Bach's 2014 deposition into the record, it does not appear that anyone considered it. (Ex. GG [2/27/15 Ltr.]; Ex. HH [12/24/14 Ltr.].) This clearly violates the APA's requirement that the

[16] The unsworn 2011 Bach statement is discussed in greater detail below. Part V.B.1.b, *infra*.

factual bases for credibility determinations be set forth with specificity. (See Govt. Code, § 11425.50, subd. (b) ["If the factual basis for the decision includes a determination based substantially on the credibility of a witness, the statement shall identify any specific evidence of the observed demeanor, manner, or attitude of the witness that supports the determination."].)

The Regional Board's decision to prefer the incompetent and inadmissible 2011 statement over credible and admissible evidence also violates the APA and the State Board's own regulations. Under both the APA and the State Board's regulations, hearsay evidence—such as that contained in the 2011 unsworn statement which is not the product of Bach's personal knowledge—"may be used for the purpose of supplementing or explaining other evidence *but shall not be sufficient in itself to support a finding unless it would be admissible over objection in civil actions.*" (Govt. Code, § 11513, subds. (c), (d), italics added); Cal. Code Regs. tit. 23, § 648.5.1 [incorporating Govt. Code § 11513 by reference]; see also, e.g., *Molenda v. Dept. of Motor Vehicles* (2009) 172 Cal.App.4th 974, 996 ["The mere admissibility of evidence at an administrative hearing does not confer the status of 'sufficiency' to support a finding absent other competent evidence"], citation omitted; *Daniels v. Dept. of Motor Vehicles* (1983) 33 Cal.3d 532 [noting that Gov. Code § 11515 "render[s] hearsay evidence insufficient in itself to support a finding"]; see also Evid. Code, § 1200 [defining hearsay evidence].)

For these reasons as well, the Revised CAO must be vacated.

5. The Prosecution And Advisory Teams Favored Shell And The *Acosta* Plaintiffs And Disfavored Barclay.

Separate and apart from the illegal and unconstitutional payments, Shell's and the *Acosta* Plaintiffs' relationship with the Regional Board is deeply problematic in other important respects. The Regional Board provided Barclay two specific opportunities to comment on the Draft CAO naming it, and Barclay did so within the prescribed comment periods. The two comment periods were the October 31, 2013 and June 3, 2014 notices to all interested parties. (Ex. J [10/31/13 Notice from Regional Board]; Ex. T [6/3/14 Notice from Regional Board].) No other parties submitted comments in response to the October 31, 2013 notice, and the Draft CAO was not changed in response to Bar-

clay's comments by June 2014. Therefore, there was no reason in June 2014 to "re-open" the public comment period. However, the Prosecution Team did so, apparently in response to Shell's demands.

After receiving the June 3, 2014 order, Barclay again respected the boundaries of the proscribed comment periods and submitted responsive comments to Shell's on the due date. (Ex. U [6/30/14 Barclay Response].) According to the Prosecution Team's December 8, 2014 memoranda, those are the only comment periods. (Ex. S [12/8/14 Memo].) Based on the submissions to the official comment periods, there should only be one comment from Shell (Ex. II [6/16/14 Ltr.]) and two comments from Barclay (Ex. TTT [1/21/14 Ltr.]; Ex. U [6/30/14 Ltr.]). However, even after the comment periods closed, Unger repeatedly communicated on an ex parte basis with Bowcock, the *Acosta* Plaintiffs' consultant. (Ex. E [Unger Dep.] at 22:4-23, 162:5-14.) Indeed, Unger openly invited these ex parte communications by offering Bowcock the opportunity to "talk whenever you wish." (Ex. E [Unger Dep.] at *id.* at 162:5-14; Ex. 15 at PRA-RWQCB-007029.) In those communications, Bowcock criticized Barclay's submissions and demanded that Barclay be named as a discharger. (Ex. E [Unger Dep.] at Ex. 14; *id.* at Ex. 15.) Unger also communicated with a member of the Carson City Council, even though the City of Carson was an adverse party. (Ex. E [Unger Dep.] at Ex. 17.) These improper *ex parte*, post-comment period communications were never disclosed to Barclay, and Barclay was never given the opportunity to respond. Moreover, the State Board has specific guidelines establishing the purpose behind preventing ex parte contacts. (Ex. JJ [State Water Resources Control Board, Office of Chief Counsel, M. A.M. Lauffer Chief Counsel Memorandum (Apr. 25, 2013)] at p. 2 ["Ex parte communications may contribute to public cynicism that decisions are based more on special access and influence than on the facts, the laws, and the exercise of discretion to promote the public interest."].)

Unger also met with representatives of Shell on May 14, 2014 after the close of the initial comment period to discuss naming Barclay as a discharger. (Ex. F [Ayalew Dep.] at 185:24-187:1; Ex. E [Unger Dep.] at Ex. 14.) Shortly after that meeting, the Regional Board re-opened the comment period solely for the purpose of giving Shell the opportunity to respond to Barclay's submissions. (See Ex. S [12/8/14 Memo].) Even more egregious, in his December 2014 letter recommending the adoption of the Revised Draft CAO, Unger asked Smith to issue a decision on the very same

day that the comment period for the revised RAP was set to close, which would have made Barclay responsible to pay for a RAP prepared by its adversary over which it had no say and that Shell had already agreed with the Plaintiffs to implement. (*Id.*; Ex. LL [11/3/14 Regional Board Summary of Proposed RAP] at p. 4.)

Finally, Congresswoman Hahn encouraged the Regional Board to add Barclay. (Ex. E [Unger Dep.] at Ex. 21.) Given the quasi-judicial nature of the Regional Board's proceedings, Congresswoman Hahn's contacts with the Regional Board raise the appearance of impropriety. (See, e.g., *Pillsbury Co. v. FTC* (5th Cir. 1966) 354 F.2d 952, 963 ["Common justice to a litigant requires that we invalidate the order entered by a quasi-judicial tribunal that was importuned by members of the United States Senate, however innocent they intended their conduct to be, to arrive at the ultimate conclusion which they did reach."].) Moreover, the *Acosta* Plaintiffs' consultant, Bowcock, stated that Unger was "afraid of Hahn." (Ex. E [Unger Dep.] at Ex. 19 at PRA-RWQCB-2638.) Hahn's ties to counsel for the *Acosta* Plaintiffs are no secret. As discussed, lead counsel for the *Acosta* Plaintiffs is a significant individual contributor to Congresswoman Hahn's political ambitions, and a significant contributor to AAJ PAC, which in turn is also one of Congresswoman Hahn's largest contributors. (Ex. E [Unger Dep.] at Ex. 20.) By naming Barclay, the Regional Board was able to satisfy the demands of Shell, the Acosta Plaintiffs, and the City of Carson and appease Congresswoman Hahn. Taken together, the aforementioned facts raise genuine questions about the impartiality of the Prosecution Team. (*Burrell v. City of Los Angeles* (1989) 209 Cal.App.3d 568, 582 ["The due process guaranty of a fair and impartial administrative decisionmaker . . . [is] violated . . . if the official or officials who take part in the proceedings are demonstrably biased or if, in the least, circumstances such as personal or financial interest strongly suggest a lack of impartiality"].)

By contrast, the record is replete with instances where Barclay's attempts to plead its case were blocked at every turn. For example, Frances McChesney claimed in her January 2015 letter that Barclay should have submitted the Waterstone 3-D model in the fall of 2014. (Ex. MM [1/15/15 Ltr.].) However, submitting the model at that time would have been inappropriate since it would have necessarily occurred after the close of the official comment period. McChesney used that argument to urge Deborah Smith to prevent the adjudicator from considering that key model, and Smith

obligingly agreed to keep it out of the record. (Ex. GG [2/27/15 Ltr.].) Yet, at the same time, Unger was inviting Bowcock, Girardi Keese's representative, to meet with him at any time to discuss naming Barclay on the order, regardless of the close of the "official" comment period. (Ex. E [Unger Dep.] at 162:5-14.)

Barclay, continuing to respect the boundaries and guidelines set by the Regional Board, sought to submit more critical evidence to Smith in December 2014. (Ex. HH [12/24/14] at p. 2; Ex. N [1/6/15 Ltr.]; Ex. NN [1/16/15 Ltr.].) Those requests were denied. (Ex. GG [2/27/15 Ltr.].) Smith's justifications for the denial were arbitrary and baseless. For example, Smith claimed that the Waterstone expert report was a model derived from "litigation in which the Water Board was not a party." (*Id.*) It is impossible to reconcile Smith's rejection of evidence merely because it was part of litigation to which the Water Board was not a party with the Prosecution Team's eagerness to assist Shell and the *Acosta* Plaintiffs in manufacturing evidence (the Revised CAO) for litigation to which the Water Board was not a party. The fact that the Regional Board was not a party to the *Acosta* Litigation never stopped Unger from listening to Shell who had just sued Barclay in May of 2014 when Unger suddenly "re-opened" the comment period for Shell, or from inviting Bowcock to meet with him any time when Bowcock was a known consultant for the *Acosta* Plaintiffs.

Barclay again requested that Smith wait to name Barclay until additional evidence was ready for Smith's review, this time on the basis of the deposition transcripts of Unger and Ayalew. (Ex. NN [1/16/15 Ltr.].) Although Smith initially stated she would later consider reviewing the transcripts, she ultimately summarily decided not to wait for the transcripts before issuing the CAO—even though Barclay informed her that the depositions were only a couple of weeks away. (Ex. OO [4/30/15 Ltr.] at p. 2.) Yet as Barclay had predicted, the depositions of Unger and Ayalew revealed many material facts that she should have considered in making her decision. Particularly informative was the fact that the Regional Board Prosecution Team's work had been illegally paid for by Shell – a fact that, had Smith been aware of it, should have convinced her that the process was tainted and that she could not rely on the Prosecution Team's independence. (Ex. F [Ayalew Dep.] at 179:8-21.) Similarly, both Unger and Ayalew testified that they were aware of no violations of law by Barclay—another fact that should have affected Smith's decision and certainly should have dissuaded her from

coming up with even more violations of law. (Ex. E [Unger Dep.] at 63:7-15, 64:5-65:6, 66:10-67:23; Ex. F [Ayalew Dep.] at 40:19-41:22.) Both Unger and Ayalew further testified that the County's oversight of Barclay's activities was "irrelevant" their considerations. (*Id.*) Had Smith been aware of that testimony she could not have possibly justified adding two more violations of law – especially one claiming a violation of a County ordinance. (Ex. A [Revised CAO].) After all, the Board's own Prosecution Team had just testified under oath that it considered Barclay's adherence to County requirements to be irrelevant to their recommendation to name Barclay on the order and they had drawn no conclusions in that regard.

6. The Regional Board's Failure To Hold A Formal Hearing Violated Barclay's Due Process Rights.

Although the State Board has acknowledged that "informal hearings may be used in place of formal hearings in some instances," the State Board has stated that the informal process may only "be used where significant facts are not in issue and the proceeding held is to determine only what consequences flow from those facts." (Ex. KK [State Water Resources Control Board, Office of Chief Counsel, M. A.M. Lauffer Chief Counsel Memorandum (Aug. 2, 2006)] at p. 3.) "In deciding whether to use the informal process, a water board should consider how many parties are involved, whether any of the parties have requested a more formal process, how many interested persons there are, how complex the issues facing the water board may be, and how important a formal record may be if petitions and appeals result." (*Id.*)

Here, Barclay twice requested a formal hearing in order to (1) present new evidence; (2) present legal argument on the question of whether Barclay qualifies as a "discharger" under section 13304(a); and (3) cross-examine witnesses who disagree with the technical reports submitted by Barclay and who have relied on the unsworn statement of George Bach rather than his sworn deposition testimony. (Ex. HH [12/24/14 Ltr.] at p. 2; Ex. N [1/6/15 Ltr.]; Ex. NN [1/16/15 Ltr.].) This is by no means a case "where significant facts are not in issue and the proceeding held is to determine only what consequences flow from those facts." The correspondence between Barclay and the Regional Board long before the hearing requests were made make clear that there were significant and complex factual disputes at issue. (*E.g.*, Ex. TTT [1/21/14]; Ex. S at Attachment 15; Dagdigian Decl. at Ex. A

[Waterstone Response to Comments].) Moreover, the need for a formal record due to the likelihood of an appeal was clear. (Ex.HH [12/24/14 Ltr.] at p. 5.)

Nonetheless, despite Barclay's repeated requests, the Regional Board refused to conduct a formal hearing on whether to name Barclay as a discharger on the CAO. (Ex. GG [2/27/15 Ltr.].) In rejecting Barclay's repeated requests, Smith ignored the guidelines set forth by the State Board, instead reasoning—incorrectly—that "the factual questions raised by the Revised Draft CAO are primarily technical and therefore, fit to be addressed through written expert reports and written rebuttal."[17] (*Id.* at p. 2.) But the State Board makes no distinction regarding whether the disputed facts are "technical in nature"—the key is whether the facts at issue are "significant." There can be no question that the factual disputes at issue here are significant. Indeed, the factual disputes go to the very heart of whether Barclay qualifies as a discharger at all. Smith also completely ignored Barclay's need to cross-examine witnesses. (See Ex. GG [2/27/15 Ltr.].) The Regional Board's failure to provide a formal hearing in this case deprived Barclay of due process, deprived Barclay of a formal record to assist in the event of appeal, and resulted in a Revised CAO which names Barclay without any basis in fact or law.[18]

Past cases challenging actions of the Water Board emphasize the importance of providing a hearing to the party named on the CAO. In determining whether an agency has provided sufficient due process, California law applies a four-factor balancing test, weighing: "(1) the private interest that will be affected by the official action, (2) the risk of an erroneous deprivation of such interest through the procedures used, and the probable value, if any, of additional or substitute procedural safeguards, (3) the dignitary interest in informing individuals of the nature, grounds and consequences of the action and in enabling them to present their side of the story before a responsible governmental official, and (4) the governmental interest, including the function involved and the fiscal and administrative burdens that the additional or substitute procedural requirement would entail." (*Salee-*

[17] The 85-page legal brief submitted by Barclay on January 21, 2014 included multiple critical and purely "legal" issues. There can be no rationale for Smith's arbitrary suggestion that the issues were just "technical."

[18] See Part V.B, *infra*, for a detailed discussion of why the Revised CAO is not supported by the evidence or the law.

by v. State Bar (1985) 39 Cal.3d 547, 565.) Here, the four-factor balancing test makes clear that the Regional Board deprived Barclay of due process by failing to hold a formal hearing. First, the potential impact of the Revised CAO on Barclay's private interest is severe. The Regional Board may hold Barclay responsible (financially or otherwise) for the implementation of a RAP valued by Shell at nearly $150 million, a RAP that it had no role in developing (nor any reason to do so), and the *Acosta* Plaintiffs and Shell will certainly attempt to use the Revised CAO to impute liability for millions or hundreds of millions of dollars onto Barclay. Second, the risk of an erroneous deprivation of property here is unacceptably high, due to the fundamentally flawed processes used by the Regional Board to investigate and name Barclay. Third, the Regional Board failed to inform Barclay of the true nature, grounds, and consequences of its action, and did not provide Barclay with a fair opportunity to present its side of the story. Finally, conducting a hearing would not have created any additional burden on the Regional Board (especially in light of the fact that Shell was paying for the Regional Board's work), and holding a hearing would not have caused any delay to the Regional Board's goal of cleaning up the Kast Property. (Ex. E [Unger Dep.] at Ex. 22 [6/12/14 Regional Board Meeting Tr.] at 15:3-9; Ex. E [Unger Dep.] at 191:20-192:6 ["Q. And Ms. McChensney says: oh, none. The – Shell never petitioned or challenged the original cleanup and abatement order, so they're still responsible regardless of who else may be added. . . Do you agree with Ms. McChesney's statement? A. Yes."].) To deny a hearing on the merits in light of such facts clearly violated Barclay's due process rights.

This is not a case like *Machado v. State Water Resources Control Board*, where the California Courts of Appeal held that a post-CAO hearing was sufficient to satisfy Machado's due process rights. (90 Cal.App.4th 720, 725.) In that case, the trial court disagreed with Machado's argument that it was entitled to a hearing *before* the CAO had been issued, but held that the dairy was at least entitled to a hearing *after* the CAO had been issued. (*Id.*) The Court of Appeal affirmed. (*Id.*) In rejecting Machado's argument that it was entitled to a hearing before the issuance of the CAO, the court noted that the CAO did not impose criminal or civil penalties; rather, "[i]ts effect is much more limited." (*Id.* at p. 726.) "The order prohibits the discharge of polluted water, requires inspections to ensure compliance with previously issued WDR's, and calls for modifications of the wastewater dis-

tribution system to prevent any further unlawful discharges. While these measures create obligations for the Dairy, they do not affect the fundamental nature of its business." (*Id.*) The court also noted that "[t]he need for immediate action to clean up or abate waste discharge is obvious: Unlawful discharges threaten public health and safety, and pose significant risk to the environment." (*Id.* at p. 727.) Here, by comparison, the potential impact on Barclay is not "limited." As discussed above, the potential financial impact on Barclay is severe. Moreover, unlike in *Machado*, there was no need for the Regional Board to rush to issue an order without a hearing, because there were no ongoing discharges, and as noted by the Regional Board itself, the addition of Barclay to the CAO had no effect on the actual cleanup procedures of the site, since Shell had already been named and the CAO and was already complying with it. (Ex. E [Unger dep.] at Ex. 22 [6/12/14 Regional Board Meeting Tr.] at 15:3-9.) A post-CAO hearing by the Regional Board here will not suffice to remedy the violation of Barclay's due process rights.

B. The Regional Board's Findings Are Not Supported By The Evidence And Do Not Support Liability Under Porter-Cologne.

Given the lack of due process provided to Barclay as discussed above, it is not surprising that the Regional Board issued the Revised CAO containing findings that are not supported by the evidence or the law. The law places the burden of proof on the Regional Board to establish that Barclay meets the definition of a "discharger" in California Water Code section 13304(a) before it may issue a clean-up and abatement order naming Barclay. (*City of Brentwood v. Center Valley Reg'l Water Quality Control Bd.* (2004) 123 Cal.App.714, 720.) "To meet the requirement of fairness, the Regional Board, before acting on . . . proposed orders, must ensure that there is a factual and legal basis in the record for its decision and must indicate its reasoning and the factual basis for its decision to the affected parties." (*In the Matter of Project Alpha*, State Board Order No. WQ 74-1, at *3; see also *Topanga Ass'n for a Scenic Cmty. v. City of L.A.* (1974) 11 Cal.3d 506, 514-515 [an agency "must render findings sufficient both to enable the parties to determine whether and on what basis they should seek review and, in the event of review, to apprise a reviewing court of the [legal] basis for the [agency's] action," and the findings must "bridge the analytic gap between the raw evidence and ultimate decision or order," disclosing "the analytic route the . . . agency traveled from evidence to ac-

tion"]; *City of Brentwood v. Centr. Valley Reg'l Water Quality Control Bd.* (2004) 123 Cal.App.4th 714, 720 [Regional Boards bear the burden of proving the elements of an offense under Porter-Cologne].)

Neither the Revised CAO, nor the administrative record, satisfies these requirements. The Regional Board has not "ensure[d] that there is a factual and legal basis in the record." The Revised CAO's findings are not supported by the evidence, and even if they were, the findings do not support Barclay's liability under section 13304(a). Moreover, even if the Regional Board did have a factual or legal basis for its finding that Barclay is liable under section 13304(a) (and it does not), the Regional Board has failed to meet its burden of demonstrating that Barclay is not exempt from liability under the safe harbor of section 13304(j). Not only is there no factual or legal basis in the record for arguing that Barclay was in violation of any then-existing laws, the affirmative evidence actually proves the opposite: Barclay is exempt from liability under section 13304(a) because Barclay was in compliance with all existing laws at the time of its activities at the Site. Therefore, the Revised CAO cannot stand. (See, e.g., *Schutte & Koerting, Inc. v. Reg'l Water Quality Control Bd.* (2007) 158 Cal.App.4th 1373, 1383-1384 [stating abuse of discretion is established if the administrative order "is not supported by the findings, or the findings are not supported by the evidence"], citing Cal. Civ. Proc. Code, § 1094.5, subd. (c).)

1. The Regional Board's Finding That Barclay Is Liable Under Section 13304(a) For Knowingly "Spread[ing] The Waste" or "Contribut[ing] To The Migration Of The Waste" Is Not Supported By Evidence.

The Regional Board seeks to justify holding Barclay responsible for clean-up and abatement of contamination that it did not discharge or even know about on the basis of its finding that Barclay "purchased the Site with explicit knowledge of . . . the presence of residual petroleum hydrocarbons, and conducted various activities, including partially dismantling the concrete in the reservoirs and grading the onsite materials. These activities *spread the waste* at the site, and *contributed to the migration of the waste* through soil and groundwater." (Ex. A [Revised CAO] at p. 10, italics added.) The Revised CAO purports to recite the facts concerning Barclay's activities at the Site on pages 4 and 10-11, but these descriptions gloss over the details in a way that mischaracterize the facts, utterly

failing to "bridge the analytical gap between the raw evidence and ultimate decision or order." There is a significant disparity between what is described in the Revised CAO and what the evidence shows.

This lack of clarity is exacerbated by the failure to cite evidence in anything but the most general terms. Although the Revised CAO occasionally refers to "the record" in general terms, there is no reference to admitting evidence, identification of a record, or specification of what parts of any evidence or record are relied upon to support finding Barclay to be a responsible party under section 13304(a). The Revised Draft CAO sent to Smith on December 8, 2014 notably failed to provide a specific list of evidence in the administrative record, (Ex. D [Revised Draft CAO]), and when asked for factual support at their depositions, members of the Regional Board's Prosecution Team were repeatedly unable to point to any specific documents or witness testimony to support the Regional Board's factual assertions. (Ex. F [Ayalew Dep.] at 73:10-74:3, 74:18-76:16, 159:6-9, 243:22-244:5, 84:15-22, 229:22-230:5, 109:18-110:3, 166:17; Ex. E [Unger Dep.] at 213:2-217:20, 97:8-14, 232:20-233:15, 234:7-10, 235:5-12.) "[M]ere conclusory findings without reference to the record are inadequate." (*Envtl. Prot. Info. Ctr. v. Cal. Dep't of Forestry & Fire Prot.* (2008) 44 Cal.4th 459, 517, citation omitted.)

a. There Is No Evidence That Barclay Knowingly "Spread The Waste" Or "Contributed To The Migration Of The Waste."

The reason for the Regional Board's failure to properly cite evidence is clear: there is no evidence to support its findings that Barclay knowingly "spread the waste" and "contributed to the migration of the waste." Indeed, all of the available evidence shows that Barclay spread fill soil that it did not believe had any petroleum when it graded the Site. Even if the fill soil used for compaction was already contaminated before Barclay moved it from the berm (for which there is no evidence), there is absolutely no evidence to contradict the fact that Barclay had no knowledge of its presence.

(i) There Is No Evidence That Barclay Knowingly "Spread The Waste."

In the *Acosta* Litigation, the last four surviving witnesses to Barclay's placement and compaction of the berm fill soil testified under oath that they saw no oil in the soil. (Ex. TTT [1/21/14 Ltr.]

at Tab 7 [Bach Dep.] at 105:8-107:16, 143:23-144:4; *id.* at Tab 8 [Vollmer Dep.] at 86:2-87:1; *id.* at Tab 12 [Anderson Dep.] at 35:9-36:8; *id.* at Tab 13 [Al Vollmer Dep.] at 43:25-44:15.) All four men testified that they had good vantages from which to observe the soil taken from the berms after it had been spread, and they were in a position to see oil contamination if there had been any. (*Id.* at Tab 12 [Anderson Dep.] at 35:24-36:8; *id.* at Tab 13 [Al Vollmer Dep.] at 44:7-19.). Those who were asked about odors testified that there were no petroleum odors in the berm soil. (*Id.* at Tab 12 [Anderson Dep.] at 36:9-12; *id.* at Tab 13 [A. Vollmer Dep.] at 60:4-6; 110:19-111:2.) The same is true for observations of soil beneath the reservoir bottoms seen when the concrete floors were being ripped. All of the eye-witnesses who observed the soil beneath the slabs on the reservoir bottoms observed no petroleum hydrocarbons beneath the ripped concrete. (*Id.* at Tab 7 [Bach Dep.] at 188:15-189:1; *id.* at Tab 8 [L. Vollmer Dep.] at 97:18-98:3; *id.* at Tab 12 [Anderson Dep.] at 42:4-12; *id.* at Tab 13 [A. Vollmer Dep.] at 61:18-62:7, 62:19-22, 109:14-110:11.) The testimony of all four witnesses was given in deposition subject to cross-examination by lawyers for Shell and the *Acosta* Plaintiffs. These are the only four known living witnesses who actively participated in the grading and decommissioning of the tanks at the Site, and their testimony is unanimous on the subject.

Moreover, as shown above, there were soil samples taken from the berm soil as part of the preliminary soils investigation, and while it was not the purpose of that sampling to look for oil, the cuts taken from the berms provided yet another opportunity for a trained eye to see oil contamination in the berm soil if it was there. (Part III.F, *supra.*) Although there were many soils reports prepared after those samples were taken, and hundreds of pages of documents placed in the construction file after that, not one page of those documents says anything about oil in the berm soil. This corroborates the testimony of the four eyewitnesses. (Ex. TTT [1/21/14 Ltr.] at Tab 66 [CARSON 348-54]; *id.* at [Shepardson Report] at p. 26.)

Despite all of this evidence, the Responses to Comments and deposition testimony of Unger and Ayalew indicate that the Prosecution Team relied on unsupported and unreasonable inferences for its conclusion that Barclay knowingly left petroleum-impacted soil at the site. (Dr. Dagdigian Decl. ¶¶ 26, 34.) For example, Ayalew stated that when Barclay's on-site contractors testified that they removed all "gunk" that was not suitable to serve as fill soil, this justified an inference that those

contractors knowingly left petroleum-impacted soil at the Kast Site so long as it was suitable for "fill." (Ex. F [Ayalew Dep.] at 238:11-240:9.) Further, in the Responses to Comments, the Prosecution Team asserted that because Barclay only screened soils for geotechnical soundness and visible petroleum saturation, its activities left in place and caused redistribution of fill soils impacted at lower concentration levels. (Ex. S at Attachment 14 at p. 17.) There is no evidence in the record to support either of these inferences, and the Prosecution Team did not point to any. Moreover, these inferences are directly contrary to the uniform eyewitness testimony discussed above that only visibly clean soil was used for fill.

(ii) Barclay Did Not "Contribute To The Migration Of The Waste: or "Allow The Percolation Of . . . Sludge Present In The Reservoirs Into The Subsurface."

Nor is there any evidence to support the Revised CAO's assertion that Barclay's actions "contributed to the migration of the waste" or that the concrete floors of the reservoirs were broken "to allow the percolation of water *and sludge* present in the reservoirs *into the subsurface*." (Ex. A [Revised CAO] at p. 4, italics added.) While "percolation of water" was an objective of the trenching, it was clear from the first moment it was raised in the Preliminary Soils Report dated January 7, 1966, that the objective of such percolation was precipitation after the grading had occurred; it was never a part of the process to clean out residual materials "present in the reservoirs." (Part III.I, *supra*.) There is no evidence that any sludge was "present in the reservoirs" by the time the trenching took place or that Barclay or anyone else ever intended to "allow the percolation of . . . *sludge* . . . into the subsurface" through the concrete. The only evidence on this subject shows that when Barclay arrived in late January 1966, Reservoirs 5 and 6 were already clean (as reported by Shell documents); that Barclay's subcontractor, Chancellor & Ogden, cleaned out residual materials from Reservoir 7 with the assistance of the grading contractor, Vollmer Engineering; and that no ripping took place in any of the reservoir bottoms until they were fully cleaned out.[19] (Part III.I, *supra*.) There is no evidence

[19] The Draft Revised CAO included this statement: "Available information indicates that by August 15, 1966, all three reservoirs had been ***fully cleaned out*** of liquid residue." (Ex. D [Draft Revised CAO] at p. 5.) However, the Revised CAO altered this statement to read "all three reservoirs had been ***emptied*** of liquid residue." (Ex. A [Revised CAO] at p. 4.) Ayalew testified that he wrote in the draft CAO that all the reservoirs had been "fully cleaned out." (Ex. F [Ayalew Dep.] at 141:23-143:22.) He testified that this information was extracted from the Pacific Soils Reports [Footnote continued on next page]

that any sludge ever contaminated the sub-floor area, or any other area of the Site during the time Barclay was on Site. (*Id.*)

Despite the lack of any evidence indicating that "sludge" was left in the reservoirs at the time, in the Responses to Comments, the Prosecution Team stated that photographs from the 2010 trenching of the property at 24403 Ravenna "revealed the presence of a concrete slab that contained petroleum hydrocarbons on the concrete slab surface" and "showed concrete slabs that are continuous and intact with significant staining overlain by sludge or hydrocarbon saturated residual soil or oily soil." (Ex. S at Attachment 14 at pp. 86-88.) According to the Prosecution Team, these photos prove that Barclay did not remove all of the sludge from Reservoir 7. (See *id.*) However, Dr. Dagdigian and his staff reviewed the photos and "found no evidence to support the Regional Board's statements." (Dr. Dagdigian Decl. ¶ 27.) Dr. Dagdigian further noted that "the URS reports for the 24403 Ravenna investigations . . . refutes the Regional Board's claim that a concrete slab uncovered at that location was 'overlain by sludge or hydrocarbon saturated residual soil or oily soil,' and instead provides strong support for" Dr. Dagdigian's theory of upward migration. (*Id.*)

Ayalew confirmed the Prosecution Team's faulty reliance on alleged "sludge" at 24403 Ravenna to support its assertion that Barclay knowingly left petroleum hydrocarbons at the Kast Site. (Ex. F [Ayalew Dep.] at 146:3-149:9.) Ayalew stated that his only evidence for this assertion was his own field observations and the photographs at 24403 Ravenna (which he took). (*Id.*) However, Ayalew conceded that no analysis was performed to test whether this "sludge" actually contained petroleum hydrocarbons. (*Id.*) Moreover, Ayalew's claim is further undermined by his confused application of the word "sludge." At certain points in his deposition, Ayalew appeared to testify that any soil impacted with petroleum hydrocarbons should be considered "sludge." (*Id.* at 155:25-156:12.) However, under further questioning, he was unable to provide any reference for such a definition (*Id.* at 159:6-9), and later reversed course by stating that he did not "establish correlation between sludge and higher concentrations." (*Id.* at 161:14-20.) After admitting that he does not actually know what qualifies as "sludge" or whether the material he saw at 24403 Ravenna was indeed "sludge," Ayalew

[Footnote continued from previous page]
from the time. (*Id.* at 142:25-143:22.) Without explanation or evidentiary support for this change, Smith deleted it from the final order. (Ex. A [Revised CAO] at p. 4.).

was otherwise unable to point to any specific evidence to support the Regional Board's allegations that Barclay knowingly left petroleum hydrocarbon "sludge" in the former reservoirs. (*Id.* at 153:7-155:4-23.)

The Prosecution Team also relied on an unsupported assertion that Barclay's "ripping" of the concrete reservoir floors "resulted in bringing soil from beneath the reservoir floor to the surface, which was then mixed with the broken concrete and incorporated into the fill materials above the reservoir floor." (Ex. S at Attachment 14 at pp. 35-39; Ex. F [Ayalew Dep.] at 227:13-228:7.) However, as explained in Dr. Dagdigian's November 2014 Expert Report, the ripping tool that Barclay's contractors used would not have pulled up soil from beneath the reservoir floors. (Ex. AAA [Dagdigian's November 2014 Report] at Appendix B, pp. 5-6; Dr. Dagdigian's Decl. ¶ 23.) The Prosecution Team's assertion is also contradicted by sworn testimony from the eyewitnesses at the site who described the process by which the former reservoir walls and floors were broken up, mixed with clean soil from the berms, and subsequently compacted. Thus, contrary to the unsupported assertion of the Prosecution Team, Barclay's ripping would not have caused soils beneath the floors to mix into the fill material, and eyewitness testimony shows that no such mixing occurred.

(iii) There Is No Evidence That Barclay's Acts "Contributed To The Migration Of Waste" Into The Groundwater.

Although the Revised CAO does not contain any factual basis for the Regional Board's finding that Barclay's acts "contributed to the migration of the waste into . . . groundwater" (Ex. A [Revised CAO] at p. 10), in the Responses to Comments, the Prosecution Team asserted that Barclay "contributed to the water pollution and nuisance conditions" through its "breaking up [of] the concrete and moving soil." (Ex. S at Attachment 14 at p. 11.) In particular, Unger and Ayalew claimed that Barclay's work on the concrete floor of Reservoir 5 contributed to groundwater contamination detected at Monitoring Well 03 and Monitoring Well 12. (Ex. E [Unger Dep.] at 213:2-217:20; Ex. F [Ayalew Dep.] at 117:19-125:3, 133:6-136:13.) However, Shell's consultants have previously demonstrated that the groundwater contamination from petroleum hydrocarbons originated from the floor joints and sidewalls of Shell's former reservoirs. (Ex. F [Ayalew Dep.] at Ex. 12 [9/29/10 URS Corporation Plume Delineation Report] at pp. 4-34; Dr. Dagdigian Decl. ¶ 25.) It is undisputed Bar-

clay did not operate in these locations. Ayalew's claim that Barclay is responsible for this groundwater contamination because it operated "nearby" is untenable in light of the clear contamination trails presented in Shell's data that emanate exclusively from the former sidewalls and reservoir joints, and the fact that the direction of groundwater flow from the center of Reservoir 5 is away from Monitoring Well 03 and Monitoring Well 12, not towards it. (Dr. Dagdigian Decl. ¶ 39.)

b. The Regional Board's Reliance on The 2011 Unsworn Statement of George Bach Is Improper.

Despite all of the evidence to the contrary, the Response to Comments indicates the Prosecution's conclusion that the "contamination pattern presently on site likely resulted from site development activities of fill and grading with site soils" is based on its belief that during redevelopment there was evidence of petroleum hydrocarbon odors in the berm soils and observable impacts to soil directly beneath the reservoir floors. (Ex. S at Attachment 14 at pp. 17, 44.) But the prosecution's only evidence for these propositions (besides the unsupported inferences already discussed above) is the unsworn, hearsay statement signed by Bach on May 13, 2011 ("2011 Statement"). (*Id.*; Ex. F [Ayalew Dep.] at 89:16-90:19; Ex. E [Unger Dep.] at 105:2-105:10.)

However, as the Regional Board is well aware, Bach has directly refuted the factual assertions which the Regional Board attributes to his 2011 Statement. (Ex. HH [12/24/2014 Ltr.] at pp. 3-4.) In November 2014, while testifying under oath and subject to cross-examination by lawyers for Shell and Plaintiffs in the *Acosta* Litigation, Bach testified unequivocally that (1) he did not see or smell oil in the berm soil that was used as fill or in other soils on the property (Ex. N [1/6/15 Ltr.] at Ex. A [Bach Dep.] at 126:16-127:1, 127:19-129:6, 130:4-132:11); (2) he did not observe oil in the soil below reservoir floors (*id.* at 130:4-132:11), and (3) he saw no ponding of oil onsite (*id.* at 135:4-136:10).

Bach explained in the November 2014 deposition that the 2011 Statement was written without the benefit of looking at documents generated at the time the Kast Site was developed. He stated, "The statements in here are what I believed to be true after 25–40 years of not looking at it. It's what I could recall at that time with no reference material, just out of my head." (Ex. N [1/6/15 Ltr.] at Ex. A [Bach Dep.] at 117:17-21.) Bach also explained that some of the statements were written because

the *Acosta* Plaintiffs' counsel asked him to speculate. (*Id.* at 138:9-12 ["These were written because I was asked to speculate about where [contamination] might be found."].) Once he had the opportunity to review documents, his recollection was refreshed and he could offer an accurate account of his first-hand knowledge.

Bach's 2014 testimony makes clear that the 2011 Statement is not competent or reliable evidence under the Evidence Code. First, it is hearsay not subject to any recognized hearsay exception. (Evid. Code, § 1200.) Second, it was not signed under penalty of perjury. (Evid. Code, § 710.) Third, Bach does not have personal knowledge of many things discussed in the 2011 Statement (Evid. Code, § 702, subd. (a)), and indeed much of it is based on speculation (Evid. Code, §§ 702, 800; see, e.g., Ex. N [1/6/15 Ltr.] at Ex. A [Bach Dep.] at 138:9-12 ["These were written because I was asked to speculate about where [contamination] might be found."].) The 2011 Statement would not be admissible under the most basic rules of evidence, and no California court would permit reliance on it to support a finding of fact. (See, e.g., *Fishbaugh v. Fishbaugh* (1940) 15 Cal.2d 445, 457 [basing conclusions upon inadmissible evidence may constitute sufficient ground for a reversal of judgment]; *Estate of Pierce* (1948) 32 Cal.2d 265, 277 [noting that once "the inadmissibility of the evidence came to light . . . it was the duty of the trial court to disregard the inadmissible portion of the evidence"].)

Bach's 2014 testimony makes clear that the Regional Board's reliance on his 2011 unsworn statement is arbitrary and without basis, particularly in light of the robust compilation of admissible evidence in the Regional Board's possession related to Bach and the subjects he addresses. (See *Houghtaling v. Super. Ct.* (1993) 17 Cal.App.4th 1128, 1141 ["recognizing the "centuries old evidentiary doctrine that only trustworthy and reliable evidence should be considered"]; *Ojala v. Bohlin* (1960) 178 Cal.App.2d 292, 304 ["Resort must be had to the best evidence that is available"].) Yet, the Regional Board disregarded all other evidence—including Bach's 2014 sworn testimony and the sworn testimony of the other percipient witnesses—and relied solely on the inadmissible 2011 Statement to support its finding that there were odors in the berm soils and observable impacts to soil beneath the reservoir floors on the 2011. (Ex. E [Unger Dep.] at 105:2-105:10, 106:6-21, 108:1-110:1; Ex. F [Ayalew Dep.] at 71:11-72:6, 89:16-90:19.) Smith even allowed the 2014 deposition into the

record (Ex. GG [2/27/15 Ltr.]), but nowhere explains—as she was required to—her basis for finding the 2011 unsworn Bach statement more credible than Bach's 2014 sworn testimony. (See Govt. Code, § 11425.50, subd. (b) ["If the factual basis for the decision includes a determination based substantially on the credibility of a witness, the statement shall identify any specific evidence of the observed demeanor, manner, or attitude of the witness that supports the determination."].) The Regional Board's wholesale failure to address the 2014 Bach Deposition testimony and willfully blind reliance on the inadmissible 2011 Statement—which is plainly inferior evidence—is just another example of the arbitrary, erratic, Alice in Wonderland-like proceedings below, the sole purpose of which appears to have been naming Barclay by any means necessary and regardless of the evidence.

c. All Available Evidence Supports Determination That Shallow Contamination At The Site Has Been Caused By The Upward Migration Of The Deep Contamination.

Without any direct evidence there was oil in the berm soil at the time of Barclay's operations at the Kast Site, the Regional Board instead draws the unsupported conclusion that the shallow contamination at the Site was caused by Barclay's grading of the fill soil. However, Dr. Jeffrey Dagdigian, an expert on the movement of oil in the environment, has determined that the fill soil placed by Barclay in the areas located above the former reservoir bottoms became contaminated (and required remediation) only after it was put there when contamination, previously undetected beneath the former reservoir bottoms by Shell, moved upward into the clean fill soil through capillary action, buoyancy and other pressures in the vadose zone.

According to Dr. Dagdigian, after Barclay placed and compacted clean fill on top of the broken reservoir bottoms, contamination that had remained immediately beneath the reservoir bottoms at high concentrations was able to move upward through openings that had been ripped in the former reservoir concrete bottoms and around the bottoms in the places where the walls had been removed. (Ex TTT [1/21/14 Ltr.] at [Dagdigian Report] at p. 116.) At high concentrations, these contaminants moved into the clean fill via capillary action, by buoyancy whenever water from irrigation or rain was introduced, and other naturally-occurring pressures in the vadose zone. (*Id.* at p. 142.) That this occurred is demonstrated by the pattern of contamination shown by the data, which confirms that higher concentrations are found just above the former reservoir bottoms with smaller amounts as the as-

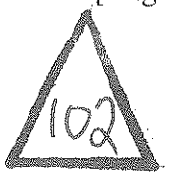
cends in the fill soil, in a reverse of the pattern that occurs when the source of contamination comes from the top and migrates down. (*Id.* at p. 116.)

The Regional Board staff reviewed Dr. Dagdigian's opinion and—while it agreed that capillary action is responsible for some upward movement of petroleum hydrocarbons at the Site—it nevertheless concluded that such upward migration "cannot account for the larger portion of the petroleum hydrocarbons found in shallow surface soils across the Site." (Ex. S at Attachment 14 at p. 4.) This conclusion disregards the comprehensive reports prepared by Dr. Dagdigian in which he expanded on his opinion concerning the role of buoyancy in the upward movement of contaminants as well as pressure and fluid saturation. (See, e.g., Ex. U [6/30/14 Barclay Submission] at [Dagdigian Declaration and Technical Response to Shell]; Ex. AAA [Expert Report of Jeffrey V. Dagdigian, Ph.D. (November 14, 2014)]; Ex. PP [Rebuttal Report of Jeffrey V. Dagdigian, Ph.D. in Response to the Plaintiffs' Expert Reports (December 22, 2014)]; Declaration of Jeffrey V. Dagdigian, Ph.D. (June 1, 2015) ("Dr. Dagdigian Decl.").)

Most notably, Dr. Dagdigian's November 2014 Report contained the results of a three-dimensional ("3-D") model that Dr. Dagdigian developed using three million lines of data from the Site. (Dr. Dagdigian Decl., ¶ 10; Ex. AAA [November 2014 Report] at p. 36.) Although the Regional Board inexplicably refused to admit this additional evidence (Ex. GG [2/27/15 Ltr.]), this model provides additional clarity of the patterns of petroleum hydrocarbons in the relevant areas, yielding compelling evidence consistent with the theory of upward migration. Previous analyses of the distribution of petroleum hydrocarbons at the Site that were reviewed by the Regional Board were based on a two-dimensional ("2-D") model generated by Shell's consultant, Geosyntec, using a less complete dataset than that employed by Dr. Dagdigian. (Ex. QQ [4/29/11 Geosyntec Report].) Dr. Dagdigian's 3-D model demonstrates the limitations of this 2-D model and brings to light significant information not previously available to the Regional Board. (Dr. Dagdigian Decl., ¶¶ 10-19.) As Dr. Dagdigian explained, the benefit of the 3-D model over the 2-D model is that it interpolates concentrations of TPHd between all sample depths in all directions, providing a more accurate representation of the lateral and vertical extent of impacted soil. (*Id.*, ¶ 11.) The 3-D model confirms Dr. Dagdigian's opinion regarding upward migration because it shows a pattern of highest petroleum hydro-

carbon concentrations close to the original release locations at or beneath the former reservoir floors and near the intersections of the floors and sidewalls and lower concentrations at shallower depths; the contaminant concentration pattern follows vertical and lateral pathways that, combined, confirm an overall upward migration pathway within the former reservoir footprints and also into the directly adjacent surrounding soil that once constituted the lower portions of the berms. (*Id.*, ¶ 11; Ex AAA [November 2014 Report] at pp. 36-37.)

Dr. Dagdigian's Report and Rebuttal Report also refute the alternative explanation provided by the prosecutor for the current distribution of petroleum hydrocarbons at the Site. To provide justification for its recommendation to name Barclay to the CAO, the prosecutor concluded that "the current contamination pattern in the Site soil is explained by the procedure Barclay used to backfill and compact berm soil into the former reservoirs which resulted in a random pattern which characterizes the present hydrocarbons onsite." (Ex. S at Attachment 14 at p. 43.) However, the prosecutor's characterization of the true, current distribution of petroleum hydrocarbons at the Site as random is inaccurate. Dr. Dagdigian's Report and 3-D model shows that the pattern of hydrocarbons onsite is not "random," and so could not have been created by Barclay's backfilling procedures. Dr. Dagdigian demonstrates that the pattern of petroleum hydrocarbons requiring abatement today is instead correlated with releases that occurred during Shell's operations. (Ex. AAA [November 2014 Report] at pp. 27, 29-30; Dr. Dagdigian Decl., ¶ 24.) 3-D representation of lateral and vertical petroleum hydrocarbon impacts to soil reveals that in many cases what looks to be what the Regional Board staff calls "highly variable" patterns of distribution in Geosyntec's 2-D modeling (Ex. S at Attachment 14 at p. 54) is not variable at all, but is fully explained by a more accurate picture of the contaminant migration pathways due to forces including capillary action, buoyancy, and pressure. (Dr. Dagdigian Decl., ¶¶ 11-18.) In Dr. Dagdigian's Rebuttal Report, Dr. Dagdigian explained that the procedure used by Barclay would have resulted in homogenized soils and randomly distributed hydrocarbons, which is definitely not the pattern seen on the Site today or reflected in the 10,000 soil sample analyses of TPHd and three million lines of data that support Dr. Dagdigian's theory. (Ex. RR [Dagdigian Dec. 2014 Report] at p. 3.)



Dr. Dagdigian's reports and declarations directly refute the Prosecution Team's rejection of the upward migration theory. The Prosecution Team relies solely on its analysis that capillary action could only account for "limited" upward migration of petroleum hydrocarbons at the Site. (See, e.g., Ex. S at Attachment 14 at pp. 46-48.) This was the very same position taken by Dr. Johnson, an expert retained by Shell, who submitted a letter to the Regional Board in June 2014. (Ex. II [6/16/14 Ltr.] at Attachment 2.) Dr. Dagdigian responded to Dr. Johnson's letter by pointing out that while he was correct that capillary action could only account for vertical movement of a certain amount, the remainder of the distance of upward migration was accounted for by buoyancy and other forces. (Ex. U [6/30/2014 Ltr.] at [Dagdigian's Response to Shell] at pp. 3-27) Dr. Johnson understood this because he was careful to limit his letter to a comment only on capillary action and he did not comment on the entirety of Dr. Dagdigian's theory of upward migration, and, for example, offered no response to Dr. Dagdigian's buoyancy opinion. However, giving everyone the benefit of the doubt, Dr. Dagdigian explained in detail in his June 30, 2014 report how buoyancy worked in the specific environment of the Carousel site, where sometimes petroleum hydrocarbons would wick upward through capillary action and come to rest; then rain or irrigation would cause an area to become flooded thereby causing the petroleum hydrocarbons to move further upward in the saturated ground. (*Id.*) Over the ensuing 40 years since the redevelopment, those combined forces explain the additional vertical migration seen in the contaminant distribution today.

When asked about this evidence at their depositions, Unger and Ayalew both testified that their disregard of the upward migration theory is largely based on their belief that capillary rise cannot explain the movement of petroleum hydrocarbons in soils at the Subject Property. (Ex. E [Unger Dep.] at 218:7-232:9; Ex. F [Ayalew Dep.] at 216:18-217:19.) However, as Dr. Dagdigian's reports and declarations have repeatedly explained, "upward migration theory does not rely solely on capillary pressure; it is one of several factors that affect vertical mobility of petroleum hydrocarbons," including buoyancy and other forces. (Dagdigian Decl. ¶ 40.) Unger and Ayalew admitted that they did not attempt to calculate the potential rise of petroleum hydrocarbons through buoyancy, (Ex. E [Unger Dep.] at 218:7-232:9; Ex. F [Ayalew Dep.] at 212:23-214:23.), and that they were unaware of any data indicating saturated soil conditions (which are necessary for buoyancy) (Ex. E [Unger Dep.]

at 218:7-232:9; Ex. F [Ayalew Dep.] at 216:18-217:19) despite the fact that these conditions are documented in numerous boring logs prepared by URS and during trenching performed by Shell's consultants (Dagdigian Decl. ¶ 39). Ayalew ultimately agreed that a localized area of saturated soil, created by through irrigation or rainfall, can cause buoyancy as much as a perched water zone. (Ex. F [Ayalew Dep.] at 220:19-221:6.) Dr. Dagdigian has confirmed that data indicate that these localized saturated conditions are present across the Kast Site. (Dagdigian Decl. ¶ 43.)

Ayalew's testimony also confirmed that the Regional Board refused to consider important data from Shell's 1997 Report regarding former Reservoirs 1 and 2. As discussed above (Part IV.F.2, *supra*), Shell decommissioned Reservoirs 1 and 2 in the 1990s through methods substantially similar to Barclay Hollander's at the Kast Site in the 1960s. At Reservoirs 1 and 2, after the concrete was broken up and placed on the reservoir bottoms, the berm soil was used as fill and compacted on top of the former reservoir bottoms. (*Id.*) A semi-permeable clay cap was placed near the top of the fill before about two more feet of dirt was placed on it. (*Id.*) Within a year after the clay cap was put in place, however, petroleum hydrocarbons had seeped up to the cap then migrated around it to the surface. (*Id.*) As explained in Barclay's January 21, 2014 submission to the Regional Board, upward migration theory met fact in Reservoirs 1 and 2 when the upward movement of oil was stopped at the clay cap but then the oil moved sideways to the edge of the cap, around the edge and upward again until it seeped out of the surface. (Ex. TTT [1/21/14 Ltr.] at p. 29.) When questioned about the Regional Board's consideration of data from this comparable location, Ayalew refused to comment other than testifying, with little explanation or elaboration, that these conditions do not exist at the Kast Site. (Ex. F [Ayalew Dep.] at 251:14-252:14.)

No other narrative explains all the evidence as completely as does Dr. Dagdigian's opinion. It is established that the berm soil was not known to be contaminated when Barclay moved it from the reservoir berm to the floor of the reservoir because: (1) those who spread it saw no oil; (2) those who tested it reported no oil; (3) the patterns of contamination observed by Dr. Dagdigian are not consistent with the theory that contaminated berm soil was the source of the Shallow Contamination; and (4) the patterns of contamination demonstrate that it is much more likely that the source of the current contamination in the shallow fill above the reservoir bottoms came from the bottom up. (Ex. TTT

[1/21/14 Ltr.] at [Dagdigian Report] at pp. 166-167, 173; Dr. Dagdigian Decl., ¶¶ 21-24; Part IV.B.1, *supra*.)

By contrast, the Revised CAO cites no evidence to support its finding that Barclay had "explicit knowledge" of "residual petroleum hydrocarbons" but engaged in grading activities that "spread the waste" despite that knowledge; indeed, the finding is contradicted by the same facts that provide such a direct fit with Dr. Dagdigian's conclusions.

2. The Regional Board's Finding That Barclay "Spread The Waste" Or "Contributed To The Migration Of The Waste" Does Not Support Liability Under Section 13304(a).

Even if there were any evidence that Barclay "spread the waste" or "contributed to the migration of the waste" (which there is not), "spreading waste" or "contributing to the migration of waste" that has already been discharged by another does not make one a discharger under section 13304(a). No State Board order has ever so found, and both Ninth Circuit precedent and the plain meaning of the statute confirm that merely "spreading waste" or "contributing to the migration of waste" do not constitute a discharge for purposes of liability under section 13304(a).

a. The Regional Board's Finding Is Inconsistent With State Board Precedent Because No State Board Decision Has Ever Held That "Spread[ing] The Waste" Or "Contribut[ing] To The Migration Of The Waste" Constitutes A "Discharge" Under Section 13304(a).

The Revised CAO does not cite to a single State Board order that holds a former owner liable for "spread[ing] the waste" or "contribut[ing] to the migration of the waste." Indeed, there are none. Instead, the Revised CAO asserts that "[i]ncluding [Barclay] as a responsible party in this Order is consistent with orders of the State Water Resources Control Board . . . naming former owners who had knowledge of the activities that resulted in the discharge and the legal ability to control the continuing discharge." (Ex. A [Revised CAO] at p. 11.) The assertion then refers to footnote 13, which cites six orders (collectively "Decisions") of the State Board. These decisions, in rare circumstances inapplicable here, hold either current owners or former owners who were in possession of property at the time of a discharge responsible for the clean-up and abatement of contaminants discharged by others. Barclay is neither. Barclay is not a current owner nor did any discharges occur during its prior ownership of the property. The undisputed facts are that Shell contaminated the property before

selling it to Barclay. Accordingly, the Revised CAO goes beyond the limits of a Regional Board's jurisdiction set by section 13304(a) and as interpreted by State Board precedent.

In the Draft CAO released on October 31, 2013, the Regional Board cited four State Board decisions as consistent with the draft order's assertion of liability against Barclay. In its January 21, 2014 submission to the Regional Board, Barclay explained in detail how none of the four State Water Board decisions cited here in short form as *Wenwest*,[20] *Spitzer*,[21] *Sinnes*,[22] and *Zoecon*,[23] support the imposition of liability here. (Ex. TTT [1/21/14 Ltr.] at pp. 45-51.) Barclay explained that in all of these decisions, the only prior owners who were held liable had either actively participated in the discharge or the discharge occurred while they were owners.[24] (*Id.*) The State Board recognized this as an important distinction: "No order issued by [the State] Board has held responsible for a cleanup a former landowner who had no part in the activity which resulted in the discharge of waste and whose

[20] *In the Matter of Wenwest, Inc., et al.*, State Board Order No. WQ 92-13 ("*Wenwest*").

[21] *In the Matter of Arthur Spitzer, et al.*, State Board Order No. WQ 89-8 ("*Spitzer*").

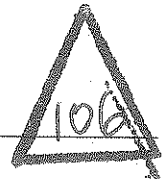
[22] *In the Matter of Stinnes-Western Chemical Corp.*, State Board Order No. WQ 86-16 ("*Stinnes*").

[23] *In the Matter of Zoecon Corp.*, State Board Order No. WQ 86-2 ("*Zoecon*"). *Zoecon* did not involve a challenge to a clean-up and abatement order arising under section 13304(a), but rather addressed who could be named as a discharger in a Waste Discharge Requirement ("WDR"). In *Zoecon*, a current owner was held liable under section 13263 for a Waste Discharge Requirement as a result of the ongoing discharge caused by the movement of waste from soils to groundwater. *Id.* at *4. In recommending the issuance of the Revised CAO, the prosecutor argued that Barclay should be considered a discharger based on the passive migration of waste from the contamination previously released by Shell based on *Zoecon*. (Ex. S at Attachment 14 at pp. 10-11). In relying upon this case, the prosecutor ignores that, after the decision in *Zoecon*, the State Board has specifically distinguished former landowners from current landowners when considering whether to impose liability based solely on the ongoing movement of contaminants within an already contaminated property:

> We have applied to current landowners the obligation to prevent an ongoing discharge caused by the movement of the pollutants on their property, even if they had nothing whatever to do with putting it there. . . . The same policy and legal arguments do not necessarily apply to former landowners.

Wenwest, WQ 92-13, at *5.

[24] *Stinnes*, WQ 86-16, at *5 (prior owner was a chemical company, and during its ownership period, it stored chemicals in large underground storage tanks, and leaks from those very tanks were determined to be a source of the contaminant plume in the groundwater at issue); *Zoecon*, WQ 86-2, at *2 (former owner had deposited waste in a shallow sludge pond, which resulted in contaminant runoff that was the subject of the order); *Wenwest*, WQ 92-13, at *4 (unrebutted analysis from consultant showed discharges must have taken place during prior owner's ownership); *Spitzer*, WQ 89-8 (prior owner owned property when the discharges took place and prior owner had built the relevant seepage pit and made it available to tenants for discharges).



ownership interest did not cover the time during which the activity was taking place." (*Wenwest*, Order No. WQ 92-13, at *5.) That statement is true today, 22 years after the State Board clarified in *Wenwest* its interpretation of section 13304(a): the State Board has never held a prior owner responsible for contamination *discharged by someone else* when *the discharge did not occur during its ownership*.

In response, in the final version of the Revised CAO the Regional Board included two additional State Board decisions that were not in the draft version that was the subject of the January 21, 2014 submission. (Ex. A [Revised CAO] at p. 11, fn.13 [citing *In the Matter of Cnty. of San Diego*, State Board Order No. WQ 96-2, and *In the Matter of The BOC Group, Inc.*, State Board Order No. WQ 89-13].) Neither case provides a basis for Barclay's liability here. In *The BOC Group*, BOC argued that it owned and sold the property without ever detecting or having reason to detect the relevant underground storage tank that leaked, and therefore it was not liable for the pollution because it was an "innocent prior owner." (*The BOC Group*, WQ 89-13, at *4.) However, the State Board concluded that BOC was the only party who could have placed the tank on the property because the property was undeveloped prior to BOC's ownership, and therefore it was proper to hold BOC liable. Thus, BOC was held liable because it was established that BOC had actually installed the tank that ultimately caused the discharge. There is no similar evidence here. As discussed above, it is undisputed that Barclay did not bring any contaminants onto the Site—only Shell did so. (Part III.E, *supra*; Ex. F [Ayalew Dep.] at 65:19-66:5.)

In *County of San Diego*, a community development commission ("CDC") purchased a former, non-operative land fill in the 1980s that it later sold to a development company. However, prior to selling the property, the CDC filed a Waste Discharge Requirement ("WDR"), as it was required to do by law at the time, which imposed certain post-closing responsibilities on CDC that made it a discharger. Thus, CDC's liability was based on CDC's unique status, not as a former owner. Here, Barclay was not required to file a WDR for the type of activities Barclay performed at the site in the 1960s, and thus Barclay did not assume any responsibilities that qualified it as a discharger. (Ex. TTT [1/21/14 Ltr.] at [Williams Report] at p. 58.)

Therefore, none of the Decisions cited by the Regional Board support holding Barclay responsible as a former owner. Not only are Barclay's circumstances unlike all of the persons held responsible in the Decisions cited in the Revised CAO, but when the Regional Board applied to Barclay the same test that was applied in *Wenwest*, it should have concluded that Barclay is *not* responsible under section 13304(a). (See *Wenwest*, Order No. WQ 92-13, at *4.)

The Regional Board has argued that Barclay is still liable regardless of *Wenwest* because Barclay "did take actions during their [sic] ownership to make the matter worse." (Ex. S at Attachment 14 at pp. 10-11.) The Regional Board does not explain what conditions were worsened as a result of Barclay's actions, but merely asserts that "Barclay owned the property and actually moved the waste to where it is currently located." Even assuming that Barclay's actions affected the current distribution of the contamination on the property, none of the decisions cited above support imposing liability for "mov[ing] the waste."

b. The Regional Board's Finding Is Inconsistent With Ninth Circuit Precedent Because The Ninth Circuit Has Confirmed That Redistributing Discharge Is Not Itself A "Discharge" Under Section 13304(a).

The Ninth Circuit has also confirmed that merely redistributing someone else's discharged contamination is not, itself, a "discharge." (*Redev. Agency of the City of Stockton v. BNSF Railway Co.* (9th Cir. 2011) 643 F.3d 668, 677-678.)

In *City of Stockton*, the defendant was a group of railroads ("Railroads"), which had constructed and maintained a french drain beneath its tracks to enhance soil stability by improving water drainage. (*Id.* at p. 671.) Unknown to the Railroads, petroleum contamination caused by several spills at a neighboring property, the L&M bulk petroleum facility, was channeled to yet another property through the french drain constructed by the Railroads, which acted as a conduit. That contamination was later discovered during development. (*Id.* at p. 672.) Plaintiff Redevelopment Agency, which had once owned the contaminated site and indemnified the developer against pollution loss, sued the Railroads for liability under causes of action for common law nuisance and violations of the Polanco Redevelopment Act, California Health and Safety Code section 33459 *et seq.* ("Polanco Act"). (*Id.*) The United States District Court ruled on cross-motions for summary judgment that the

Railroads were liable for the pollution both under common law nuisance and the Water Code provisions cross-referenced in the Polanco Act. (*Id.*) The Polanco Act incorporates Water Code section 13304(a) by reference, providing that the Railroads were liable based on proof that they had "caused or permitted . . . any waste to be discharged" where it is, or probably will be discharged into the waters of the state. (See Health & Saf. Code, § 33459, subd. (h); Wat. Code, § 13304.)

The Court of Appeals reversed, first rejecting the common law nuisance claim and then holding that there had been no violation of the Water Code provisions incorporated by reference into the Polanco Act. It rejected the finding of the District Court that the Railroads had met the requirements of a discharger under section 13304(a) on two grounds. First, the Railroads were not a "discharger" within the meaning of Section 13304(a) because the contaminants had already been discharged by L&H. (*City of Stockton*, *supra*, 643 F.3d at p. 677.) Second, the Court of Appeals held that "even if the emission of contamination from the french drain is the appropriate 'discharge' to consider, the Railroads are not liable" under Water Code section 13304(a). (*Id.*) While the trial court had correctly attempted to construe "section 13304 . . . harmoniously with the law of nuisance," the Court of Appeals found that it had "construed nuisance liability too broadly." (*Id.*) "Just as but-for causation is insufficient to impose liability for [creating] a nuisance, it is insufficient to impose liability for a discharge under section 13304."[25] (*Id.*) In rejecting the District Court's findings on common law nuisance, the Court of Appeals had already, as a matter of nuisance law, "decline[d] to hold that an otherwise innocent party who builds or installs a conduit or structure for an unrelated purpose which *happens to affect the distribution of contamination released by someone else* is nonetheless liable for

[25] The analogy to nuisance law was limited to the court's holding that the Railroads did not "create . . . the nuisance." (*City of Stockton*, *supra*, 643 F.3d at p. 673.) In rejecting liability based on the common law nuisance claim, the Court of Appeals observed that on the facts before it, there were two possible ways for plaintiffs to prove nuisance liability: (1) by proving that the Railroads "created the nuisance," and (2) by proof that they "unreasonably as possessors of the Property…fail[ed] to discover and abate the nuisance." (*Id.*) Because the Railroads had owned the contaminated property at one time, they had potential nuisance liability under both prongs (1) and (2), which the court rejected for different reasons. (*Id.* at pp. 674-677.) But when it "harmonized" nuisance law with section 13304(a), the Court of Appeal relied only on its analysis of the Railroads' potential nuisance liability under prong (1), not prong (2), making it clear that prong (2) has nothing to do with section 13304(a). (*Id.* at pp. 677-678.) Therefore, the possessor of land's "failure to abate" basis of nuisance liability is not applicable, even by analogy, to the determination of whether one is a "discharger" under Water Code section 13304(a).

'creating or assisting in the creation' of a nuisance. Such a result defies semantics, the law, and common sense." (*Id.* at p. 675, emphasis added; compare *Lake Madrone Water Dist.*, *supra*, 209 Cal.App.3d at pp. 169, 174 [finding a "discharge" where a dam accumulated and released sediment, and noting that the dam was "not a mere conduit through which a [hazardous substance] passes"].) The court then applied those same principles to hold that the Railroads had not become a "discharger" under section 13304(a) just because their conduit had facilitated the movement of contaminants discharged by someone else from one property onto another:

> The Railroads' involvement with the petroleum *spill* [at the L&M site] was not only remote, it was nonexistent; and their involvement with the emission of contamination from the french drain was entirely passive and unknowing. As explained in our nuisance analysis, the Railroads engaged in no active, affirmative or knowing conduct with regard to the passage of contamination through the french drain and into the soil. Therefore, the Railroads did not "cause or permit" the discharge under section 13304, and they are not liable under the Water Code provision of the Polanco Act.

(*City of Stockton*, *supra*, 643 F.3d at p. 678, italics in original.)

Here, as with the Railroads, it "is undisputed that [Barclay] did not in any way cause or permit the initial discharge of petroleum at the . . . Site." (*Id.* at p. 677.) Barclay's activities, too, were for the purposes of drainage and soil stability—"conduct . . . wholly unrelated to the contamination." (*Id.* at p. 674.) Like the Railroads, Barclay's "involvement with the petroleum *spill* was not only remote, it was nonexistent . . . . Therefore, [Barclay] did not 'cause or permit' the discharge under 13304." (*Id.* at p. 678, italics in original.) The *City of Stockton* court declined to hold the Railroads liable under Water Code section 13304(a), even though their activities actually brought the petroleum contamination to the plaintiff's property. Here, Barclay's activities have not even done that much. By placing and grading fill soil that was already on the property, Barclay, at most, created pathways for existing contamination to move around the same property on which the pollution originated. And Barclay did so to promote better soil compaction and water drainage. The Ninth Circuit decision confirms that the passive act of unknowingly moving contaminants discharged by someone else from one place to another is not itself a discharge and cannot form the basis for liability under section 13304(a).

Despite this precedent, when asked at a deposition whether the term "discharge" includes moving soil around that has already been contaminated, the Regional Board's prosecutor unequivo-

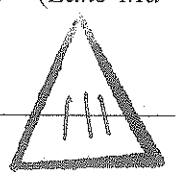
cally answered, "Yes." (Ex. E [Unger Dep.] at 59:9-18 ["Q. Is it your understanding that the term "discharge" includes moving soil around that has petroleum hydrocarbons in it? A. Yes."].) The Regional Board's definition of "discharge" amounts to an overreach that will not garner deference from the courts. (*Yamaha Corp. of America v. State Bd. of Equalization* (1998) 19 Cal.4th 1, 11 [A "statute's legal meaning and effect [are] questions lying within the constitutional domain of the courts"; thus "agency interpretations [have a] diminished power to bind . . . [and] command[] a commensurably lesser degree of judicial deference."].)

c. The Regional Board's Finding Is Inconsistent With The Plain Meaning of Section 13304(a) Which Makes Clear That "Spreading Waste" and "Contributing To Migration Of Waste" Does Not Constitute A "Discharge."

(i) The Regional Board Is Required To Apply The Plain Meaning of Section 13304(a).

Under "[w]ell-established rules of statutory construction," the Regional Boards are obligated to "first examine the words themselves because the statutory language is generally the most reliable indicator of legislative intent. The words of the statute should be given their ordinary and usual meaning and should be construed in their statutory context." (*Modesto Redev. Agency v. Super. Ct.* (2004) 119 Cal.App.4th 28, 36-37 [determining the meaning of "causes or permits" within section 13304 and citing *Hassan v. Mercy American River Hosp.* (2003) 31 Cal.4th 709, 715-716]; see also *People ex rel. Younger v. Super. Ct.* (1976) 16 Cal.3d 30, 43 [When interpreting a statute, "we must first *look to the words* themselves and must interpret them 'according to the usual, ordinary import of the language employed in framing them.'"] internal citations omitted, italics added.)

When specifying the persons against whom the Regional Boards may issue orders, the Legislature chose clear, forceful words: "Any person who has *discharged or discharges wastes* into the waters of this state" are the opening words of section 13304(a) (italics added). Clarity is not diminished when the next clause of the statute resumes its definition of the persons covered: "or who has *caused or permitted* . . . waste to be *discharged or deposited* where it is, or probably will be, *discharged* into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance." (Wat. Code, § 13304, subd. (a), italics added.) "Thus, as used in Section 13304, 'discharge' means: 'to relieve of a charge, load or burden; . . . to give outlet to: pour forth: EMIT.'" (*Lake Ma-*



drone Water Dist., 209 Cal.App.3d at p. 174 [quoting WEBSTER'S NEW INT'L DICT. 644 (3d ed. 1961)] italics and omissions in original.) Within the context of Porter-Cologne, "deposit" means "the act of depositing . . . something laid, placed, or thrown down." (*Younger*, *supra*, 16 Cal.3d at p. 43 [quoting WEBSTER'S 3D INT'L DICT., UNABRIDGED (1963)].[26] It makes sense, then, that Porter-Cologne would adopt the plain meaning definition of "discharge" when its predecessor, the Dickey Act, was understood in the same way. (Ex. TTT [1/21/14 Ltr.] at [Williams Report] at pp. 59-60 [citing Attorney General Opinions that define "discharge" as a verb meaning, "to emit; to give outlet to; to pour forth" and as a noun meaning "[a] flowing or issuing out"].)

Statutory rules of construction further obligate the State Board to avoid interpretations that are discordant with other provisions of Porter-Cologne. The court in *Modesto Redevelopment Agency* looked to the legislative history of "causes or permits" language in Water Code section 13350 to discern the meaning of the same language within section 13340, and determined that there is "no indication the Legislature intended the words 'causes or permits' within the Porter-Cologne Act to encompass those whose involvement with a spill was remote and passive." (119 Cal.App.4th at pp. 36, 44 ["[W]ords should be given the same meaning throughout a code unless the Legislature has indicated otherwise."], citing *Hassan v. Mercy American River Hosp.*, *supra*, 31 Cal.4th at pp. 715-716). The court found that "causes or permits" in section 13350—and, therefore, section 13304—"was intended to encourage hazardous waste handlers to be careful in their operations and to avoid spills. Persons who had *no active involvement in activities leading to a discharge do not appear to fall in this category*." (*Id.* at p. 43, italics added.)

Under the plain meaning of this statute, Barclay is not liable under section 13304(a) because it did not "discharge" anything, nor did it permit anyone else to discharge at the Site, and the Regional

[26] In *Zoecon*, the State Board distinguishes the definition of "discharge" in Water Code section 13263(a), a provision which concerns the issuing of WDRs for prospective discharges, from *Younger*'s definition of "deposit" within section 13350(a), a provision which imposes penalties for discharges. (State Board Order No. WQ 86-2, at *5-6.) The State Board explained that the reasoning in *Younger* did not apply because "[a]n enforcement action is not being taken" in the case of issuing WDRs. *Id.* at *6. To the contrary, section 13304(a) is an enforcement provision, and the court's definition of "deposit" within section 13350(a) should be applied harmoniously with section 13304(a).

Board is therefore without jurisdiction to order it to participate in clean-up and abatement of contaminants discharged by its predecessor owner pursuant to section 13304(a).

(ii) The Ninth Circuit Has Recognized The Plain Meaning of "Discharge" in Section 13304(a).

The plain meaning of section 13304(a) was recognized in *City of Stockton,* where the Ninth Circuit Court of Appeals reversed entry of summary judgment in favor of plaintiffs on a violation of the Water Code provisions of the Polanco Act. (643 F.3d 668.) The defendants had built a french drain to allow water to drain under a railroad track, but this had the unforeseen and unwanted consequence of allowing petroleum contaminants to move through the conduit onto another property. (*Id.* at pp. 671-72.) The Ninth Circuit held that the defendants were not responsible under Water Code section 13304(a) on alternative grounds. (*Id.* at pp. 677-678.) Although the second ground is discussed in detail in Part III.B., *supra*, it is the first ground that is significant here: defendants had not discharged anything because someone else had already discharged the contaminants. Although the Court of Appeals was prepared to consider the unique circumstances in which the conduit might provide a second point of discharge, the Court made clear it had no doubt at all that section 13304(a) limits the jurisdiction of the Regional Boards to dischargers and no other categories. (*Id.* at p. 677.)

This is dramatically different from the interpretation of section 13304(a) developed by the State Board during the 1980s and early 1990s, when it expanded the definition of dischargers to include owners who do not discharge but are nevertheless responsible for clean-up and abatement of contaminants discharged by someone else. For example, as discussed in Part V.B.2, *supra*, in the decisions relied upon in footnote 13 of the Revised CAO, more than half of the parties held responsible did not actively participate in the discharge of contaminants. The reasons given for such expansive redefining of the jurisdictional scope of the Regional Boards were not linked to the intent of the State Legislature. In *Zoecon*, for example, current owners, who had nothing to do with the discharge of contaminants, were nevertheless held responsible for cleanup and abatement because of the practical consideration that they were "in the position of being well suited to carrying out the needed onsite cleanup"—a convenience rationale not found anywhere in the words of the statute. (State Board Order No. WQ 86-2, at *10.) These and other decisions like them wander beyond the plain meaning of

the statute to expand the jurisdiction of the State and Regional Boards well beyond intended limits. (*Carmel Valley Fire Prot. Dist. v. State* (2001) 25 Cal.4th 287, 300 [quoting *Physicians & Surgeons Labs., Inc. v. Dep't of Health Servs.* (1992) 6 Cal.App.4th 968, 982 ["[T]he rulemaking authority of an agency is circumscribed by the substantive provisions of the law governing the agency. . . . [R]egulations that alter or amend the statute or enlarge or impair its scope are void."]; see also *Whitcomb Hotel, Inc. v. Cal. Emp't Comm'n* (1944) 24 Cal.2d 753, 757 ["An administrative officer may not make a rule or regulation that alters or enlarges the terms of a legislative enactment."].)

(iii) The Legislative History Of The 1980 Amendments To Porter-Cologne Support The Plain Meaning Interpretation Of Section 13304(a).

If the plain meaning of the statute requires an explanation, it can be found in the legislative history of the 1980 amendments to Porter-Cologne, which became effective on January 1, 1981. When Porter-Cologne became effective in 1970, it authorized the State and Regional Boards to initiate enforcement actions against a person who "causes or permits" a discharge. The language of section 13304(a) was therefore identical to what it is now except that the verbs in the pre-1981 version were in the present tense only. (Compare Porter-Cologne Water Quality Control Act, Stats. 1969, Ch. 482, § 13304, subd. (a), with Wat. Code, § 13304, subd. (a).]

Under the present-tense language in effect before the 1980 amendments, the Regional Boards regulated ongoing discharges. State Board decisions from the decade in which Porter-Cologne operated in this manner reveal that the exclusive focus was on true and active dischargers. A typical State Board decision under pre-1981 Porter-Cologne is found in *In the Matter of United States Steel Corporation*, State Board Order No. WQ 71-9. There U.S. Steel discharged industrial waste from the manufacturing of fabricated iron and steel products, which entered a slough at its shore from three outfalls. (*Id* at *2.) The Regional Board established waste discharge requirements in 1964 and 1970. (*Id.*) Subsequently, the Regional Board found U.S. Steel to be in violation of these WDRs. (*Id.* at *2-3.) The State Board found the continued violation and threatened violation of these WDRs to support the issuance of a cease and desist order ("CDO"), and concluded that the Regional Board's decision to issue a CDO was appropriate and proper. (*Id.* at *4.) Other examples are

In the Matter of Crestline Sanitation District, State Board Order No. 78-12 [sustaining CDO concerning discharges of untreated sewage in violation of WDRs], and *Order Requiring the City of Antioch to Cease & Desist*, State Board Order No. 77-14 [CDO issued to the City of Antioch for threatening to violate WDRs and for failing to submit a time schedule for implementing secondary treatment for discharges to the sewage system]. All State Board decisions interpreting section 13304(a) prior to January 1, 1981 were like these three examples in that they all involved enforcement against current dischargers.

In 1980, section 13304(a) was amended, adding the past tense "has discharged" and "has caused or permitted," to allow the Regional Boards to hold dischargers responsible for clean-up and abatement of contaminants caused by past discharges when they did not violate a prior order.

The State Board, which advocated for the amendments, explained that the "enforcement provisions of the [currently worded] Porter-Cologne Act address only present or threatened future *discharges* . . . they do not apply to those *discharges* which are transitory or have a broken *flow path* between the *point of discharge* and the pollution point. Consequently, *illicit discharges* which have ceased prior to discovery as well as *transitory discharges* are *not subject to* [*enforcement*]." (State Water Resources Control Board, Request for Approval of Proposed Legislation (Nov. 6, 1979), italics added.)

Importantly, the language that had placed the focus on dischargers was *not changed* at all; only the tense of the verbs was changed, expanding the number of ways in which a *discharger* may be held accountable but not varying the category of persons who may be held accountable. Section 13304(a) still referred to "discharges" just as it did before; words such as "owner" or "operator" were not added. In fact, no changes at all were made to expand the category of persons who could be included as the subject of a clean-up and abatement order, and nothing in the legislative history suggests that it was even considered.

The State Board pushed for amendments to section 13304(a) to clarify that a cleanup and abatement order could issue for such discharges, and expected that the provision would most affect "those industries which have *improperly spilled or disposed* of hazardous wastes in the past but which have ceased prior to discovery . . . [and also] local agencies that have allowed *improper dis-*

posal to occur in the past at waste disposal facilities." (*Id.*, italics added.) Speaker of the Assembly and author of the bill, Leo McCarthy, too, explained the intent of the 1980 Porter-Cologne amendment in terms of the "polluter," which in his example refers to someone who has "unlawfully discharged waste": "For example, assume a *polluter* in the past has *unlawfully discharged* waste to an unlined pond overlying a groundwater basin. Even though the *discharge* to the pond has ceased, the harmful materials may continue to seep into the underlying groundwater. In such a situation it is not clear that the Regional Board can require *the polluter* to clean up." (Authors Statement for AB2700, italics added.) The repeated use of the words "dischargers" and "discharging" in this correspondence from the legislative history demonstrates that no one was even considering a change from past practices, where the focus was exclusively on dischargers; it was taken for granted that the exclusive jurisdiction would remain limited to dischargers while the focus of each conversation was on the subjects of the legislative amendments.

So the legislative history shows that the sights of the State Legislature were set squarely on the discharger when it adopted the 1980 amendments to Porter-Cologne. The jurisdiction of the regional boards was limited to dischargers because *dischargers* were the subject of WDRs, and violators of those WDRs were noncompliant *dischargers*. The Legislature certainly had the power to expand the Regional Boards' authority to include categories of persons in addition to dischargers, but that would have required a change in language. The word "owner," for example, could have been used if the Legislature had wished to allow the regional boards to order owners to clean-up and abate contaminants discharged by someone else. But the Legislature did not change the language in that manner even though it certainly had an example available in the CERCLA law first enacted in 1980 by the United States Congress, 42 U.S.C. § 9601 *et seq.*, and the California equivalent adopted in 1981, the Hazardous Substances Account Act ("HSAA"), Health & Saf. Code § 25300 *et seq.*, both of which designate "owners, operators and arrangers" the responsible parties for clean-up and remediation of designated sites. Those terms have been comprehensively defined by statute and case law. The omission of any of them could not have been an accident or oversight. It is beyond the power of the State Board to refashion the scope of its own authority to conform to the HSAA or other law when the Legislature has not done so. (See, e.g., Health & Saf. Code § 25187, subd. (b)(5) [provid-

ing for enforcement against "present and prior owners" of hazardous waste facilities]; Health & Saf. Code § 25360.3, subd. (c)(2) [providing for recovery actions against property owners for the release of a hazardous substance, including for a "release [that] occurred before the date that the owner acquired the property"]; Authors Statement for AB2700 [1980 amendments to Health & Safety Code permit DTSC to issue an order to "owners...and any prior owners of the site"]; *City of Stockton*, *supra*, 643 F.3d at pp. 677-678 [applying different standards when determining if the defendant had liability under Polanco Act, which would allow recovery if defendant had been liable under either (1) the Water Code § 13304(a), which requires that defendant "actively or knowingly caused or permitted the contamination," or (2) CERCLA, which only requires proof of passive ownership].)

The State Board decisions cited in footnote 13 of the Revised CAO were wrong to go beyond dischargers in their interpretation of section 13304(a), and the Regional Board compounded that error by taking the unprecedented step of making a former owner, Barclay, responsible for cleaning up and abating contaminants that—unbeknownst to its—were discharged by its predecessor before it purchased the property.

C. Barclay Is Exempt From Liability Under Porter-Cologne Because All Of The Acts For Which The Revised CAO Holds It Responsible Occurred Before 1981 And Are Therefore Protected By The Safe Harbor Of Section 13304(j).

Even if there was evidence or legal authority to support the Regional Board's finding that Barclay knowingly "spread[] the waste" or "contributed to the migration of waste" (and there is not), Barclay is nonetheless exempt from liability under Porter-Cologne because all of the acts for which the Revised CAO holds it responsible are protected by the safe harbor of section 13304(j). Section 13304(j) of the California Water Code precludes the 1980 amendments to section 13304(a) from creating "any new liability for acts occurring before January 1, 1981, if the acts were not in violation of existing laws or regulations at the time they occurred." (Wat. Code, § 13304, subd. (j).)[27]

[27] The 1980 amendments to the Porter Cologne Act only changed some of the verbs in section 13304(a) from being limited to the present tense to include the past tense so that the Regional Boards gained authority to order dischargers to undertake clean-up and abatement of past discharges in certain circumstances. The amendments thus added the word "discharged" at the beginning and added "caused or permitted." This left formerly compliant dischargers open to possible liability if the amended section 13304(a) were enforced to clean up contamination that had been lawfully discharged at the time. Therefore, section 13304(j) was added at the same time to

[Footnote continued on next page]

Because it is beyond dispute that all of Barclay's alleged activities occurred well before 1981, the burden of proof is on the Regional Board to establish Barclay's liability in light of section 13304(j), and the Revised CAO utterly fails to meet that burden. Besides the failure of the Revised CAO to satisfy the burden of proving that Barclay is not entitled to the safe harbor provided by section 13304(j), the uncontradicted evidence provided to the Regional Board establishes affirmatively that Barclay's "acts were not in violation of existing laws or regulations at the time they occurred."

1. The Regional Board Failed To Meet Its Burden Of Proof That Barclay Is Not Exempt From Liability Under Section 13304(j).

The Revised CAO makes only the conclusory statement that "[i]ncluding [Barclay] as a responsible party is consistent with Water Code section 13304(j) because Lomita or [Barclay]'s actions that resulted in creating pollution and nuisance were unlawful since at least 1949." (Ex. A [Revised CAO] at 11.) In support, the Revised CAO cites in a footnote three code provisions that Barclay allegedly violated: Health and Safety Code section 5411, Fish and Game Code section 5650, and Los Angeles County Code section 20.36.010. (*Id.* at 11, fn.14.) However, the Regional Board does not have authority to assert violations of these code provisions: none of these code provisions are enforced by the Regional Board or listed in the Water Code. But even if it did have such authority, the Revised CAO does not cite any evidence to support its conclusion that Barclay's alleged activities at the Site from 1965-66 violated these provisions. Nor does it analyze the relevant statutory language at the time. Moreover, the Draft Revised CAO did not even mention violations of the Fish and Game Code section 5650 or Los Angeles County Code section 20.36.010, so Barclay had no opportunity to respond to the Board's unsupported conclusion that Barclay violated those laws.

Even now, Barclay does not know what basis the Regional Board had for finding that Barclay violated these code provisions. When questioned about these findings in his deposition, the Regional Board's lead prosecutor testified that the Prosecution Team did not make these findings; their counsel did. (Ex. E [Unger Dep.] at 64:5-65:6 ["Q. Okay. As part of your work on the prosecution side, did you or anybody at your direction attempt to evaluate any of the laws that were in effect in 1965 and

[Footnote continued from previous page]
provide an exemption from enforcement against past dischargers where the discharges occurred before 1981 and did not at that time constitute a violation of then-existing law.

1966 to determine if Barclay violated those laws? A. My understanding is that our counsel did that research."].) And when he was asked to identify the factual and legal basis for these findings, Unger refused to answer on the grounds of privilege. (*Id.* at 55:2-58:18 ["Q. So just so we have a record, if I were to ask you about what you and Ms. McChesney discussed in terms of how she came to a conclusion that Barclay violated the Dickey Act, am I correct you won't be able to answer it based on the instruction of your lawyer? [. . .] A. Yes, I will follow -- I will follow the advice of my counsel."].)

The Regional Board cannot hide behind a claim of privilege to justify the lack of any evidentiary support for its finding that Barclay violated these code provisions. The Regional Board is required to "ensure that there is a factual and legal basis in the record for its decision *and must indicate its reasoning and the factual basis for its decision to the affected parties*." (*In the Matter of Project Alpha*, State Board Order No. WQ 74-1, at *3, italics added.) Because the Regional Board has failed to "indicate its reasoning and the factual basis for its decision," the Regional Board's finding that Barclay violated existing laws cannot stand.

2. Barclay Was "Not In Violation Of Any Laws Or Regulations" Cited By The Regional Board.

While it is not Barclay's burden to prove that it is entitled to a safe harbor under section 13304(j), the evidence makes clear that Barclay's acts did not violate any of the regulations cited by the Regional Board.

a. Barclay's Acts Did Not Violate Health & Safety Code Section 5411.

Health and Safety Code section 5411 provides: "No person shall discharge sewage or other waste, or the effluent of treated sewage or other waste, in any manner which will result in contamination, pollution or a nuisance." The Regional Board has not cited to any evidence to prove that Barclay committed a "discharge," and indeed there is none. As discussed above, it is undisputed that Shell was the sole discharger of contaminants at the Site.

In its January 21, 2014 submission to the Regional Board, Barclay explained that during the 1960s, this statute was applied against people who engaged in discharges, in the usual sense of that term, not against non-discharging owners like Barclay. (Ex. TTT [1/21/14 Ltr.] at pp. 72-73.) Moreover, Barclay explained that in the 1960s, section 5411 was enforced for disposal of sewage and simi-

lar contaminants, not oil. (See *Thompson v. Kraft Cheese Co. of Cal.* (1930) 210 Cal. 171, 173 [enforcing section 5411 against cheese factory for discharge of dirty water that comes from floor cleaning]; *People v. City of L.A.* (1948) 83 Cal.App. 2d 627, 638 [injunction restraining the plaintiff cities from discharging sewage that is injurious to the public health into the salt waters of the state].) Barclay explained that there are no published decisions in which section 5411 was enforced against non-dischargers, and while oil was not expressly exempted from section 5411, there are no pre-1972 cases in which the discharge of oil was found to be a violation of that provision. In short, there is no evidence or other basis from which to conclude that anything Barclay did during its work at the Kast Site violated Health and Safety Code section 5411 as the provision was interpreted and enforced at the time. (See also Ex. TTT [1/21/14 ltr.] at [Williams Report] at pp. 58-59, fn.150.) The Regional Board has not offered any evidence to the contrary, and therefore there is no basis for the Regional Board to assert that Barclay's acts have violated Health and Safety Code section 5411.

b. Barclay's Acts Did Not Violate Fish & Game Code Section 5650.

During the time period when Barclay owned the property, section 5650 provided: "It is unlawful to deposit in, permit to pass into, or place where it can pass into the waters of this State any of the following: (a) Any petroleum, acid, coal or oil tar, lampblack, aniline, asphalt, bitumen, or residuary product of petroleum, or carbonaceous material or substance; (b) Any refuse, liquid or solid, from any refinery, gas house, tannery, distillery, chemical works, mill or factory of any kind; (c) Any sawdust, shavings, slabs, or edgings; (d) Any factory refuse, lime, or slag; (e) Any cocculus indicus; [or] (f) Any substance or materials deleterious to fish, plant life, or bird life." (Stats. 1957, c. 456, p. 1394 § 5650.)

The Regional Board has not cited any evidence that Barclay "deposited" or "permitted to pass" any of the substances in subdivisions (a) through (f) into "waters of this State." However, even if the Regional Board's unsupported assertion that Barclay's acts "contributed to the migration of waste into soil and groundwater" were true (and it is not), such actions would not constitute a violation of section 5650. Under the Fish and Game Code, "waters of this State" does not include groundwater. (See, e.g., 48 Ops. Atty. Gen. 23, 24, 30 (1966).) Section 5650 was enacted to protect fish, and to comport with the purpose of the statute, "waters of this State" must be defined as waters

that contain fish. In 1966, while interpreting section 5650 in the context of pesticide deposits in artificially constructed irrigation canals, the Attorney General issued an opinion concluding that "in constructed channels *where fish would not occur naturally, there would be no violation of section 5650 if fish have been excluded* from the sections where the deleterious material or substances retain their harmful effects." (48 Ops. Atty. Gen. 23, 24, 30 (1966), italics added.) It follows that because the groundwater at issue in this matter has no "fish therein" such waters are not "waters of this State" for purposes of the Fish and Game Code and would not have been considered by the State to be "waters of this state" at the time of Barclay's activities at the site. Thus, Barclay's acts could not have violated section 5650.[28]

Had the Prosecution Team identified Fish and Game Code section 5650 in earlier drafts of the CAO when it was put out for public comment, Barclay could have pointed out that it simply does not apply in this setting, and the Prosecution Team could have made an informed decision whether they still thought Barclay violated that statute and then provided some reasoning. Here, by contrast, with Smith as the adjudicator and making an apparent unilateral and uninformed decision to add that section into the order as it went final, Barclay was deprived of any opportunity to point out that it could not have violated Fish and Game Code section 5650. Smith's eagerness to please her superior and help out by adding more violations of law, without any support, analysis, or opportunity for Barclay to comment just highlights the due process violations and the lack of any proper administrative record to support the allegation that Barclay violated Fish and Game Code section 5650.

c. Barclay's Acts Did Not Violate Los Angeles County Code 20.36.010.

In language similar to section 13304(a), the Los Angeles County Code 20.36.010 provides: "A person shall not discharge or deposit or cause or suffer to be discharged or deposited at any time

[28] *See also People v. Miles* (1904) 143 Cal. 636, 641-642 (addressing Penal Code section 636, a companion statute to Penal Code section 635, which was the predecessor of section 5650, and holding: "The dominion of the state for the purpose of protecting its sovereign rights to the fish within its waters, and their preservation . . . *extends to all waters within the state, public or private, wherein these animals are habited or accustomed to resort for spawning or other purposes*, and through which they have freedom of passage to and from the public fishing-grounds of the state. *To the extent that the waters are the common passageway for fish . . . they are deemed for such purposes public waters, and subject to all laws of the state regulating the right of fishing.*"), italics added, quoting *People v. Truckee Lumber Co.* (1897) 116 Cal. 397).

or allow the continued existence of a deposit of any material which may create a public nuisance, or menace to the public health or safety, or which may pollute underground or surface waters, or which may cause damage to any storm-drain channel or public or private property."

As discussed above, the Prosecution Team cited no evidence to prove that Barclay's acts violated this ordinance. Moreover, the Prosecution Team has repeatedly stated that Barclay's compliance with the Los Angeles County Building Code, U.B.C. § 7014(c) (1965), is irrelevant. (Ex. S at Attachment 14 at p. 81; Ex. F [Ayalew Dep.] at 36:4-37:20, 47:12-48:19, 56:9-22). The Prosecution Team's statements that Barclay's compliance with the Building Code is irrelevant is inconsistent with a finding that Barclay violated Los Angeles County Code 20.36.010, because under the Building Code, the Los Angeles County Engineer was required by statute to confirm that the Carousel Project complied with applicable laws, and the Los Angeles County Engineer confirmed it. (Ex. E [Unger Dep.] at 66:10-67:23.) The Prosecution Team has also repeatedly stated that the expert reports of Don Shepardson and Marcia Williams (Part IV.G.2, *supra*) were irrelevant—despite the fact that those opinions go right to the heart of just what the law was at the time and further prove that Barclay was in compliance with then-existing laws. (Ex. S at Attachment 14 at pp. 79-82; Ex. E [Unger Dep.] at 32:5-33:15, 239:7-21.) Thus, contrary to the unsupported assertion in the Revised CAO, the only evidence in the record confirms that Barclay complied with Los Angeles County Code 20.36.010.

And, again, Ms. Smith's unilateral, arbitrary and unsupported decision to add yet another code section with which she has no familiarity or experience and suddenly claim Barclay violated it, too, simply highlights the unfair, biased and prejudicial determinations made by the Regional Board when it named Barclay. There is no rationale to explain how, with the involvement of the Los Angeles County engineers and planners who approved every step Barclay took towards this redevelopment, that somehow the County failed to find that Barclay violated section 20.36.010 but today, some 50 years later, a Water Board staffer can make that determination and need not offer any analysis, support, facts, nor any opportunity for Barclay to comment on it, before it becomes part of a final order.

3. Barclay Complied With The Dickey Act, Which Was The Law Applicable At The Time The Carousel Project Was Being Developed.

The fact that the Revised CAO wrongly asserts that Barclay violated code provisions it has no authority to enforce, while failing to mention the Dickey Act—which was the predecessor to Porter-Cologne and the applicable law at the time—is telling. Barclay's compliance with the Dickey Act is further evidence that Barclay was not in violation of existing laws or regulations at the time. At the time Barclay was performing its development work on the reservoirs at the Site, the determination whether it was engaging in a discharge and whether that discharge was compliant with applicable law was determined under the Dickey Act of 1949. As shown below, Barclay was fully compliant with the Dickey Act as it was applied at the time.

The Dickey Act was enacted in 1949. (Stats. 1949, ch. 1549, § 1, p. 2782). It continued to govern the jurisdiction of the State and Regional Water Boards until it was replaced by the Porter-Cologne Act, which first became effective on January 1, 1970 (after all of the acts by Barclay that are referenced in the Revised CAO had taken place at the Site). (Stats. 1969, ch. 482, § 18, p. 1051; Water Code §§ 13000 *et seq.*). It is, therefore, the applicable Water Code provision governing all of the acts upon which the Revised CAO is based.[29]

Barclay "was in compliance with the Dickey Act" given the nature of its activities and the "environmental understanding of oil and oil pollution at that time." (Ex. TTT [1/21/14 Ltr.] at [Williams Report] at p. 57.) As explained by Marcia Williams, an expert in the evolution of environmental laws and regulations, and in public knowledge about environmental subjects, for the Regional Board of that era to have authority over Barclay's conduct under the Dickey Act, three requirements had to be met: (1) Barclay's activities must have constituted a "discharge" within the meaning of the Dickey Act; (2) "the discharge must have been of a sewage or industrial waste"; and (3) the discharge must have caused or threatened a condition of pollution or nuisance. (*Id.* at p. 58.) According to Ms. Williams, none of these three prongs are satisfied under the definitions applied at the time. (*Id.* at p. 58.) Barclay did not engage in a "discharge" as the term was used at the time. (*Id.* at pp. 59-61.)

[29] Barclay completed the last filling and compacting operations in the former reservoir in 1968. (Ex. TTT[1/21/14] at Tab 108 [CARSON 387-391]; *id.* at Tab 102 [CARSON 397-403]; *id.* at Tab 99 [CARSON 430-433]; *id.* at Tab 100 [CARSON 445-450]; *id.* at Tab 105 [CARSON 552-557]; *id.* at Tab 110 [CARSON 340-344]; *id.* at Tab 112 [CARSON 345-347]; *id.* at Tab 123 [1/30/1967 report for Tract 28086]; *id.* at Tab 125 [3/10/1967 report for Tract 28086].); Part II.A.13, *supra*.)

Nor was oil-impacted soil regarded as "sewage and industrial waste" under the Dickey Act if the soil was used for construction purposes. (*Id.* at p. 61.)

Citing a contemporaneous opinion of the California Attorney General's Office, Ms. Williams points out that under the Dickey Act, "discharge" "was understood as the plain meaning of the word," which did not include grading, compaction and other construction work. (*Id.* at p. 60.) The attorney general's opinion also used the terms "flowing or issuing out" to describe "discharge," and Ms. Williams demonstrated through her analysis of contemporaneous evidence that "given the nature of the understanding and concern regarding oil in the pre-1970 period, the mere presence of oil stains in soils during [Barclay's] redevelopment project would not have been considered a 'flowing or issuing out' at the time. (*Id.*)

Also, even a discharger would not have violated the Dickey Act unless it was also proven that its conduct would have been regarded as causing pollution or nuisance to the waters of the state. (*Id.* at pp. 61-62.) This, too, is not a standard that can be based on present-day notions of what constitutes a nuisance: "the application of nuisance under the Dickey Act was 'restricted to nuisances arising from the discharge of waste materials into water.'" (*Id.* at p. 62.) And when it came to releases of oil, water at that time only meant surface water. (*Id.* at p. 64.) "[T]he authors of the Dickey Act believed that oil wastes were rarely a concern at that time unless there was evidence of discharge into surface waters." (*Id.*) Ms. Williams concluded that Barclay's conduct would not have qualified as a violation of the Dickey Act on that ground either. (*Id.*)

If the State or Regional Boards had regarded conduct like Barclay's as a discharge, developers in Barclay's circumstances would have been required by the Dickey Act to obtain waste discharge requirements, or WDRs, from the applicable regional board in order to engage in redevelopment activities. (Ex. TTT [1/21/14 Ltr.] at [Williams Report] at p. 64.) To test her conclusion that Barclay's activities were not considered a discharge, Ms. Williams reviewed complete files of WDRs issued by the Los Angeles and Santa Ana regional boards for the following years: Los Angeles, 1970 and 1971; Santa Ana, 1968 and 1969.[30] (*Id.* at pp. 64-65.) This review revealed that no WDRs were is-

[30] These files were copied by Ms. Williams several years ago when performing another assignment. The complete records are no longer available from the Regional Boards, but Ms. Williams has agreed to make her copies available upon request.

sued to anyone performing work like Barclay's, confirming Ms. Williams' conclusion that Barclay's conduct was not viewed as a discharge during the applicable timeframe. (*Id.* at p. 65.)

Marcia Williams thus confirms, (1) "[Barclay] would not have been understood to be causing pollution or nuisance to the waters of the state," (2) Barclay's activities did not constitute a "discharge" as the term was understood at the time, and (3) Barclay would not have been required to notify the Regional Board of a discharge nor was Barclay subject to WDRs; therefore, Barclay's actions could not have caused a violation of the Dickey Act. (*Id.* at p. 58 [noting also at 60 that "movement of soil from one location of a construction site to another [is not a discharge] when that soil continues to be used and is not placed into water."].) At the time Shell used the Site to store crude oil, "there was no requirement [under the Dickey Act] to report inadvertent, and potentially unknown, releases of oil from the tanks to the subsurface." (*Id.* at p. 29.) Moreover, crude oil and its organic constituents were not among the constituents of concern with respect to groundwater degradation in California at the time. (*Id.*) Accordingly, Barclay could not be in violation of the Dickey Act for merely acquiring the Site that was contaminated by oil and then re-grading and compacting it in preparation for residential development.

The Revised CAO does not mention the Dickey Act, nor does it provide any evidence or analysis to contradict the compelling analysis of Ms. Williams. Therefore, the Revised CAO provides no basis from which to conclude that Barclay's "acts" in the late 1960s "were" "in violation of existing laws or regulations at the time they occurred." (Water Code § 13304, subd. (j).)

4. Public Agencies In A Position To Know Both The Law And The Material Facts At The Time Prove Barclay's Compliance With Then-Existing Law.

In addition to Barclay's compliance with the Dickey Act, evidence from public agencies in a position to know both the law and the material facts at the time proves that Barclay complied with then-existing law. From the outset of the Carousel project, multiple public agencies gave Barclay's actions to develop the Carousel project close oversight and confirmed that there were no "violation[s] of existing laws or regulations at the time" Carousel was graded and built in the late 1960s.

a. The Los Angeles County Engineer Confirmed Barclay's Compliance With Then-Existing Laws.

At the time of the Carousel project, the County Engineer was responsible for assuring compliance with all laws. (U.B.C. § 7014, subd. (c) (1965).) Although there were no provisions for environmental review in the County's building code at the time, this merely describes the state of the law at the time and does not alter the importance of the County Engineer's determination that Barclay complied with the laws then in effect. (Ex. TTT [1/21/14 Ltr.] at Tab 7 [Bach Dep.] at 286:14-287:10; *id.* at Tab 2 [Curci Dep.] at 22:15-23:1; *id.* at Tab 6 [Nehrenberg Dep.] at 42:8-43:12.)

The County Engineer's review for legal compliance was not conducted in the dark; as described in Part III.G, *supra*, the County Engineer was thoroughly involved in every phase of the process with a frequent presence at the Site. There is ample evidence that the County Engineer was aware of all relevant facts, and there is no evidence of any material facts of which it was not aware. Indeed, because the soils reports provided the directions for the grading contractor and others in the field to grade and fill the reservoirs and the County Engineer, in turn, reviewed and directed changes in the soils reports, there are no significant facts known to Barclay that were not also known to both the County Engineer and the soils engineer. (See Part III.G, *supra*.) For example, the County Engineer is shown on the memorandum dated March 11, 1966 as being one of two recipients specified to receive three copies, the other being Barclay. (Ex. TTT [1/21/14] at Tab 74 [CARSON 251-258].) The March 11, 1966 memorandum, of course, is where Pacific Soils reported to Barclay and the County Engineer that it had observed "oil stains" in six borings taken in Reservoir 6 to ascertain the permeability of the soil beneath the former tank bottom. (*Id.*) The County Engineer signed off on compliance with every legal requirement of the project, including the decision to leave the "oil stains" undisturbed beneath the concrete floor of Reservoir 6. The evidence concerning the County Engineer thus stands as unrebutted proof that Barclay is entitled to exemption from liability under Porter-Cologne pursuant to section 13304(j).

b. The California State Real Estate Commissioner Confirmed Barclay's Compliance With Then-Existing Law.

During the 1960s, the California State Real Estate Commissioner was tasked under the Subdivided Lands Law with reviewing every subdivision of a certain size, and the Commissioner was provided staff from the Department of Real Estate to carry out its diligence. (Bus. & Prof. Code

§§ 11000-11200.) Under the Subdivided Lands Law, one of the Commissioner's (and DRE's) responsibilities was to assure compliance with the law. (Ex. TTT [1/21/14] at Tab 339 [Department of Real Estate Reference Book].) As already shown, the White Report evidencing compliance was issued for every Tract in the Carousel subdivision. (Part II.E.2.d, *supra*.) This alone proves that the requirements of section 13304(j) are satisfied.

c. The Los Angeles County Planning Commission Confirms Barclay's Compliance With Then-Existing Laws.

Finally, both the County Regional Planning Commission and the Board of Supervisors approved a number of major land use planning choices required both by California law and County Ordinance, including subdivision map approval and a zoning change from heavy industrial (M-2) to residential (R-1). Both involved public hearings and both were addressed twice. (Part IV.G.2, *supra*.) The County of Los Angeles was then (and still is) the largest in California by population, and the land use planning agencies and their staffs were at that time among the most sophisticated in the nation. (lacounty.gov, Residents, http://www.lacounty.gov/wps/portal/lac/residents (last visited Jan. 19, 2014).) When making these land use approvals, it is clear that both the Planning Commission and the Supervisors were fully aware that Barclay was converting a former oil tank farm into a residential neighborhood, and the details of how that was going to be accomplished were spelled out in the documents. (Ex. TTT [1/21/14] at Tab 73 [CARSON 363-367]; *id.* at Tab 72 [CARSON 370-374]; *id.* at Tab 355 [CARSON 786-787]; *id.* at Tab 91 [CARSON 790].) If those agencies had believed there was something unlawful being done in any aspect of the project before them, they would not have given the approvals that they did.

To determine whether there was a violation of a law or regulation 50 years ago, we need only look at the unbiased judgments of agencies from those times that were accustomed to making such determinations, had been given the responsibility to enforce the applicable laws, knew the laws well, and also knew this project well. It is impossible to imagine a better source for information on this issue than the California Department of Real Estate and the Los Angeles County Engineer Department, and when both agencies agree that there was legal compliance by Barclay, they must be correct. The County Engineer's affirmation of legal compliance, for example, is more reliable than a

retroactive assessment ever could be since it represented the collective decision of individuals who were experienced in making such decisions in that specific era. These individuals were then familiar with the laws deemed by regulatory officials to be most important for public safety and how those laws were being interpreted at that time in the context of building and safety practices with which they were personally familiar, and they applied the specific facts from the Carousel Site to those laws and determined there were no violations.

The decisions of the Planning Commission and Board of Supervisors corroborate the County Engineer and State Real Estate Commissioner. Those agencies too knew the applicable laws and had knowledgeable, competent staffs to review this project. If they had believed there were violations of law at Carousel, they would not have given the approvals they did. The uncontested evidence is therefore clear that Barclay's acts "were not in violation of existing laws or regulations at the time they occurred." If Barclay was a discharger, and it was not, then it was a discharger in compliance with all then-applicable laws, and is therefore protected by the safe harbor under section 13304(j).

VI. Conclusion

For all of the foregoing reasons, the Revised CAO should be vacated.

VIII. A STATEMENT THAT THE PETITION HAS BEEN SENT TO THE APPROPRIATE REGIONAL BOARD AND TO THE DISCHARGER, IF NOT THE PETITIONER

A true and complete copy of this Petition, without attachment, was sent by First Class Mail to Deborah Smith, Chief Deputy Executive Officer, Regional Water Quality Control Board, Los Angeles Region, 320 W. 4th Street, Suite 200, Los Angeles, California 90013. A copy of this Petition was also sent by First Class Mail to counsel for the Discharger Shell Oil Company: Deanne Miller, Morgan, Lewis & Bockius LLP, 300 S. Grand Avenue, 22nd Floor, Los Angeles, California 90071-3132.

IX. A STATEMENT THAT THE SUBSTANTIVE ISSUES OR OBJECTIONS RAISED IN THE PETITION WERE RAISED BEFORE THE REGIONAL BOARD, OR AN EXPLANATION OF WHY THE PETITIONER WAS NOT REQUIRED OR WAS UNABLE TO RAISE THESE SUBSTANTIVE ISSUES OR OBJECTIONS BEFORE THE REGIONAL BOARD

With the exception of the issues raised in Part V.A of the Statement of Points and Authorities (Section VII, *supra*), and the issues raised regarding Fish and Game Code section 5650 and Los An-

geles County Code section 20.36.010 in Part V.C of the Statement of Points and Authorities (Section VII, *supra*), all of the substantive issues and objections in Section VII were raised in submissions provided to the Regional Board on September 15, 2011, January 21, 2014, June 30, 2014, December 24, 2014, January 6, 2015, April 2, 2015, and April 22, 2015. After the Prosecution Team issued its recommendation on December 8, 2014, Barclay requested that the Regional Board consider previously unavailable evidence and requested a formal hearing. (Ex. HH [12/24/14 Ltr.].) The Regional Board largely refused to consider Barclay's additional evidence and refused to grant Barclay's request for a formal hearing. (Ex. GG [2/27/15 Ltr.].) Because the Revised CAO was issued without a hearing or opportunity to submit supplemental comments, Barclay will submit this evidence and information and a request for an evidentiary hearing to the State Board in supplemental pleadings. Moreover, Barclay was not required or able to raise the new issues in Part V.A and Part V.C to the Regional Board in its prior submissions because those issues only became evident and materialized after the Regional Board issued the Revised CAO naming Barclay. Until that point, Barclay did not know it would be named by Smith, had no insight into the activities of the Prosecution Team, did not know that Smith would reject Barclay's request to delay the decision until after the depositions of the Prosecution Team members, and did not know that Smith had unilaterally added additional unsupported findings (as discussed in Parts V.A and V.C) until the issuance of the Revised CAO. (See Ex. OO [4/30/15 Ltr.].)

DATED: May 31, 2015

GIBSON, DUNN & CRUTCHER LLP

By: _____
Patrick W. Dennis

Attorneys for Petitioner,
BARCLAY HOLLANDER CORPORATION

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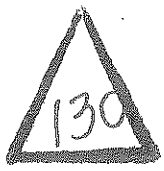
EXHIBIT A



STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

CLEANUP AND ABATEMENT ORDER NO. R4-2011-0046
REQUIRING

SHELL OIL COMPANY
AND
BARCLAY HOLLANDER CORPORATION

TO CLEANUP AND ABATE WASTE
DISCHARGED TO WATERS OF THE STATE
PURSUANT TO CALIFORNIA WATER CODE SECTION 13304[1]
AT THE FORMER KAST PROPERTY TANK FARM,
CARSON, CALIFORNIA
REVISED
April 30, 2015
(FILE NO. 97-043)

Cleanup and Abatement Order No. R4-2011-0046 (Order) requires Shell Oil Company and Barclay Hollander Corporation (hereinafter "Discharger") to assess, monitor, and cleanup and abate the effects of petroleum hydrocarbon compounds and other contaminants of concern discharged to soil and groundwater at the former Kast Property Tank Farm facility (hereinafter, the "Site") located southeast of the intersection of Marbella Avenue and East 244th Street, in Carson, California.

On March 11, 2011, the Regional Water Quality Control Board, Los Angeles Region (Regional Board) issued the Order requiring Shell Oil Company (Shell) to investigate and cleanup the Site. On July 28, 2010, in comments on the draft Order, the law firm of Morgan Lewis on behalf of Shell, requested that the Regional Board name Dole Food Company, Inc. (Dole) and its wholly-owned subsidiary Barclay Hollander Corporation (BHC) as responsible parties in the Order ("Morgan Lewis 2010 Letter"). At that time, the Regional Board declined to add Dole and BHC to the draft Order and issued the Order to Shell only. Subsequently, on April 22, 2011, the Regional Board issued an order pursuant to California Water Code section 13267 (13267 Order) requiring Dole to provide technical information about the Site. On September 15, 2011, the law firm of Gibson Dunn on behalf of Dole provided a detailed letter and attachments in response to the 13267 Order disputing that it and/or BHC should be named as responsible parties in the Order ("Gibson Dunn 2011 Letter"). On October 31, 2013, the Regional Board's Assistant Executive Officer proposed adding BHC as a responsible party to the Order and provided opportunities to submit comments on October 31, 2013 and June 3, 2014. Gibson Dunn, on

[1] Water Code section 13304 (a) states, in part: Any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts.

behalf of Dole and BHC, and Morgan Lewis, on behalf of Shell, submitted comments. For the reasons discussed below, the Order is hereby revised to add BHC, a wholly-owned subsidiary of Dole, as a responsible party in the Order based on information provided by Shell and Dole and other information in the files of the Regional Board.

As of the date of this revised Order, Shell has completed many of the tasks required by the Order since its issuance on March 11, 2011. This Order is not being revised to delete tasks already completed by Shell but is being revised to add BHC as a responsible party and to make appropriate findings based on the information provided by Dole and Shell since issuance of the Order and to clarify that the Discharger is responsible for preparing draft environmental documentation. The Regional Board's files include records documenting the activities associated with this Order.

The Regional Board herein finds:

BACKGROUND

1. **Discharger:** Shell, previously Shell Company of California, is a Responsible Party due to its: (a) ownership of the former Kast Property Tank Farm, and (b) former operation of a petroleum hydrocarbon tank farm at the Site resulting in discharges of waste at the Site. Barclay Hollander Corporation (BHC) is a responsible party due to its (a) past ownership and/or as a successor to past owners of the Site, and (b) development of the property resulting in discharges of waste at the Site. Shell and BHC are hereafter referred to collectively as "Discharger." The actions of the Discharger have caused or permitted waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and have created a condition of pollution or nuisance.

2. **Location:** The Site is located southeast of the intersection of Marbella Avenue and East 244th Street in the City of Carson, California. The Site occupies approximately 44 acres of land and is bordered by the Los Angeles County Metropolitan Transportation Authority railroad right-of-way on the north, Lomita Boulevard on the south, Marbella Avenue on the west, and Panama Avenue on the east (Figure 1). The Site was previously owned by Shell, who operated three oil storage reservoirs from the 1920s to the mid-1960s. The central and southern reservoirs each had a capacity of 750,000 barrels of oil and the northernmost reservoir had a capacity of 2,000,000 barrels of oil. The Site presently consists of the Carousel residential neighborhood and city streets.

3. **Groundwater Basin:** The Site is located on the Torrance Plain of the West Coast Groundwater Basin (Basin), in the southwestern part of the Coastal Plain of Los Angeles County. Beneath the Site, the first encountered groundwater is estimated at 54 feet below ground surface (bgs). The Basin is underlain by a series of aquifers, the deeper of which are used for drinking water production. These aquifers are with increasing depth, the Gage aquifer, Lynwood aquifer, and Silverado aquifer. The nearest municipal water supply well is located approximately 400 feet west of the Site. As set forth in the *Water Quality Control Plan for the Los Angeles Region* (the Basin Plan), adopted on June 13, 1994, the Regional Board has designated beneficial uses for groundwater (among which include municipal and domestic drinking water supplies) in the West Coast Basin and has established water quality objectives for the protection of these beneficial uses.

4. As detailed in the findings below, the Discharger's activities at the Site have caused or permitted the discharge of waste resulting in soil, soil vapor, and groundwater pollution, including discharges of waste to the waters of the state, and nuisance.

SITE HISTORY

5. **Property Ownership and Leasehold Information:** Based on information submitted to the Regional Board by the Discharger, the Site has the following property ownership and leasehold history:

   a. According to the Sanborn maps dated 1924 and 1925, the Site was owned and operated by "Shell Company of California (Kast Property)" beginning in approximately 1924 until the mid-1960s. The Site was used as a tank farm, which included three crude oil storage reservoirs, Reservoir Nos. 5, 6 and 7. Reservoir No. 5, the center reservoir, had a capacity of 750,000 barrels of oil and was under lease to General Petroleum Corporation. Reservoir No. 6, the southernmost reservoir, had a capacity of 750,000 barrels of oil; and Reservoir No. 7, the northernmost reservoir, had a capacity of 2,000,000 barrels of oil. According to Sanborn map notations, the reservoirs had concrete-lined earth-slopes with frame roofs on wood posts, surrounded by earth levees averaging 20 feet in height with 7 foot wide walks on top. One oil pump house was depicted on the 1925 Sanborn map within the southern portion of the Site. Since construction, the Site was used as a crude oil storage reservoir.

   b. In 1965, Richard Barclay and Shell executed a Purchase Option Agreement, wherein Richard Barclay (or his nominee) agreed to purchase the Site, subject to a favorable engineering report and other restrictions. Richard Barclay was a principal in an entity known as Barclay-Hollander-Curci. In 1965, Lomita Development Company (Lomita), a California partnership, was designated as Mr. Barclay's "nominee" and in 1966, purchased the Site from Shell with the reservoirs in place. Lomita explicitly stated in writing that it would complete decommissioning of the reservoirs. In phases between 1967 and 1969, Lomita developed the Site into one- and two-story single family residential parcels and sold the developed lots to individual homeowners. In 1969, a group of companies, including the constituent partners of Lomita,[2] merged into a company known as Barclay Hollander Curci, Inc. In the agreement of merger, Barclay Hollander Curci, Inc. agreed to be subject to all debts and liabilities of the merging entities. Barclay Hollander Curci, Inc. was acquired by Castle & Cooke, Inc. and became a wholly-owned subsidiary of Castle & Cooke, Inc. Barclay Hollander Curci, Inc. continued to sell parcels to residential owners. Barclay Hollander Curci, Inc. was later renamed Barclay Hollander Corporation, Inc. (BHC). Castle & Cooke, Inc. merged with Flexi-Van Corporation in 1985, which in 1991, changed its name to Dole Food Company, Inc. BHC is currently a wholly-owned subsidiary of Dole and has been dormant since the sale of its assets in 1995, though Dole maintains liability insurance for BHC.[3]

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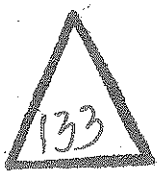
[2] The constituent partners of Lomita were Del Cerro Sales Co., Burwood Land Co., Bygrove Land Co., and Eastwood Land Co.

[3] See Letter from Robert W. Loewen, Gibson Dunn, January 21, 2014.



6. Site Description and Activities: According to information in the Regional Board's file on this Site, oil related operations at the Site began in 1923 and ended by the early 1960s. The Site was previously owned and operated by Shell Company of California, which was subsequently renamed Shell Oil Company, as a crude oil storage facility. The facility included equipment that pumped the oil to the nearby Shell refinery for processing from three concrete-lined oil storage reservoirs with a total capacity of 3.5 million barrels. As of June 25, 1959, at least one of the reservoirs was known to leak according to a Shell memorandum of that date.[4] In 1966, Shell closed the Site and sold the Site to Lomita, an affiliate of Richard Barclay and Barclay-Hollander-Curci. Subsequently, Lomita developed the Site into the Carousel residential neighborhood, which contains 285 single-family homes.

In 1965, prior to the purchase of the property from Shell, Richard Barclay. and/or Barclay Hollander Curci requested permission from Shell to remove the liquid waste and petroleum residue from the property and to begin to grade the property for development. Shell agreed to allow the activities with some conditions. Upon Lomita's designation to purchase of the property, Lomita actively participated in the decommissioning of the reservoirs and grading activities.[5] Lomita conducted the waste removal and grading activities and obtained the required permits from the County. Available information indicates that by August 15, 1966, all three reservoirs had been emptied of liquid residue. The Pacific Soils Engineering Reports dated January 7, 1966; March 11, 1966; July 31, 1967; and June 11, 1968[6] documented that: (1) Lomita emptied and demolished the reservoirs, and graded the Site prior to it developing the Site as residential housing; (2) part of the concrete floor of the central reservoir was removed by Lomita from the Site; and (3) where the reservoir bottoms were left in place, Lomita made 8-inch wide circular trenches in concentric circles approximately 15 feet apart to permit water drainage to allow the percolation of water and sludge present in the reservoirs into the subsurface. Various documents from the soil engineer describe the process of removing water and sludge in the reservoirs, burying concrete and compacting the concrete and soil, and drilling holes in the concrete to allow for percolation into the groundwater.[7] The County's grading permit required that concrete fill must be at least seven feet below grade. Boring logs indicated that soils beneath the concrete slab in Reservoir 7 were "highly oil stained" and that "[m]ost of the soils in the borings had a petroleum odor, however the amount of actual oil contained in the soil is unknown."[8] Soil used to fill in the reservoirs and return the Property to its natural grade came from the berms surrounding each reservoir and surrounding the perimeter of the Property.[9] No petroleum hydrocarbon testing was performed on the berm soil. The soil was examined only for geotechnical purposes.[10] In 1967, Lomita began transferring title of individual parcels. In 1969, title to remaining parcels was granted by grant deed from Lomita to BHC. Then BHC began transferring title to the rest of the parcels.

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[4] Exhibit 9 to Gibson Dunn 2011 Letter.
[5] In a letter to Shell dated August 25, 1966, Richard Barclay aknowledged that "[t]his type of cleanup work is a little unusual for our operation...." (See Exhibit 77 to Gibson Dunn 2011 Letter.)
[6] See Exhibits 31, 78, 36, and 42 to Gibson Dunn 2011 Letter.
[7] See Exhibits 31 and 78 to Gibson Dunn 2011 Letter.
[8] See Exhibit 78 to Gibson Dunn 2011 Letter, March 11, 1966, Report by Pacific Soils Engineering Inc.
[9] See Exhibit 31 and Declaration of Lee Volmer, attached to Gibson Dunn 2011 Letter.
[10] See January 21, 2014, Waterstone Environmental, Inc., Technical Response to the RWQCB Draft Cleanup and Abatement Order, pp. 48, 62, 70, 167.

6. **Chemical Usage:** Based on the Phase I Environmental Site Assessment (ESA) dated July 14, 2008 conducted by Shell Oil Products[11] (SOPUS) consultant, URS Corporation, the Site was used for the storage of crude oil in all three reservoirs on the property from at least 1924 to 1966. Subsequent records indicate that in the 1960s the reservoirs may also have been used for storage of bunker oil. Ongoing investigations indicate petroleum hydrocarbon compounds including volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) are impacted in the subsurface soil, soil vapor, and groundwater underlying the Site.

EVIDENCE OF DISCHARGES OF WASTE AND BASIS FOR ORDER

7. **Waste Discharges:** The following summarizes assessment activities associated with the Site:

   a. In 2007, under the regulatory oversight of the California Department of Toxic Substances Control (DTSC), an environmental investigation was initiated at the former Turco Products Facility (TPF). Soil vapor and groundwater were investigated in areas directly west of the Site and at locations in the northwestern portion of the Site. The DTSC-required investigation detected petroleum hydrocarbons, benzene, toluene, and chlorinated solvents in soil and soil vapor. A multi-depth soil vapor survey, which included soil vapor sampling on the Site at locations coincident with the former Kast Site footprints, detected benzene at concentrations up to 150 micrograms per liter (µg/l). Benzene was detected at TPF groundwater monitoring well MW-8, which has a northeast flow direction, at a concentration of 1,800 µg/l. Therefore, groundwater monitoring well MW-8 is located upgradient of the Kast Site. Chlorinated solvents were also detected at the Kast Site groundwater monitoring well MW-5.

   b. The *Final Phase I Site Characterization Report* dated October 15, 2009, which was prepared by URS Corporation on behalf of SOPUS showed that soil impacts consisted primarily of petroleum hydrocarbons spanning a wide range of carbon chains and including Total Petroleum Hydrocarbons (TPH) as gasoline (g), TPH as diesel (TPHd), TPH as motor oil (TPHmo), benzene, and naphthalene (See Tables 1, 2A, 2B, and 3).

      I. In June 2009, a subsurface investigation of public streets in the Carousel neighborhood consisting of ten cone penetrometer/rapid optical screening tools (CPT/ROST) was performed. The CPT/ROST logs indicated several locations within the Site with elevated hydrocarbon concentrations. The CPT/ROST logs also showed that the highest apparent soil impacts occurred at depths of 12 feet bgs, 36 feet bgs, and 40 feet bgs.

      II. A total of 228 soil samples were collected during the Phase I Site Characterization. The analytical data for soil samples collected from soil borings advanced on public streets across the Site (Figure 2) were as follows:

[11] Shell Oil Products US is the d/b/a for Equilon Enterprises LLC, which is wholly owned by Shell Oil Company.

i. The highest detected concentration of TPH was 22,000 milligrams per kilogram (mg/kg) and TPHg, TPHd, and TPHmo were 8,800, 22,000, and 21,000 mg/kg, respectively;

ii. Benzene, ethylbenzene, toluene, and xylenes were detected in concentrations as high as 21,000 micrograms per kilogram (µg/kg), 32,000 µg/kg, 12,000 µg/kg, and 140,000 µg/kg, respectively;

iii. SVOCs were detected in concentrations as high as 47 mg/kg of naphthalene, 38 mg/kg of 1-methylnaphthalene, 63 mg/kg of 2-methylnaphthalne, 12 mg/kg phenanthrene, and 9.0 mg/kg pyrene; and

iv. Arsenic and lead were detected in concentrations as high as 53.2 mg/kg and 52.5 mg/kg, respectively.

III. Soil vapor samples collected from a 5-foot depth and greater below the public streets in the Carousel neighborhood indicated elevated benzene and methane (Figures 3 and 4). Benzene was detected at a maximum concentration of 3,800µg/l, which exceeds the California Human Health Screening Level (CHHSL) value of 0.036 µg/l for benzene set for shallow soil vapor in a residential area. Methane was also detected in concentrations as high as 59.7 % (by volume) that significantly exceed its lower explosive limit of 5% (by volume), posing a potential safety hazard.

c. Between September 2009 and February 2010, residential soil and sub-slab soil vapor sampling was conducted at 41 parcels (Figure 5 a – f; Tables 1 and 2) and the results were as follows:

I. Surface and subsurface soil (0 to 10 feet bgs) detected concentrations of chemicals of concern that significantly exceeded soil screening levels as follows:

i. VOCs - Benzene (14,000 µg/kg), tetrachloroethylene (PCE) (22,000 µg/kg), 1,2,4-trimethylbenzene (34,000 µg/kg), and 1,3,5-trimethylbenzene (14,000 µg/kg);

ii. SVOCs - Naphthalene (18 mg/kg), Benzo(a)pyrene (2.9 mg/kg), benzo(a)anthracene (0.1 mg/kg), chrysene (0.27 mg/kg), phenanthrene (0.28 mg/kg), and pyrene (0.19 mg/kg); and

iii. Lead was also detected at a maximum concentration of 307 mg/kg.

II. The highest detected concentration of TPHg was 5,000 mg/kg, TPHd was 33,000 mg/kg, and TPHmo was 41,000 mg/kg;

III. As of September 27, 2010, sub-slab soil vapor samples have been collected from 172 homes in the Carousel neighborhood. Additional

data continues to be collected as part of the Phase II Site Characterization. The validated data from the first 41 homes detected benzene, naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, ethylbenzene, p/m-xylenes, toluene, and acetone, at a maximum concentration of 4,500 micrograms per cubic meter ($\mu g/m^3$), 2,200 $\mu g/m^3$, 1,000 $\mu g/m^3$, 1,100 $\mu g/m^3$, 5,200 $\mu g/m^3$, 700 $\mu g/m^3$, 270 $\mu g/m^3$, respectively.

d. Between November 19, 2009 and February 15, 2010, additional step-out soil and soil vapor sampling at the elevated soil vapor sampling locations were conducted in selected locations beneath the public streets at the Site. The measured concentrations for petroleum hydrocarbons in soil were as follows:

I. The highest detected concentrations of TPHg was 9,800 mg/kg, TPHd was 22,000 mg/kg, and TPHmo was 21,100 mg/kg;

II. The highest detected concentrations of benzene was 33,000 µg/kg, Ethylbenzene was 42,000 µg/kg, toluene was 11,000 µg/kg, and xylenes were 140,000 µg/kg, respectively;

III. SVOCs were detected in concentrations as high as 47 mg/kg of naphthalene, 33 mg/kg of 1-methylnaphthalene, 53 mg/kg of 2-methylnaphthalne, 6.1 mg/kg phenanthrene, and 3.9 mg/kg pyrene; and

IV. Arsenic and lead were detected in concentrations as high as 28.2 mg/kg and 13.6 mg/kg, respectively.

e. In July 2009, the installation of six on-site groundwater monitoring wells (Figure 6) were completed and quarterly groundwater monitoring was initiated. Groundwater was encountered at 53 feet bgs. Groundwater samples from five of the six wells contained concentrations of benzene at a maximum concentration of 140 µg/L and trichloroethylene (TCE) at a maximum concentration of 290 µg/L. One of the monitoring wells (MW-3) contains a free product or a light non-aqueous phase liquid (LNAPL) with a maximum measured thickness of 9.01 foot as of May 27, 2010.

8. **Source Elimination and Remediation Status at the Site**

a. The results of the initial soil and soil vapor investigation indicate the presence of elevated methane and benzene at concentrations exceeding the Lower Explosive Limit and the CHHSL for shallow soil vapor, at several locations beneath the public streets at the Site. On October 15, 2009, the Regional Board directed the Discharger to expeditiously design and implement an interim remedial action.

b. On May 12, 2010 the Regional Board approved SOPUS's proposed Soil Vapor Extraction (SVE) pilot test in order to evaluate the use of this technology as a remedial option for VOCs at the Site.

9. **Summary of Findings from Subsurface Investigations**

a. Regional Board staff have reviewed and evaluated numerous technical reports and records pertaining to the release, detection, and distribution of wastes on the Site and its vicinity. The Discharger has stored, used, and/or discharged petroleum hydrocarbon compounds at the Site. Elevated levels of TPH and other wastes have been detected in soil, soil vapor and groundwater beneath the Site.

b. The sources for the evidence summarized above include, but are not limited to:

I. Various technical reports and documents submitted by the Discharger or its representatives to Regional Board staff.

II. Site inspections conducted by Regional Board staff, as well as meetings, letters, electronic mails, and telephone communications between Regional Board staff and the Discharger and/or its representatives.

III. Subsurface drainage study for the Site reservoirs submitted by Girardi and Keese, the law firm retained by some of the residents of the Carousel neighborhood.

10. Summary of Current Conditions Requiring Cleanup and Abatement

a. Based on the Phase I ESA for the Site dated July 14, 2008 (prepared by URS Corporation) and the most recent information provided to the Regional Board by SOPUS: 1) SOC sold the Kast Site to Lomita, an affiliate of Richard Barclay and Barclay-Hollander-Curci, in 1966 with the reservoirs in place; 2) the Pacific Soils Engineering Reports from 1966 to 1968 indicate that Lomita emptied and demolished the reservoirs, and constructed residential housing; 3) part of the concrete floor of the central reservoir was removed by Lomita from the Site; and 4) where the reservoir bottoms were left in place, Lomita made 8-inch wide circular trenches in concentric circles approximately 15 feet apart to permit water drainage to allow percolation of water and sludge present in the reservoirs into the subsurface.

b. There is no consistent trend in the vertical distribution of detected concentrations of petroleum hydrocarbon compounds that can be discerned from soil boring data to date. Although, the majority of the aforementioned highest detected TPH concentrations were obtained from the 2.5-foot depth samples, there were multiple locations where the highest concentrations were in the 5-foot or 10-foot samples. This may be due to the nature of previous development activities by Lomita at the Site (i.e., the construction and demolition of the former reservoirs and site grading in preparation for development of the residential tract).

c. On May 11, 2010, Environmental Engineering and Contracting, consultants hired by Girardi and Keese, conducted exploratory trenching in order to locate and identify the obstructions that have been frequently encountered during the advancement of shallow soil borings at many of the residential homes investigated to date. Regional Board staff observed the encountering of an approximately 8-inch thick concrete slab extending at the trench excavation termination depth of 9 feet, 2 inches. The Pacific Soils Engineering Report dated January 7, 1966 states that the reservoirs were lined with a "four inch

blanket of reinforced concrete". These obstructions are presumed to be remnants of the concrete liners of the former reservoir.

d. Results from the 169 Interim Residential Sampling Reports submitted to the Regional Board through November 17, 2010 indicate that for surface and subsurface soil sampling (0 to 10 feet bgs), the cancer risk index estimate is between 0 and 10 for 107 residential parcels, between 10 and 100 for 60 parcels, and exceeded 100 for 2 parcels. In the area where the highest cancer index is documented, SVOCs (i.e. Benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene and chrysene), benzene, and ethylbenzene were the primary chemicals of potential concern (COPCs) contributing to the cancer risk index.

For the Carousel neighborhood investigation, the Regional Board is using the most protective cancer risk screening levels recommended by the State and federal governments, which is one in one million (1×10^{-6}) additional risks. For screening purposes, the Regional Board routinely uses the most conservative (health-protective assumptions) risk based screening levels of 1×10^{-6} for the target chemical. This screening level is based on a target risk level at the lower end of the US Environmental Protection Agency (USEPA) risk management range of one-in-a-million risk (1×10^{-6}) for cancer risk and a hazard quotient of 1.

The presence of a chemical at concentrations in excess of a CHHSL does not indicate that adverse impacts to human health are occurring or will occur, but suggests that further evaluation of potential human health concerns is warranted (Cal-EPA, 2005). It should also be noted that CHHSLs are not intended to "set ... final cleanup or action levels to be applied at contaminated sites" (Cal-EPA, 2005).

e. Results from the 169 Interim Residential Sampling Reports submitted to the Regional Board through November 17, 2010 also indicate that for the sub-slab soil vapor data collected from the residential parcels, the cancer risk index estimate was between 0 and 10 for 147 parcels, between 10 and 100 for 20 parcels, and greater than 100 for 2 parcels. The two highest cancer risk index were estimated as 550 and 120. In most cases, benzene was the primary contributor to the cancer risk index estimate.

f. The Office of Environmental Health Hazard Assessment (OEHHA) performed a quantitative risk evaluation of TPH using surface and subsurface (0 to 10 feet bgs) soil TPH fractionation data for the 41 residential parcels (Table 3). Based on the risk calculation, OEHHA estimated maximum exposures for a child and compared the resulting exposure estimates of reference dosages with that provided by DTSC interim guidance dated June 16, 2009. OEHHA concluded that aromatic hydrocarbons in the C-9 to C-32 range at five parcels exceeded their reference values for children (Exhibit 1).

g. The San Francisco Bay Regional Water Quality Control Board developed the Environmental Screening Level (ESL) as guidance for determining when concentration of TPH may present a nuisance and detectable odor. The ESL, based

on calculated odor indexes, for residential land-use, is 100 mg/kg for TPHg and TPHd. The soil TPHg and TPHd data obtained from the Site were detected up to 9,800 mg/kg and 85,000 mg/kg, respectively, which exceed the ESL.

11. **Pollution of Waters of the State:** The Discharger has caused or permitted waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance. As described in this Order and the record of the Regional Board, the Discharger owned and/or operated the site in a manner that resulted in the discharges of waste. The constituents found at the site as described in Finding 8 constitute "waste" as defined in Water Code section 13050(d). The discharge of waste has resulted in pollution, as defined in Water Code section 13050(l). The concentration of waste constituents in soil and groundwater exceed water quality objectives contained in the Water Quality Control Plan for the Los Angeles Region (Basin Plan), including state-promulgated maximum contaminant levels. The presence of waste at the Site constitutes a "nuisance" as defined in Water Code section 13050(m). The waste is present at concentrations and locations that *"is injurious to health, or is indecent, or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property . . . and [a]ffects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal."*

12. **Need for Technical Reports:** This Order requires the submittal of technical or monitoring reports pursuant to Water Code section 13267[12]. The Discharger is required to submit the reports because, as described in the Findings in this Order, the Discharger is responsible for the discharge of waste that has caused pollution and nuisance. The reports are necessary to evaluate the extent of the impacts on water quality and public health and to determine the scope of the remedy.

13. Substantial evidence indicates that the Discharger caused or permitted waste to be discharged into waters of state and is therefore appropriately named as a responsible party in this Order. Shell owned and operated the Site, then sold the property to the developers, leaving in place three reservoirs and residual petroleum hydrocarbons in at least one tank and in soil underneath and surrounding the reservoirs. The residual petroleum hydrocarbons are still present at the Site and continue to cause pollution and nuisance as documented in this Order and the Regional Board files. The Regional Board has investigated additional potentially responsible parties (including, but not limited to, Lomita Development Company, Richard Barclay, Barclay-Hollander-Curci, Dole Foods, Inc., Barclay Hollander Corporation and/or any of its successors) and has determined that Lomita, which merged into and was survived by Barclay-Hollander-Curci, renamed BHC, caused or permitted the discharge of waste at the Site. Lomita purchased the Site with explicit knowledge of the presence of the petroleum reservoirs and the presence of residual petroleum hydrocarbons, and conducted various activities, including partially dismantling the concrete in the reservoirs and grading the onsite materials. These activities spread the waste at the Site, and contributed to the migration of the waste through soil and

[12] Water Code section 13267 authorizes the Regional Board to require any person who has discharged, discharges, or is suspect of having discharged or discharging, waste to submit technical or monitoring program reports.

groundwater. The residual petroleum hydrocarbons are still present at the Site and continue to cause pollution and nuisance as documented in this Order and the Regional Board files. Including BHC as a responsible party in this Order is consistent with orders of the State Water Resources Control Board construing Water Code section 13304 naming former owners who had knowledge of the activities that resulted in the discharge and the legal ability to control the continuing discharge.[13] Including BHC as a responsible party is consistent with Water Code section 13304(j) because Lomita or BHC's actions that resulted in creating pollution and nuisance were unlawful since at least 1949.[14] If the Regional Board becomes aware of any other responsible parties it will consider naming such persons in this Order.

14. Shell, in a letter to the Regional Board dated May 5, 2010 (Exhibit 2), stated that it is considering a variety of potential alternatives that can be applied at specific parcels and in the public streets in order to avoid environmental impacts and avoid any significant risks to human health at this Site. Shell also indicated that if it becomes necessary for residents to relocate temporarily to perform this work, Shell will take appropriate steps to minimize any inconvenience and compensate them for any resulting expenses.

15. Issuance of this Order is being taken for the protection of the environment and as such is exempt from provisions of the California Environmental Quality Act (CEQA) (Pubic Resources Code section 21000 et seq.) in accordance with California Code of Regulations, title 14, sections 15061(b)(3), 15306, 15307, 15308, and 15321. This Order generally requires the Discharger to submit plans for approval prior to implementation of cleanup activities at the Site. Mere submittal of plans is exempt from CEQA as submittal will not cause a direct or indirect physical change in the environment and/or is an activity that cannot possibly have a significant effect on the environment. CEQA review at this time would be premature and speculative, as there is simply not enough information concerning the Discharger's proposed remedial activities and possible associated environmental impacts. If the Regional Board determines that implementation of any plan required by this Order will have a significant effect on the environment, the Regional Board will conduct the necessary and appropriate environmental review prior to Executive Officer approval of the applicable plan.

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[13] See, e.g., State Water Board Order No. WQ 92-13 (Wenwest, Inc.); State Water Board Order WQ 89-8 (Arthur Spitzer); State Water Board Order WQ 86-16 (Stinnes-Western Chemical Corporation); and State Water Board Order WQ 86-2 (Zoecon Corporation). See also State Water Board Order No. WQ 89-13 (The BOC Group, Inc.)(holding prior owner responsible for discharges associated with an abandoned underground storage tank). Also see State Water Board Order No. WQ 96-2 (County of San Diego, City of National City, and City of National City Community Development Commission) (holding County of San Diego responsible for pollution caused by landfill it operated, holding City of National City responsible for actions that contributed to the pollution, and holding City of National City Community Development Commission responsible even though it owned the property for a relatively short period of time).

[14] See Health and Saf. Code § 5411. In *Newhall Land & Farming Co. v. Superior Court*, 19 Cal.App.4th 334 (1993), the court interpreted the term "nuisance" quoting *Mangini v. Aerojet-General Corp.*, 230 Cal.App.3d 1125 (1991) (the court rejected the argument that one cannot be guilty of a nuisance unless one is in the position to abate it. The court held "Nor is it material that defendant allegedly created the nuisance at some time in the past but does not currently have a possessory interest in the property. '[N]ot only is the party who maintains the nuisance liable but also the party or parties who create or assist in its creation are responsible for the ensuing damage.'" 230 Cal.App.3d at 1137. In addition to Health and Safety Code section 5411, BHC's actions violated Fish and Game Code section 5650 and Los Angeles County Code section 20.36.010.

16. Shell submitted a proposed Remedial Action Plan (RAP) on June 30, 2014. After review of the proposed RAP, the Regional Board determined that implementation of the RAP could have a significant impact on the environment and that preparation of an environmental impact report is necessary.

17. Pursuant to section 13304 of the California Water Code, the Regional Board may seek reimbursement for all reasonable costs to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action.

THEREFORE, IT IS HEREBY ORDERED, pursuant to California Water Code section 13304 and 13267, that the Discharger shall cleanup the waste and abate the effects of the discharge, including, but not limited to, total petroleum hydrocarbons (TPH) and other TPH-related wastes discharged to soil and groundwater at the Site in accordance with the following requirements:

1. **Complete Delineation of On- and Off-Site Waste Discharges**: Completely delineate the extent of waste in soil, soil vapor, and groundwater caused by the discharge of wastes including, but not limited to, TPH and other TPH-related waste constituents at the Site into the saturated and unsaturated zones. Assessment has been ongoing under Regional Board oversight, but assessment is not yet complete. If ongoing reinterpretation of new data derived from the tasks performed suggests that modification or expansion of the tasks approved by the Regional Board is necessary for complete assessment, the Discharger is required to submit a work plan addendum(a).

2. **Continue to Conduct Groundwater Monitoring and Reporting**:

   a. Continue the existing quarterly groundwater monitoring and reporting program previously required by the Regional Board, and

   b. As new wells are installed, they are to be incorporated into the existing groundwater monitoring and reporting program

3. **Conduct Remedial Action**: Initiate a phased cleanup and abatement program for the cleanup of waste in soil, soil vapor, and groundwater and abatement of the effects of the discharges, but not limited to, petroleum and petroleum-related contaminated shallow soils and pollution sources as highest priority.

   Shallow soils in this Order are defined as soils found to a nominal depth of 10 feet, where potential exposure for residents and/or construction and utility maintenance workers is considered likely (Ref. Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste Sites and Permitted Facilities – CalEPA 1996).

   Specifically, the Discharger shall:

   a. Develop a pilot testing work plan, which includes 1) evaluation of the feasibility of removing impacted soils to 10 feet and removal of contaminated shallow soils and reservoir concrete slabs encountered within the uppermost 10 feet, including areas beneath residential houses; and 2) remedial options that can be carried out where site characterization (including indoor air testing) is completed; 3) plans for relocation of residents during soil removal activities,

plans for management of excavated soil on-site, and plans to minimize odors and noise during soil removal. The Discharger is required to submit this Pilot Test Work Plan to the Regional Board for review and approval by the Executive Officer no later than 60 days after the date of issuance of this Order. Upon approval of the Pilot Test Work Plan by the Executive Officer, the Discharger shall implement the Pilot Test Work Plan submit the Pilot Test Report that includes the findings, conclusions, and recommendations within 120 days of the issuance of the approval of the Pilot Test Work Plan.

b. Conduct an assessment of any potential environmental impacts of the residual concrete slabs of the former reservoir that includes: (1) the impact of the remaining concrete floors on waste migration where the concrete floors might still be present; (2) whether there is a need for the removal of the concrete; and (3) the feasibility of removing the concrete floors beneath (i) unpaved areas at the Site, (ii) paved areas at the Site, and (iii) homes at the Site. The Discharger is required to submit this environmental impact assessment of the residual concrete slabs to the Regional Board no later than 30 days after the completion of the Pilot Test.

c. Prepare a full-scale impacted soil Remedial Action Plan (RAP) for the Site. The Discharger is required to submit the RAP to the Regional Board for review and approval by the Executive Officer no later than 60 days after the date of the Executive Officer's approval of the Pilot Test Report.

I. The RAP shall include, at a minimum, but is not limited to:

i. A detailed plan for remediation of wastes in shallow soil that will incorporate the results from the Soil Vapor Extraction Pilot Test currently being performed.

ii. A plan to address any impacted area beneath any existing paved areas and concrete foundations of the homes, if warranted;

iii. A detailed surface containment and soil management plan;

iv. An evaluation of all available options including proposed selected methods for remediation of shallow soil and soil vapor; and

v. Continuation of interim measures for mitigation according to the Regional Board approved Interim Remediation Action Plan (IRAP).

vi. A schedule of actions to implement the RAP.

II. The RAP, at a minimum, shall apply the following guidelines and Policies to cleanup wastes in soil and groundwater. The cleanup goals shall include:

i. Soil cleanup goals set forth in the Regional Board's *Interim Site Assessment and Cleanup Guidebook, May 1996,* waste concentrations, depth to the water table, the nature of the chemicals, soil conditions and texture, and attenuation trends, human health protection levels set forth in *USEPA Regional Screening Levels (Formerly Preliminary Remediation Goals),* for evaluation of the potential intrusion of subsurface vapors (soil vapor) into buildings and subsequent impact to indoor air quality, California Environmental Protection Agency's *Use of Human Heath Screening Levels (CHHSLS) in Evaluation of Contaminated Properties*, dated January 2005, or its latest version, and Total Petroleum Hydrocarbon Criteria Working Group, Volumes 1 through 5, 1997, 1998, 1999; Commonwealth of Massachusetts, Department of Environmental Protection, *Characterizing Risks Posed by Petroleum Contaminated Sites: Implementation of MADEP VPH/EPH approach*; MADEP 2002; Commonwealth of Massachusetts, Department of Environmental Protection, *Updated Petroleum Hydrocarbon Fraction Toxicity Values for the VPH/EPH/APH Methodology*; MADEP 2003; Commonwealth of Massachusetts, Department of Environmental Protection, Method for the Determination of *Air-Phase Petroleum Hydrocarbons (APH) Final*, MADEP 2008, Soil vapor sampling requirements are stated in the *DTSC Interim Guidance* and the Regional Board's *Advisory – Active Soil Gas Investigations*, dated January 28, 2003, or its latest version, DTSC's *Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air*, revised February 7, 2005, or its latest version, USEPA Risk Assessment Guidance for Superfund, Parts A through E; USEPA User's Guide for Evaluating Subsurface Vapor Intrusion into Buildings, 2003; USEPA Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites, 2002; USEPA Supplemental Guidance for Comparing Background and Chemical Concentrations in Soil for CERCLA Sites, 2002; CalEPA Selecting Inorganic Constituents as Chemicals of Potential Concern at Risk Assessments at Hazardous Waste Sites and Permitted Facilities, CalEPA DTSC, February 1997; CalEPA Use of the Northern and Southern California Polynuclear Aromatic Hydrocarbons (PAH) Studies in the Manufactured Gas Plant Site Cleanup Process, CalEPA DTSC, July 2009. Cleanup goals for all contaminant of concerns shall be based on residential (i.e., unrestricted) land use.

ii. Groundwater cleanup goals shall at a minimum achieve applicable Basin Plan water quality objectives, including California's Maximum Contaminant Levels or Action Levels for drinking water as established by the California

Department of Public Health, and the State Water Resources Control Board's "Antidegradation Policy" (State Board Resolution No. 68-16), at a point of compliance approved by the Regional Board, and comply with other applicable implementation programs in the Basin Plan.

iii. The State Water Resources Control Board's "Antidegradation Policy", which requires attainment of background levels of water quality, or the highest level of water quality that is reasonable in the event that background levels cannot be restored. Cleanup levels other than background must be consistent with the maximum benefit to the people of the State, not unreasonably affect present and anticipated beneficial uses of water, and not result in exceedence of water quality objectives in the Regional Board's *Basin Plan*.

iv. The State Water Resources Control Board's "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304" (State Board Resolution No. 92-49), requires cleanup to background or the best water quality which is reasonable if background levels cannot be achieved and sets forth criteria to consider where cleanup to background water quality may not be reasonable.

III. The Discharger shall submit site-specific cleanup goals for residential (i.e., unrestricted) land use for the Executive Officer's approval concurrent with the submittal date of the Pilot Test Report. The proposed site-specific cleanup goals shall include detailed technical rationale and assumptions underlying each goal.

IV. Upon approval of the RAP by the Executive Officer, the Discharger shall implement the RAP within 60 days of the issuance of the approval of the RAP.

d. Continue to conduct residential surface and subsurface soil and sub-slab soil vapor sampling under the current Regional Board approved work plan dated September 24, 2009. If the ongoing reinterpretation of new assessment data derived from the tasks described in the work plan suggests that modification or expansion of the tasks proposed in the RAP is necessary for complete cleanup, then the Discharger shall submit addenda to the September 24, 2009 work plan to the Regional Board for review and approval by the Executive Officer no later than 60 days of the date of issuance of this Order.

e. If the ongoing groundwater monitoring and investigation warrants, the Discharger shall:

I. Install new wells in order to complete the groundwater monitoring well network and to fully delineate the impacted groundwater plume, and

II. Prepare a detailed impacted groundwater RAP. The Regional Board will set forth the due date of the groundwater RAP at a later date.

4. **Public Review and Involvement:**

a. Cleanup proposals and RAP submitted to the Regional Board for approval in compliance with the terms of this Order shall be made available to the public for a minimum 30-day period to allow for public review and comment. The Regional Board will consider any comments received before taking final action on a cleanup proposal and RAP.

b. The Discharger shall encourage public participation. The Discharger is required to prepare and submit a Public Participation Plan for review and approval by the Executive Officer, with the goal of having the Regional Board provide the stakeholders and other interested persons with:

I. Information, appropriately targeted to the literacy and translational needs of the community, about the investigation and remedial activities concerning the discharges of waste at the Site; and

II. Periodic, meaningful opportunities to review, comment upon, and to influence investigation and cleanup activities at the Site.

c. Public participation activities shall coincide with key decision making points throughout the process as specified or as directed by the Executive Officer of the Regional Board.

d. The Discharger shall prepare draft environmental documentation evaluating the potential environmental impacts associated with the implementation of the RAP and submit to the Regional Board as directed by the Executive Officer.

5. **Time Schedule:** The Discharger shall submit all required technical work plans and reports by the deadlines stated in this Order, which are summarized in Table 4. As field activities at this Site are in progress, additional technical documents may be required and/or new or revised deadlines for the technical documents may be issued. Therefore, Table 4 may be updated as necessary. The Discharger shall continue any remediation or monitoring activities until such time as the Executive Officer determines that sufficient cleanup has been accomplished to fully comply with this Order.

6. The Regional Board's authorized representative(s) shall be allowed:

a. Entry upon premises where a regulated facility or activity is located, conducted, or where records are stored, under the conditions of this Order;

b. Access to copy any records that are stored under the conditions of this Order;

c. Access to inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

d. The right to photograph, sample, and monitor the Site for the purpose of ensuring compliance with this Order, or as otherwise authorized by the California Water Code.

7. **Contractor/Consultant Qualification:** A California licensed professional civil engineer or geologist, or a certified engineering geologist or hydrogeologist shall conduct or direct the subsurface investigation and cleanup program. All technical documents required by this Order shall be signed by and stamped with the seal of the above-mentioned qualified professionals.

8. This Order is not intended to permit or allow the Discharger to cease any work required by any other Order issued by this Regional Board, nor shall it be used as a reason to stop or redirect any investigation or cleanup or remediation programs ordered by this Regional Board or any other agency. Furthermore, this Order does not exempt the Discharger from compliance with any other laws, regulations, or ordinances which may be applicable, nor does it legalize these waste treatment and disposal facilities, and it leaves unaffected any further restrictions on those facilities which may be contained in other statues or required by other agencies.

9. The Discharger shall submit 30-day advance notice to the Regional Board of any planned changes in name, ownership, or control of the facility; and shall provide 30-day advance notice of any planned physical changes to the Site that may affect compliance with this Order. In the event of a change in ownership or operator, the Discharger also shall provide 30-day advance notice, by letter, to the succeeding owner/operator of the existence of this Order, and shall submit a copy of this advance notice to the Regional Board.

10. Abandonment of any groundwater well(s) at the Site must be approved by and reported to the Executive Officer of the Regional Board at least 14 days in advance. Any groundwater wells removed must be replaced within a reasonable time, at a location approved by the Executive Officer. With written justification, the Executive Officer may approve of the abandonment of groundwater wells without replacement. When a well is removed, all work shall be completed in accordance with California Department of Water Resources Bulletin 74-90, "California Well Standards," Monitoring Well Standards Chapter, Part III, Sections 16-19.

11. The Regional Board, through its Executive Officer or other delegate, may revise this Order as additional information becomes available. Upon request by the Discharger, and for good cause shown, the Executive Officer may defer, delete or extend the date of compliance for any action required of the Discharger under this Order. The authority of the Regional Board, as contained in the California Water Code, to order investigation and cleanup, in addition to that described herein, is in no way limited by this Order.

12. Any person aggrieved by this action of the Regional Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

    http://www.waterboards.ca.gov/public_notices/petitions/water_quality

    or will be provided upon request.

13. Failure to comply with the terms or conditions of this Order may result in imposition of civil liabilities, imposed either administratively by the Regional Board or judicially by the Superior Court in accordance with Sections 13268, 13308, and/or 13350, of the California Water Code, and/or referral to the Attorney General of the State of California.

14. None of the obligations imposed by this Order on the Discharger are intended to constitute a debt, damage claim, penalty or other civil action which should be limited or discharged in a bankruptcy proceeding. All obligations are imposed pursuant to the police powers of the State of California intended to protect the public health, safety, welfare, and environment.

Ordered by: _____ Date: 4-30-15

Deborah J. Smith
Chief Deputy Executive Officer

ATTACHMENTS

FIGURES

Figure 1: Site Vicinity Map
Figure 2: Previous Exploration Location
Figure 3: Proposed Soil Vapor Sampling Locations
Figure 4: Benzene and Methane Concentrations in Soil Vapor
Figure 5a: Carousel Houses Tested as of March 15, 2010
Figure 5b: Residential Methane Screening Results as of March 15, 2010
Figure 5c: Summary of Results of Testing for Benzene Concentrations in Soil Vapor as of March 15, 2010
Figure 5d: Summary of Results of Testing for Non-Benzene Concentrations in Soil Vapor as of March 15, 2010
Figure 5e: Summary of Soil Sampling Results (0-10' Below Surface) as of March 15, 2010
Figure 5f: Methane Concentrations in Soil Vapor at 5 Feet Below Surface as of March 15, 2010
Figure 6: Proposed Groundwater Monitoring Well Locations

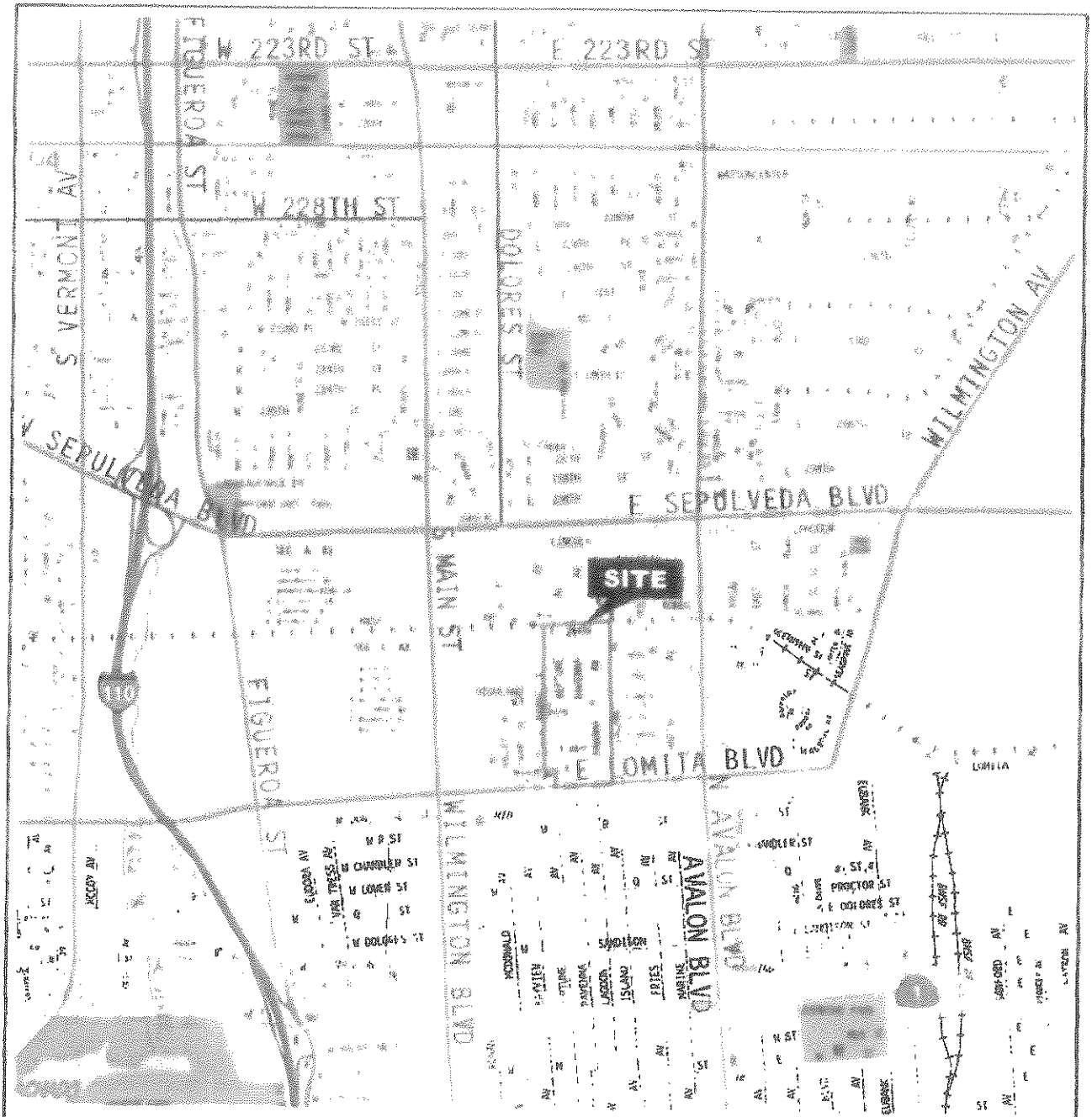
TABLES

Table 1: Data Summary from Phase I and Phase II Site Characterization for Soil and Soil Vapor
Table 2A: Summary of Soil Samples Analytical Results -VOCs, SVOCs, and TPH
Table 2B: Summary of Soil Vapor Analytical Results -VOCS and Fixed Gases
Table 3: Maximum Concentration of Aliphatic and Aromatic Hydrocarbons by Hydrocarbon Fractionations at Individual Properties
Table 4: Deadlines for Technical Work Plans and Reports

EXHIBITS

Exhibit 1: OEHHA's Memorandum dated May 19, 2010
Exhibit 2: Shell Oil Company Letter to the Regional Board dated May 5, 2010

Note: All Figures and Tables, except Table 4, were taken from technical reports prepared by SOPUS's consultant, URS Corporation



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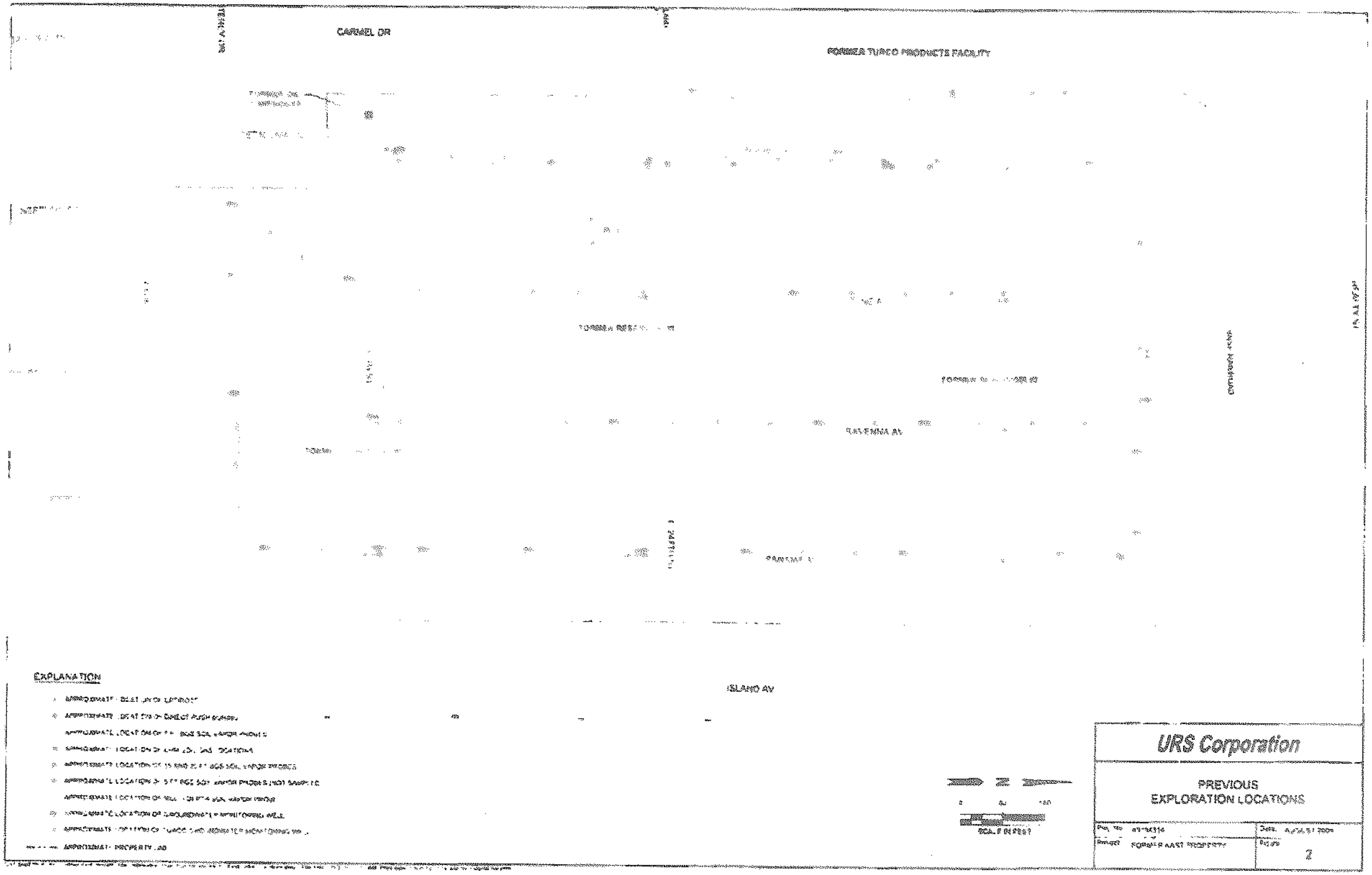
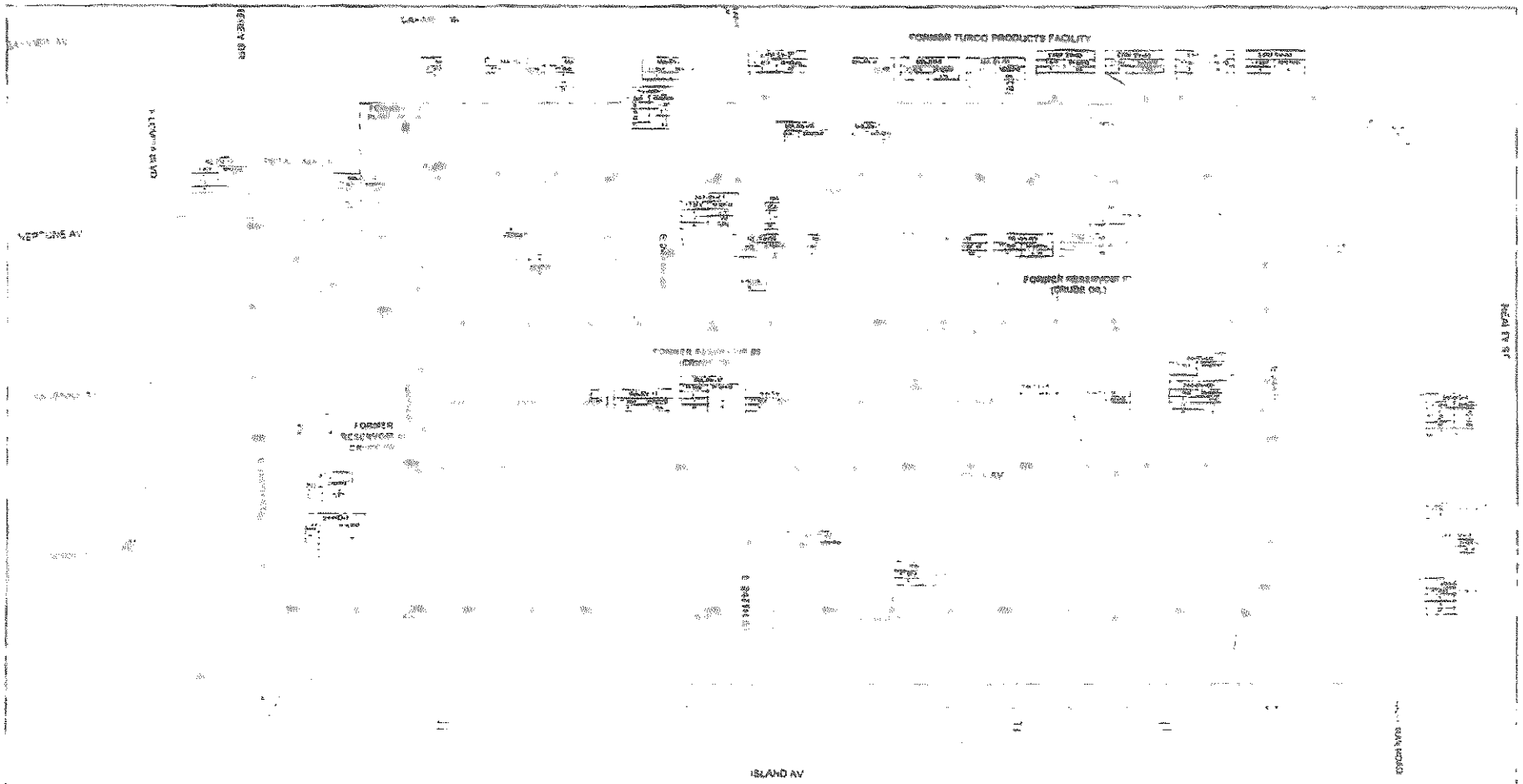
SITE VICINITY MAP

Project No. 49194314	Date. JUNE 2008	Project: Former KAST Property	Figure 1

URS

K:\2008\KAST\Figure 1 Vic Map.ai


CARMEL DR
FORMER TURCO PRODUCTS FACILITY
RAVENNA AV
ISLAND AV
EXPLANATION
URS Corporation
PREVIOUS
EXPLORATION LOCATIONS
2



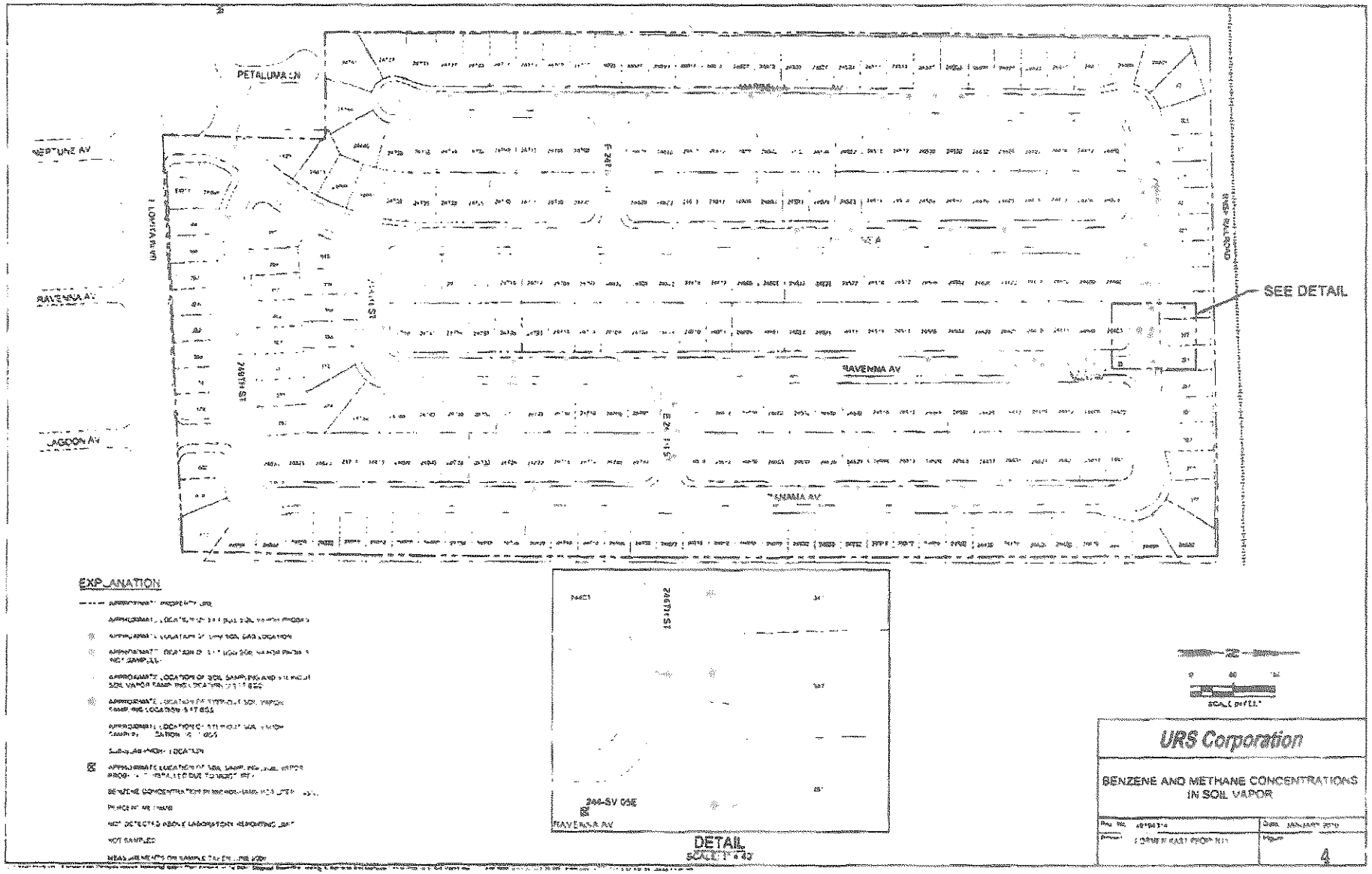
EXPLANATION

URS Corporation

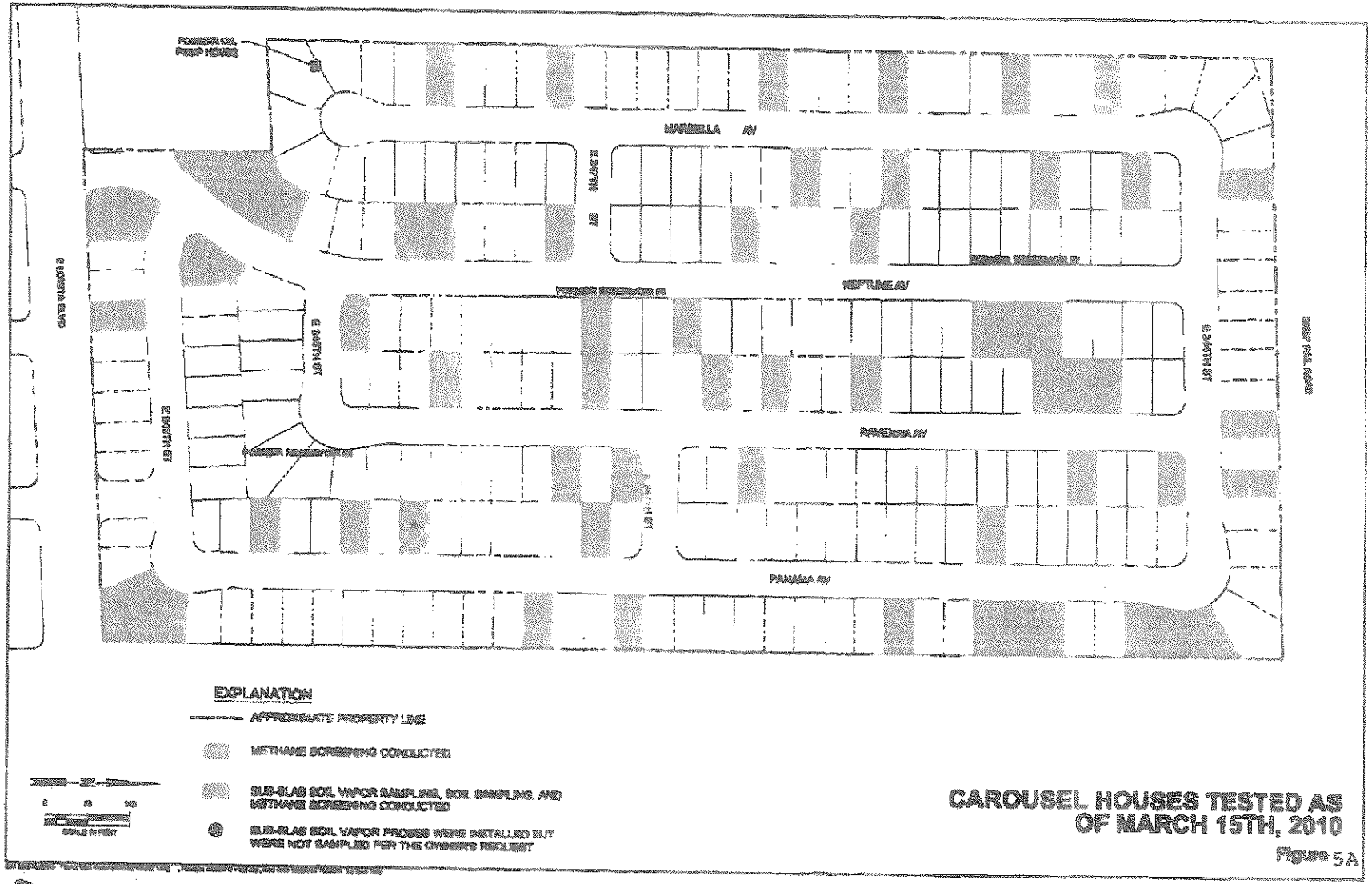
PROPOSED
SOIL VAPOR SAMPLING LOCATIONS

FORMER EAST PROPERTY

3



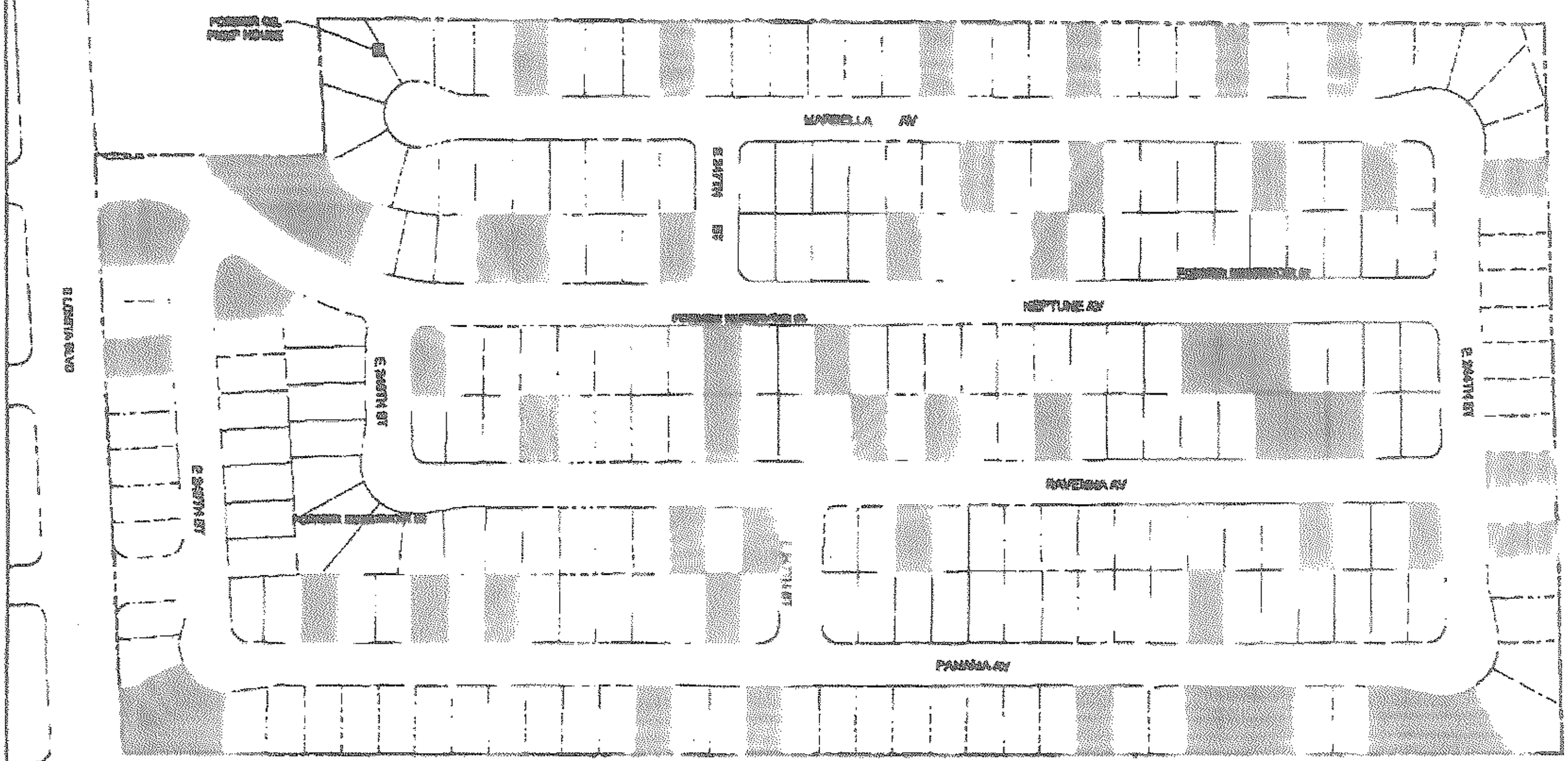
EXPLANATION



CAROUSEL HOUSES TESTED AS OF MARCH 15TH, 2010

Figure 5A

151



EXPLANATION

APPROXIMATE PROPERTY LINE

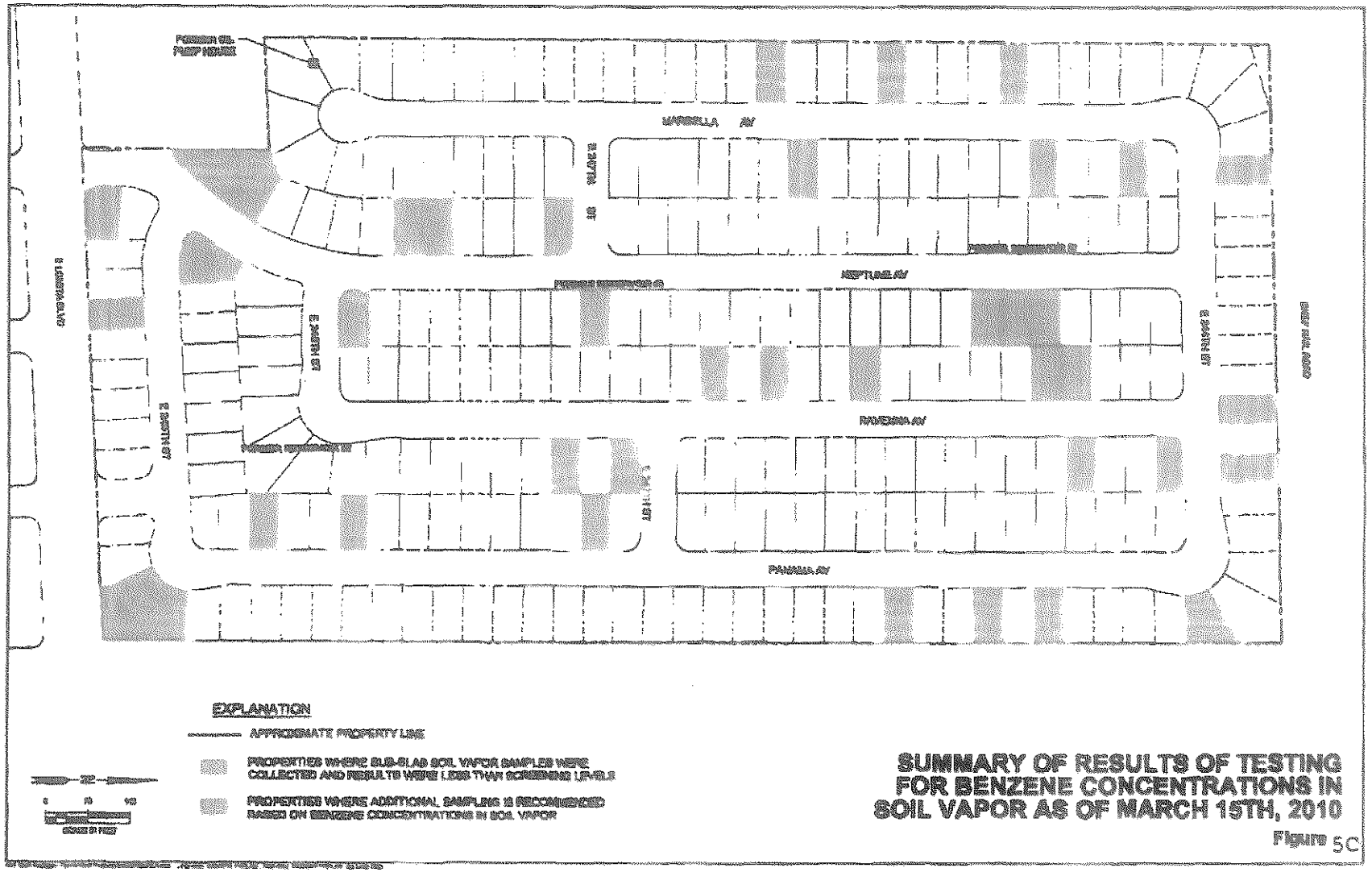
METHANE SCREENING LESS THAN 10% LEL

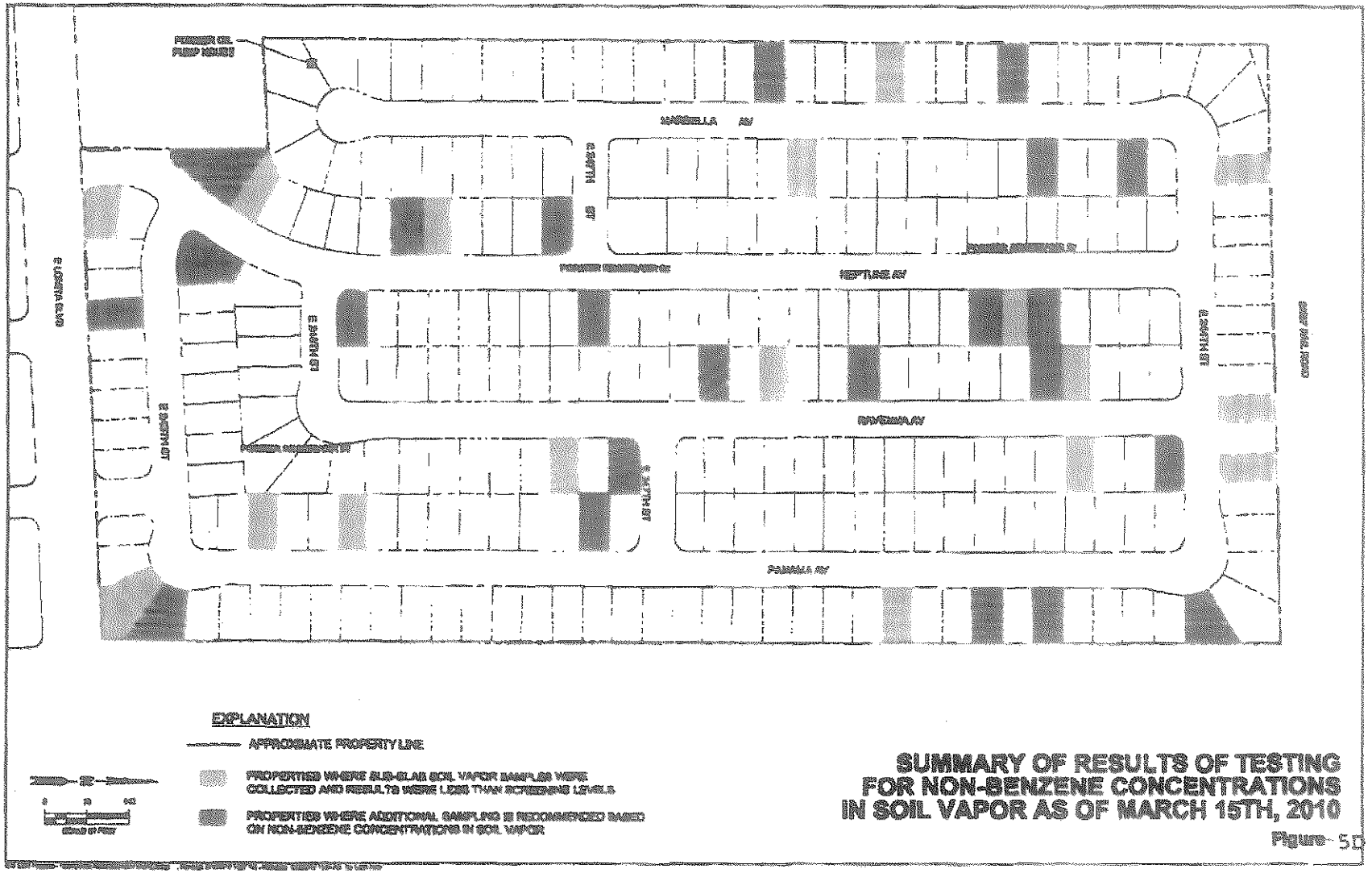
METHANE SCREENING GREATER THAN OR EQUAL TO 10% LEL (NO HOUSES EXCEED 10% LEL FOR METHANE)

RESIDENTIAL METHANE SCREENING RESULTS AS OF MARCH 15TH, 2010

Figure 5B

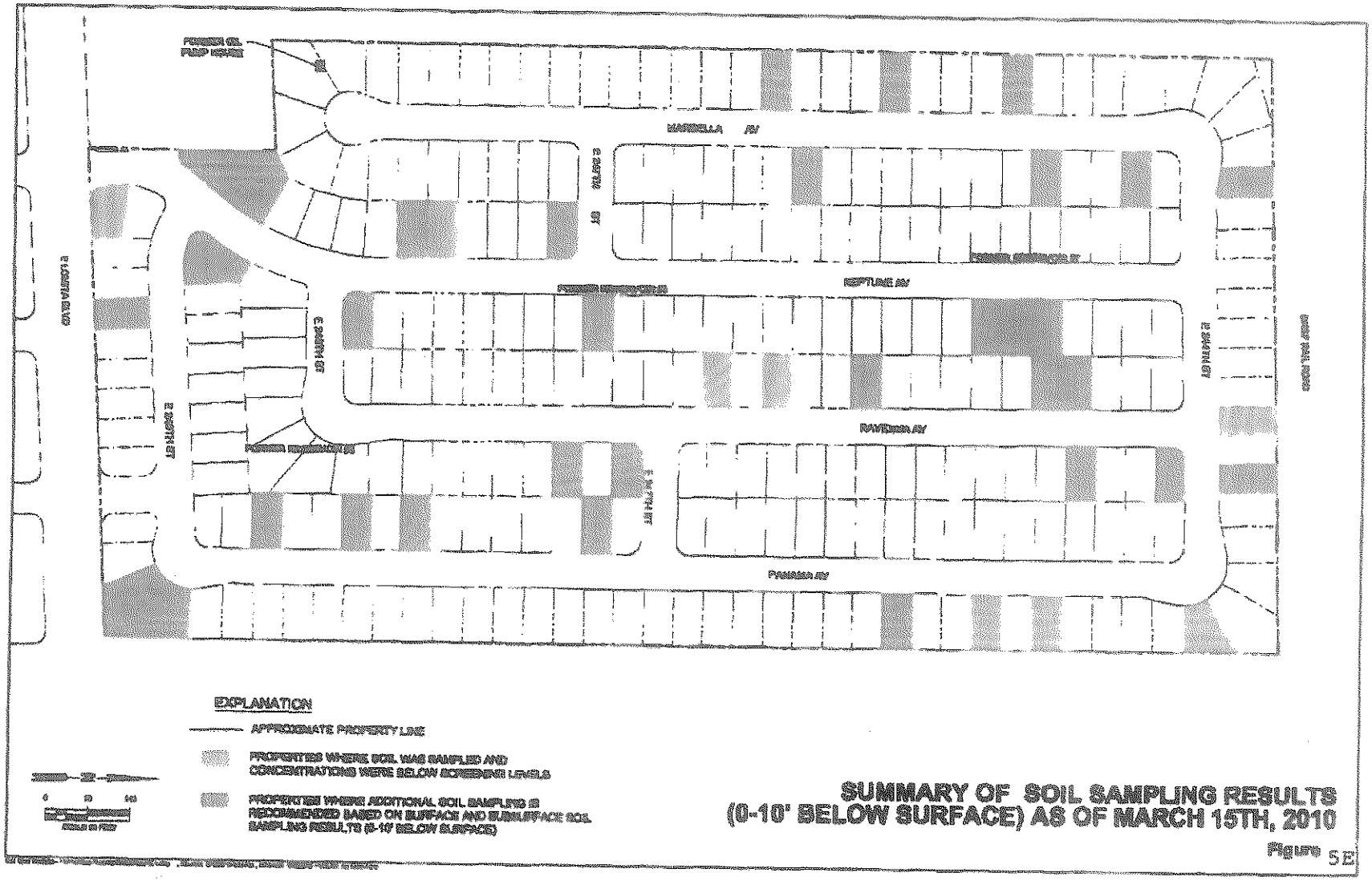
155


EXPLANATION
APPROXIMATE PROPERTY LINE
PROPERTIES WHERE SUB-SLAB SOIL VAPOR SAMPLES WERE COLLECTED AND RESULTS WERE LESS THAN SCREENING LEVELS
PROPERTIES WHERE ADDITIONAL SAMPLING IS RECOMMENDED BASED ON BENZENE CONCENTRATIONS IN SOIL VAPOR
SUMMARY OF RESULTS OF TESTING FOR BENZENE CONCENTRATIONS IN SOIL VAPOR AS OF MARCH 15TH, 2010
Figure 5C



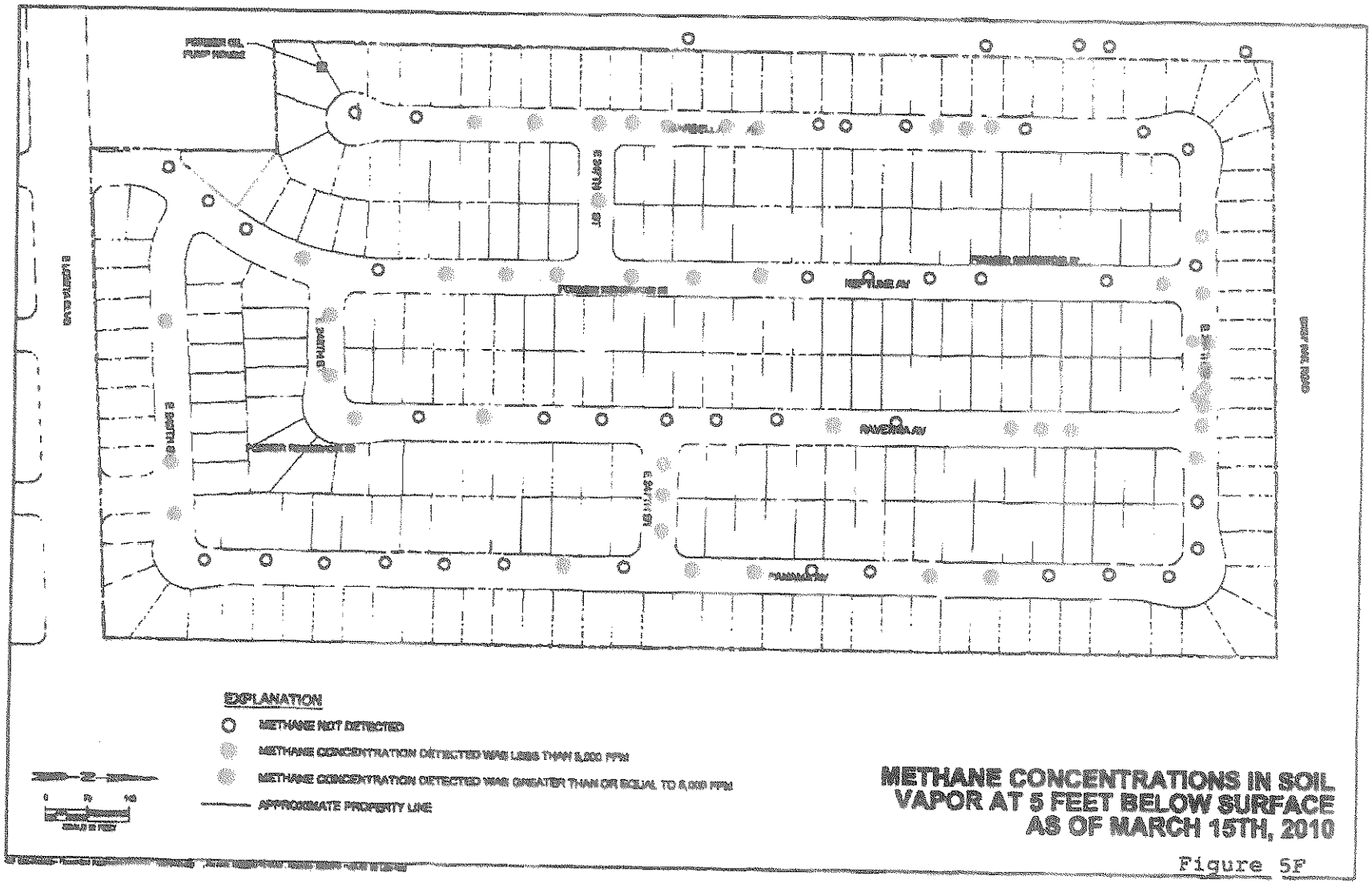
SUMMARY OF RESULTS OF TESTING FOR NON-BENZENE CONCENTRATIONS IN SOIL VAPOR AS OF MARCH 15TH, 2010

Figure 5D



SUMMARY OF SOIL SAMPLING RESULTS (0-10' BELOW SURFACE) AS OF MARCH 15TH, 2010

Figure 5E



METHANE CONCENTRATIONS IN SOIL VAPOR AT 5 FEET BELOW SURFACE AS OF MARCH 15TH, 2010

Figure 5F

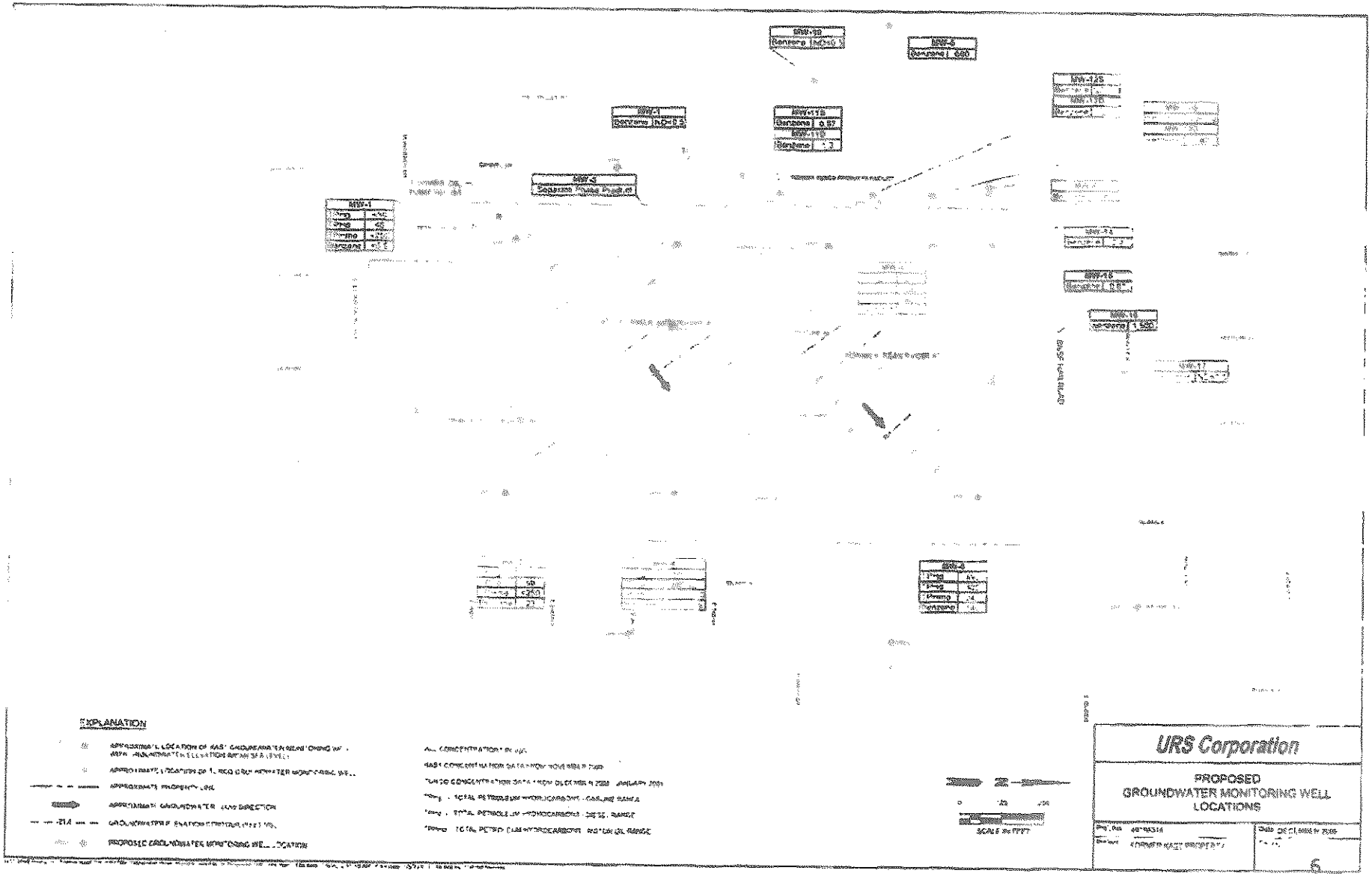

EXPLANATION
SCALE IN FEET
URS Corporation
PROPOSED
GROUNDWATER MONITORING WELL
LOCATIONS
FORMER MAST PROPERTY
6

Table 1. Data Summary - Phase I & II Site Characterization

Medium	Constituents	Phase	Units	% of Sample Detection	5%ile	25%ile	Median	75%ile	95%ile	Maximum Detected Concentration
Soil	Benzene	I	UG/KG	24.0%	ND 0.445	ND 0.5	ND 0.6	ND 110	4600	34000
		II	UG/KG	55.2%	ND 0.13	ND 0.24	0.405	0.48	180	14000
	Benzo (a) Pyrene	I	MG/KG	0%	ND 0.25	ND 0.25	ND 0.25	ND 1.25	ND 2.5	ND
		II	MG/KG	67.2%	ND 0.0025	ND 0.011	0.26	0.25	2.5	3.6
	Naphthalene	I	MG/KG	22.3%	ND 0.00455	ND 0.0055	ND 0.25	ND	14	29
		II	MG/KG	43.5%	0.0015	0.0041	0.013	ND 0.25	4.7	61
	TPH as Diesel	I	MG/KG	39.4%	ND 2.5	ND 2.5	ND 2.5	2700	13000	22000
		II	MG/KG	71.8%	ND 2.5	ND 2.5	70	470	7300	33000
	TPH as Gasoline	I	MG/KG	40.6%	ND 0.11	ND 0.125	ND 0.14	190	4300	8800
		II	MG/KG	43.7%	ND 0.063	ND 0.10	ND 0.10	0.18	660	5500
	TPH as Motor Oil	I	MG/KG	36.0%	ND 12.5	ND 12.5	ND 12.5	3500	11000	21000
		II	MG/KG	74.7%	ND 12.5	ND 12.5	205	930	8900	41000
Soil Vapor	Methane	I	%	55.1%	ND 0.39	ND 0.42	1.35	12.6	50.3	62.6
		II	%	4.1%	ND 0.00011	ND 0.00012	ND 0.00012	ND 0.00012	ND 0.00024	78
	Benzene	I	UG/L	85.1%	ND 0.0016	0.028	0.10	3.3	150	3800
		II	UG/L	27.6%	ND 0.0018	ND 0.0018	ND 0.0019	0.0038	0.013	6.5
	Naphthalene	I	UG/L	3.4%	ND 0.016	ND 0.12	ND 1.1	ND 8.5	ND 46	1.2
		II	UG/L	26.7%	ND 0.0031	ND 0.0115	ND 0.012	0.0125	0.017	0.18

Shaded cells indicate not-detected result. 1/2 Detection limit reported
Phase II investigation reports submitted to Regional Board as of July 19, 2010

Table 1. Data Summary - Phase I & II Site Characterization

Medium	Constituents	Phase	Units	% of Sample Detection	5%ile	25%ile	Median	75%ile	95%ile	Maximum Detected Concentration
Soil	Benzene	I	UG/KG	24.0%	ND 0.445	ND 0.5	ND 0.6	ND 110	4600	34000
		II	UG/KG	55.2%	ND 0.13	ND 0.24	0.405	0.48	180	14000
	Benzo (a) Pyrene	I	MG/KG	0%	ND 0.25	ND 0.25	ND 0.25	ND 1.25	ND 2.5	ND
		II	MG/KG	67.2%	ND 0.0025	ND 0.011	0.25	0.25	2.5	3.6
	Naphthalene	I	MG/KG	22.3%	ND 0.00455	ND 0.0055	ND 0.25	ND	14	29
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	TPH as Motor Oil	I	MG/KG	36.0%	ND 12.5	ND 12.5	ND 12.5	3500	11000	21000
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Soil Vapor	Methane	I	%	55.1%	ND 0.39	ND 0.42	1.35	12.6	50.3	62.6
		II	%	4.1%	ND 0.00011	ND 0.00012	ND 0.00012	ND 0.00012	ND 0.00024	78
	Benzene	I	UG/L	85.1%	ND 0.0016	0.028	0.10	3.3	150	3800
		II	UG/L	27.6%	ND 0.0018	ND 0.0018	ND 0.0019	0.0038	0.013	6.5
	Naphthalene	I	UG/L	3.4%	ND 0.016	ND 0.12	ND 1.1	ND 8.5	ND 46	1.2
		II	UG/L	26.7%	ND 0.0031	ND 0.0115	ND 0.012	0.0125	0.017	0.18

Shaded cells indicate not-detected result. 1/2 Detection limit reported
Phase II investigation reports submitted to Regional Board as of July 19, 2010.

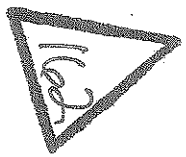

TABLE 1A
Summary of Soil Sample Analytical Results- VOCs, SVOCs, and TPH
Addendum to the IRAP- Further Site Characterization Report
Former Kast Property

LOCATION NAME			244SV05A7	244SV05A7	244SV05A7
SAMPLE DATE			2/2/2010	2/2/2010	2/2/2010
SAMPLE DEPTH, ft bgs			2.5	5	10
SAMPLE NAME			244SV05A7-2.5	244SV05A7-5	244SV05A7-10
SAMPLE DELIVERY GROUP (SDG)	Method	Unit	10-02-0133	10-02-0133	10-02-0133
1,2,4-Trimethylbenzene			14,000	9,700	33,000
1,3,5-Trimethylbenzene			3,300	300	12,000
Acetone			< 4000	< 4200	< 11000
Benzene			11,000	9,600	3,900
Chlorobenzene			< 80	< 85	< 220
cis-1,2-Dichloroethene			< 80	< 85	< 220
Cumene (Isopropylbenzene)			4,000	4,500	6,300
Ethylbenzene			12,000	12,000	19,000
Methyl-tert-Butyl Ether			< 160	< 170	< 440
Naphthalene	SW8260B	µg/kg	7,300	7,200	9,800
n-Butylbenzene			2,800	2,400	5,100
p-Isopropyltoluene			2,500	1,800	5,000
Propylbenzene			6,200	6,800	9,800
sec-Butylbenzene			2,100	2,500	3,500
tert-Butylbenzene			94	120	< 220
Toluene			< 80	< 85	< 220
Vinyl Acetate			< 800	< 850	< 2200
Xylenes, Total			7,300	2,500	56,000
1-Methylnaphthalene			19	9.9	13
2-Methylnaphthalene			28	16	21
Fluorene			< 5.0	< 5.0	< 5.0
Naphthalene	SW8270C	mg/kg	11	7.8	10
Phenanthrene			7.4	< 5.0	< 5.0
Pyrene			< 5.0	< 5.0	< 5.0
TPH as Gasoline	M8015	mg/kg	2,600	2,500	5,000
TPH as Motor Oil	M8015	mg/kg	8,100	6,200	5,700
TPH as Diesel	SW8015B	mg/kg	85,000	6,500	8,600

Notes:

Bold text indicates results above laboratory reporting limit.

µg/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

ft bgs = feet below ground surface

TABLE 1A
Summary of Soil Sample Analytical Results- VOCs, SVOCs, and TPH
Addendum to the IRAP- Further Site Characterization Report
Former Kast Property

LOCATION NAME			244SV05A7	244SV05A7	244SV05A7
SAMPLE DATE			2/2/2010	2/2/2010	2/2/2010
SAMPLE DEPTH, ft bgs			2.5	5	10
SAMPLE NAME			244SV05A7-2.5	244SV05A7-5	244SV05A7-10
SAMPLE DELIVERY GROUP (SDG)	Method	Unit	10-02-0133	10-02-0133	10-02-0133
1,2,4-Trimethylbenzene	SW8260B	µg/kg	14,000	9,700	33,000
1,3,5-Trimethylbenzene			3,300	300	12,000
Acetone			< 4000	< 4200	< 11000
Benzene			11,000	9,600	3,900
Chlorobenzene			< 80	< 85	< 220
cis-1,2-Dichloroethene			< 80	< 85	< 220
Cumene (Isopropylbenzene)			4,000	4,500	6,300
Ethylbenzene			12,000	12,000	19,000
Methyl-tert-Butyl Ether			< 160	< 170	< 440
Naphthalene			7,300	7,200	9,800
n-Butylbenzene			2,800	2,400	5,100
p-Isopropyltoluene			2,500	1,800	6,000
Propylbenzene			6,200	6,800	9,800
sec-Butylbenzene			2,100	2,500	3,500
tert-Butylbenzene			94	120	< 220
Toluene			< 80	< 85	< 220
Vinyl Acetate			< 800	< 850	< 2200
Xylenes, Total			7,300	2,500	56,000
1-Methylnaphthalene	SW8270C	mg/kg	19	9.9	13
2-Methylnaphthalene			28	16	21
Fluorene			< 5.0	< 5.0	< 5.0
Naphthalene			11	7.8	10
Phenanthrene			7.4	< 5.0	< 5.0
Pyrene			< 5.0	< 5.0	< 5.0
TPH as Gasoline	M8015	mg/kg	2,500	2,500	5,000
TPH as Motor Oil	M8015	mg/kg	8,100	6,200	5,700
TPH as Diesel	SW8015B	mg/kg	86,000	6,500	5,600

Notes:

Bold text indicates results above laboratory reporting limit

µg/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

ft bgs = feet below ground surface

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TABLE 2
Summary of Soil Vapor Analytical Results - VOCs and Fixed Gases
IRAP Further Site Characterization
Former Kast Property

LOCATION NAME			244-SV-05A5	244-SV-05A6	244-SV-05A7
SAMPLE DATE			2/4/2010	2/4/2010	2/4/2010
SAMPLE DEPTH, FT BGS			2.5	5	10
SAMPLE NAME			244-SV05A5-2.5	244-SV05A6-5	244-SV05A7-10
SAMPLE DELIVERY GROUP (SDG)	Method	Unit	1002129A/B	1002129A/B	1002129A/B
1,2,4-Trimethylbenzene	TO15	UG/M3	18000	< 2800	31000
1,3,5-Trimethylbenzene			< 6200	< 2800	8800
4-Ethyltoluene			17000	< 2800	20000
Benzene			390000 j	430000 j	630000
Cumene (Isopropylbenzene)			7600	8200	14000
Cyclohexane			1800000 j	470000 j	2700000 E
Ethylbenzene			50000	44000	85000
Heptane			1000000 j	< 2400	120000
Hexane			1500000 j	3300 j	250000
Naphthalene			590 J b	760 J b	1300 J b
o-Xylene			20000	< 2500	< 4900
p/m-Xylene			110000	< 2500	120000
Propylbenzene			8400	9300	15000
Toluene			33000	< 2200	< 4200
Carbon Dioxide	D1946	%	5.2	0.89	11
Methane			23	0.086	25
Oxygen			4.5	20	7.3

Notes:

Bold text indicates results above laboratory reporting limit.

ug/m^3 = micrograms per cubic meter

% = percent

B = Compound detected in associated laboratory method blank (laboratory qualified)

J = Estimated value (laboratory qualified)

b = Compound detected in associated laboratory method blank (qualified during validation)

j = Estimated value (qualified during validation as the result is possibly biased high)

E = Estimated value. Result exceeded instrument calibration range during analysis

FT BGS = Feet below ground surface

Table 3

Maximum Concentrations of Aliphatic and Aromatic Hydrocarbons by Hydrocarbon Fractionation at Individual Properties

Street Name	House No	Units	Aliphatics (C5 - C8)	Aromatics (C5 - C8)	Aliphatics (C9 - C18)	Aromatics (C9 - C16)	Aliphatics (C19 - C32)	Aromatics (C17 - C32)
244TH ST	351	MG/KG	ND	ND	ND	ND	46	26
244TH ST	361	MG/KG	ND	ND	ND	ND	30	29
249TH ST	345	MG/KG	0.84	ND	140	300	220	240
249TH ST	352	MG/KG	ND	ND	ND	17	48	59
249TH ST	412	MG/KG	ND	0.014	ND	39	80	71
MARBELLA AVE	24412	MG/KG	2300	2	4100	2400	3100	4400
MARBELLA AVE	24426	MG/KG	2.2	0.1	220	240	340	210
MARBELLA AVE	24433	MG/KG	ND	ND	1300	6800	7200	6000
MARBELLA AVE	24517	MG/KG	ND	ND	ND	15	12	27
MARBELLA AVE	24532	MG/KG	350	54	1000	1200	1900	1600
MARBELLA AVE	24603	MG/KG	2	0.056	980	2400	1300	2000
NEPTUNE AVE	24422	MG/KG	1.4	ND	79	170	190	180
NEPTUNE AVE	24426	MG/KG	ND	ND	37	63	99	92
NEPTUNE AVE	24502	MG/KG	0.64	ND	32	72	94	110
NEPTUNE AVE	24632	MG/KG	ND	ND	51	220	300	420
NEPTUNE AVE	24703	MG/KG	68	2.5	1100	2500	2000	2300
NEPTUNE AVE	24725	MG/KG	ND	ND	ND	ND	ND	ND
NEPTUNE AVE	24729	MG/KG	ND	ND	ND	ND	37	35
NEPTUNE AVE	24738	MG/KG	710	130	2100	2000	1900	1300
NEPTUNE AVE	24815	MG/KG	ND	ND	ND	ND	100	54
NEPTUNE AVE	24825	MG/KG	ND	ND	ND	22	84	160
NEPTUNE AVE	24912	MG/KG	ND	ND	ND	ND	12	10
PANAMA AVE	24406	MG/KG	ND	ND	ND	56	260	250
PANAMA AVE	24430	MG/KG	ND	ND	ND	ND	ND	ND
PANAMA AVE	24502	MG/KG	ND	ND	ND	ND	ND	ND
PANAMA AVE	24518	MG/KG	ND	ND	17	48	110	130
PANAMA AVE	24709	MG/KG	2.8	1.1	1100	6100	5100	7200
PANAMA AVE	24739	MG/KG	5.9	0.25	14	240	96	250
PANAMA AVE	24809	MG/KG	53	3.8	220	520	440	570
PANAMA AVE	24823	MG/KG	210	ND	610	540	560	1000
PANAMA AVE	24838	MG/KG	ND	ND	ND	22	96	130
RAVENNA AVE	24402	MG/KG	680	60	680	630	920	730
RAVENNA AVE	24416	MG/KG	3.8	0.32	640	1500	2000	1900
RAVENNA AVE	24419	MG/KG	1.2	0.07	280	510	790	890
RAVENNA AVE	24423	MG/KG	780	23	820	830	700	600
RAVENNA AVE	24523	MG/KG	2.4	0.16	100	250	210	290
RAVENNA AVE	24603	MG/KG	ND	ND	ND	ND	15	ND
RAVENNA AVE	24613	MG/KG	76	ND	500	340	590	760
RAVENNA AVE	24700	MG/KG	ND	ND	16	67	340	410
RAVENNA AVE	24712	MG/KG	1.1	0.013	140	130	240	360

Note: The concentrations shown are the maximum concentration detected at each property.

The maximum concentration of aliphatic or aromatic hydrocarbons in a particular carbon-chain range may not occur in the same sample as the maximum concentrations in a different carbon-chain range.

Table 4: Target Schedule

Task	Estimated Start Date	Target Completion Date	Schedule (on, ahead or behind)	Comments
Pilot Testing Work Plan	03/11/11	05/10/11		Within 60 days of the issuance of the CAO
Regional Board review of Pilot Testing Work Plan	05/11/11	07/11/11		Regional Board reviews Report and issues Response and approval
Pilot Test Report	07/12/11	11/07/11		Final Report due within 120 days with a bi monthly progress reporting
Environmental Impact Assessment (EIA) Report	NA	12/07/11		Within 30 days of the completion of the Pilot Testing Report
Regional Board Review of Pilot Test and EIA Reports	11/08/11	01/09/12		Review of Piolot Test & EIA Reports and Response
Site- Specific Cleanup Goals (SSCG)	NA	11/07/11		Due date is concurrent with the Pilot Test Report due date.
30 day Public Review of SSCG	11/08/11	12/08/11		
Remedial Action Plan (RAP)	01/11/12	03/11/12		Within 30 days of the completion of the Pilot Testing Report
30 day Public Review of RAP	03/12/12	04/12/12		
Regional Board Review of Remedial Action Plan	04/13/12	06/13/12		
Implementation of RAP	06/20/12			
Groundwater Monitoring and Reporting	On going			Quarterly Monitoring Program

Notes: (1) Dates are considered estimates and subject to revision in response to evolving field conditions and potential weather-related delays.
(2) Project schedule reconciled/updated at the end of each calendar month.

Exhibit 1

Office of Environmental Health Hazard Assessment

Joan E. Denton, Ph.D., Director
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Mailing Address: P.O. Box 4010 • Sacramento, California 95812-4010
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Linda S. Adams
Secretary for Environmental Protection

Arnold Schwarzenegger
Governor

MEMORANDUM

TO: Dr. Teklewold Ayalew
Engineering Geologist
Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013

FROM: James C. Carlisle, D.V.M., M.Sc.,
Lead Staff Toxicologist
Integrated Risk Assessment Branch

DATE: May 19, 2010

SUBJECT: TPH DATA FOR 41 HOMES AT THE FORMER KAST SITE IN CARSON, CA (R4-09-17) OEHHA # 880212-01

Document reviewed

- Memo: "Kast TPH Data for 41 homes" dated April 6, 2010.

Site characterization

- Analytical data for TPH in soils data are supplied for 41 homes. Sample depths are not always stated but those that are provided are either 0.5 or 5 feet.

Hazard Assessment

Based on the data in the memo, I estimated maximum exposures for a child and compared the resulting exposure estimates to DTSC reference dosages (RfDs).

- In the table below, columns 3-8 show the maximum TPH concentrations detected at each property.
- Columns 9-14 show the corresponding TPH ingestion by a 15 kg child ingesting 200 mg soil per day.
- Columns 15-20 show the corresponding hazard quotients for a 15 kg child, obtained by dividing the daily ingestion by the reference dose. Hazard quotients exceeding unity are in bold font.

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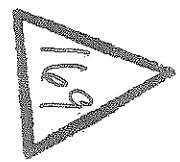
Street Name	House No	Aliphatics (C5 - C8)	Aromatics (C6 - C8)	Aliphatics (C9 – C18)	Aromatics (C9 - C16)	Aliphatics (C19 - C32)	Aromatics (C17 - C32)	Aliphatics (C5 - C8)	Aromatics (C6 - C8)	Aliphatics (C9 - C18)	Aromatics (C9 - C16)	Aliphatics (C19 - C32)	Aromatics (C17 - C32)	Aliphatics (C5 - C8)	Aromatics (C6 - C8)	Aliphatics (C9 - C18)	Aromatics (C9 - C16)	Aliphatics (C19 - C32)	Aromatics (C17 - C32)
		Detected concentrations (mg/kg)						Estimated child dose (mg/kg/day)						Hazard ratio (child)					
244TH ST	351	ND	ND	ND	ND	46	26					6.1E-4	3.5E-4	0.0E+0	*	0.0E+0	0.0E+0	3.1E-4	1.2E-2
244TH ST	361	ND	ND	ND	ND	30	29					4.0E-4	3.9E-4	0.0E+0	*	0.0E+0	0.0E+0	2.0E-4	1.3E-2
249TH ST	345	0.84	ND	140	300	220	240	1.1E-5		1.9E-3	4.0E-3	2.9E-3	3.2E-3	2.8E-4	*	1.9E-2	1.3E-1	1.5E-3	1.1E-1
249TH ST	352	ND	ND	ND	17	48	59				2.3E-4	6.4E-4	7.9E-4	0.0E+0	*	0.0E+0	7.6E-3	3.2E-4	2.6E-2
249TH ST	412	ND	0.014	ND	39	80	71				5.2E-4	1.1E-3	9.5E-4	0.0E+0	*	0.0E+0	1.7E-2	5.3E-4	3.2E-2
MARBELLA AVE	24412	2300	2	4100	2400	3100	4400	3.1E-2	2.7E-5	5.5E-2	3.2E-2	4.1E-2	5.9E-2	7.7E-1	*	5.5E-1	1.1	2.1E-2	2.0
MARBELLA AVE	24426	2.2	0.1	220	240	340	210	2.9E-5	1.3E-6	2.9E-3	3.2E-3	4.5E-3	2.8E-3	7.3E-4	*	2.9E-2	1.1E-1	2.3E-3	9.3E-2
MARBELLA AVE	24433	ND	ND	1300	6800	7200	6000			1.7E-2	9.1E-2	9.6E-2	8.0E-2	0.0E+0	*	1.7E-1	3.0	4.8E-2	2.7
MARBELLA AVE	24517	ND	ND	ND	15	12	27				2.0E-4	1.6E-4	3.6E-4	0.0E+0	*	0.0E+0	6.7E-3	8.0E-5	1.2E-2
MARBELLA AVE	24532	350	54	1000	1200	1900	1600	4.7E-3	7.2E-4	1.3E-2	1.6E-2	2.5E-2	2.1E-2	1.2E-1	*	1.3E-1	5.3E-1	1.3E-2	7.1E-1
MARBELLA AVE	24603	2	0.058	980	2400	1300	2000	2.7E-5	7.7E-7	1.3E-2	3.2E-2	1.7E-2	2.7E-2	6.7E-4	*	1.3E-1	1.1	8.7E-3	8.9E-1
NEPTUNE AVE	24422	1.4	ND	79	170	190	180	1.9E-5		1.1E-3	2.3E-3	2.5E-3	2.4E-3	4.7E-4	*	1.1E-2	7.6E-2	1.3E-3	8.0E-2
NEPTUNE AVE	24426	ND	ND	37	63	99	92			4.9E-4	8.4E-4	1.3E-3	1.2E-3	0.0E+0	*	4.9E-3	2.8E-2	6.6E-4	4.1E-2
NEPTUNE AVE	24502	0.64	ND	32	72	94	110	8.5E-6		4.3E-4	9.6E-4	1.3E-3	1.5E-3	2.1E-4	*	4.3E-3	3.2E-2	6.3E-4	4.9E-2
NEPTUNE AVE	24632	ND	ND	51	220	300	420			6.8E-4	2.9E-3	4.0E-3	5.6E-3	0.0E+0	*	6.8E-3	9.8E-2	2.0E-3	1.9E-1
NEPTUNE AVE	24703	68	2.5	1100	2500	2000	2300	9.1E-4	3.3E-5	1.5E-2	3.3E-2	2.7E-2	3.1E-2	2.3E-2	*	1.5E-1	1.1	1.3E-2	1.02
NEPTUNE AVE	24725	ND	ND	ND	ND	NO	ND							0.0E+0	*	0.0E+0	0.0E+0	0.0E+0	0.0E+0
NEPTUNE AVE	24729	ND	ND	ND	ND	37	35					4.9E-4	4.7E-4	0.0E+0	*	0.0E+0	0.0E+0	2.5E-4	1.6E-2
NEPTUNE AVE	24738	710	130	2100	2000	1900	1300	9.5E-3	1.7E-3	2.8E-2	2.7E-2	2.5E-2	1.7E-2	2.4E-1	*	2.8E-1	8.9E-1	1.3E-2	5.8E-1
NEPTUNE AVE	24815	ND	NO	ND	ND	100	54					1.3E-3	7.2E-4	0.0E+0	*	0.0E+0	0.0E+0	6.7E-4	2.4E-2
NEPTUNE AVE	24825	ND	ND	ND	22	84	160				2.9E-4	1.1E-3	2.1E-3	0.0E+0	*	0.0E+0	9.8E-3	5.6E-4	7.1E-2
NEPTUNE AVE	24912	ND	ND	ND	ND	12	10					1.6E-4	1.3E-4	0.0E+0	*	0.0E+0	0.0E+0	8.0E-5	4.4E-3
PANAMA AVE	24406	ND	ND	ND	56	260	250				7.5E-4	3.5E-3	3.3E-3	0.0E+0	*	0.0E+0	2.5E-2	1.7E-3	1.1E-1
PANAMA AVE	24430	ND	ND	ND	ND	ND	ND							0.0E+0	*	0.0E+0	0.0E+0	0.0E+0	0.0E+0
PANAMA AVE	24502	ND	ND	ND	ND	ND	ND							0.0E+0	*	0.0E+0	0.0E+0	0.0E+0	0.0E+0
PANAMA AVE	24518	ND	ND	17	48	110	130			2.3E-4	6.4E-4	1.5E-3	1.7E-3	0.0E+0	*	2.3E-3	2.1E-2	7.3E-4	5.8E-2
PANAMA AVE	24709	2.8	1.1	1100	6100	5100	7200	3.7E-5	1.5E-5	1.3E-2	8.1E-2	6.8E-2	9.6E-2	9.3E-4	*	1.5E-1	2.7	3.4E-2	3.2
PANAMA AVE	24739	5.9	0.25	14	240	96	250	7.9E-5	3.3E-6	1.9E-4	3.2E-3	1.3E-3	3.3E-3	2.0E-3	*	1.9E-3	1.1E-1	6.4E-4	1.1E-1
PANAMA AVE	24809	53	3.8	220	520	440	570	7.1E-4	5.1E-5	2.9E-3	6.9E-3	5.9E-3	7.6E-3	1.8E-2	*	2.9E-2	2.3E-1	2.9E-3	2.5E-1



PANAMA AVE	24823	210	ND	610	540	560	1000	2.8E-3		8.1E-3	7.2E-3	7.5E-3	1.3E-2	7.0E-2	*	8.1E-2	2.4E-1	3.7E-3	4.4E-1
PANAMA AVE	24838	ND	ND	ND	22	96	130				2.9E-4	1.3E-3	1.7E-3	0.0E+0	*	0.0E+0	9.8E-3	6.4E-4	5.8E-2
RAVENNA AVE	24402	680	60	680	630	920	730	9.1E-3	8.0E-4	9.1E-3	8.4E-3	1.2E-2	9.7E-3	2.3E-1	*	9.1E-2	2.8E-1	6.1E-3	3.2E-1
RAVENNA AVE	24416	3.8	0.32	640	1500	2000	1900	5.1E-5	4.3E-6	8.5E-3	2.0E-2	2.7E-2	2.5E-2	1.3E-3	*	8.5E-2	6.7E-1	1.3E-2	8.4E-1
RAVENNA AVE	24419	1.2	0.07	280	510	790	890	1.6E-5	9.3E-7	3.7E-3	6.8E-3	1.1E-2	1.2E-2	4.0E-4	*	3.7E-2	2.3E-1	5.3E-3	4.0E-1
RAVENNA AVE	24423	780	23	820	830	700	600	1.0E-2	3.1E-4	1.1E-2	1.1E-2	9.3E-3	8.0E-3	2.6E-1	*	1.1E-1	3.7E-1	4.7E-3	2.7E-1
RAVENNA AVE	24523	2.4	0.16	100	250	210	290	3.2E-5	2.1E-6	1.3E-3	3.3E-3	2.8E-3	3.9E-3	8.0E-4	*	1.3E-2	1.1E-1	1.4E-3	1.3E-1
RAVENNA AVE	24603	ND	ND	ND	ND	15	ND					2.0E-4		0.0E+0	*	0.0E+0	0.0E+0	1.0E-4	0.0E+0
RAVENNA AVE	24613	76	ND	500	340	590	760	1.0E-3		6.7E-3	4.5E-3	7.9E-3	1.0E-2	2.5E-2	*	6.7E-2	1.5E-1	3.9E-3	3.4E-1
RAVENNA AVE	24700	ND	ND	15	67	340	410			2.0E-4	8.9E-4	4.5E-3	5.5E-3	0.0E+0	*	2.0E-3	3.0E-2	2.3E-3	1.8E-1
RAVENNA AVE	24712	1.1	0.013	140	130	240	360	1.5E-5	1.7E-7	1.9E-3	1.7E-3	3.2E-3	4.8E-3	3.7E-4	*	1.9E-2	5.8E-2	1.6E-3	1.6E-1
RfD								0.04		0.1	0.03	2	0.03	* = No RfD					

- Aromatic hydrocarbons in the C-9 to C-32 range at 24412, 24433, and 24603 Marbella Avenue, 24709 Panama Avenue, and 24703 Panama Neptune exceed their reference values for children (i.e. the hazard quotient is ≥ 1.
- While a hazard quotient ≥ 1does not indicate that there will be definite toxic effects, it does indicate that the concentration exceeds the level that we can say is definitely safe.

Conclusions

- Aromatic hydrocarbons in the C-9 to C-32 range at five properties exceed their reference values for children (i.e. the hazard quotient is ≥ 1).

If you have any questions, do not hesitate to call or e-mail me at 916-323-2635 or JCarlisle@OEHHA.CA.gov, respectively.

Memo reviewed by:

Ned Butler, PhD
Staff Toxicologist
Integrated Risk Assessment Branch

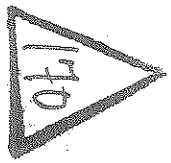


Exhibit 2

Shell Oil Company
One Shell Plaza
910 Louisiana Street
Houston, TX 77002
Tel (713) 241 5126
Email: ed.platt@shell.com
Internet http://www.shell.com

May 5, 2010

Ms. Tracy Egoscue
Executive Officer
California Regional Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Reference: Former Kast Property, Carson, California
Site Cleanup No. 1230; Site ID 2040330

Dear Ms Egoscue:

As you know, during the past several months, Shell Oil Company employees and contractors have worked tirelessly to investigate and address the environmental issues at the former Kast Property. To date, we have sampled at approximately one-third of the homes in the Carousel neighborhood, and we will continue our work in conjunction with the RWQCB, based upon applicable and appropriate scientific and regulatory standards that are protective of human health and the environment. Like the RWQCB, our goal is to protect the residents of the Carousel neighborhood and address the environmental issues, while minimizing disruption to residents and preserving the integrity of the community.

Although elevated levels of compounds of concern (COCs) have been found beneath the streets and at certain residential properties, based on the data collected so far, there is no imminent risk to residents or the public in the Carousel neighborhood. Also, while Shell's investigation is not yet complete, it does not appear at this time that there is any significant off-site migration of soil impacts or soil vapor impacts from the former Kast Property.

Our approach, which is to develop a coherent conceptual framework for the mitigation and remediation of the Carousel neighborhood, is consistent with the RWQCB's guidelines providing for a principled, phased approach to investigating and remediating environmental impacts Specifically, this approach follows the guidance set out in the State Water Resources Control Board's Resolution 92-49. In accordance with these guidelines, it includes "an evaluation of cleanup alternatives that are feasible at the site" and consistent with the maximum benefit to the people of the State. Because the soil and groundwater assessment is ongoing, a full evaluation of cleanup alternatives is premature at this time.

Nevertheless, we are considering a variety of potential alternatives that can be applied at specific properties and in the public streets in order to address environmental impacts and avoid any significant risk to human health in the Carousel neighborhood. For example, Shell has submitted a work plan for the soil vapor extraction pilot test. While evaluating alternatives, we place a priority on keeping the community intact and minimizing any disruption to residents of the Carousel community If it becomes necessary for residents to relocate temporarily to perform this work, Shell will take appropriate steps to minimize any inconvenience and compensate them for any resulting expenses. We are also sensitive to the residents' concerns about their property values and are open to a dialogue with the RWQCB regarding these issues.

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In addition, Shell is continuing to monitor the groundwater to ensure that there are no significant impacts emanating from the former Kast Property. In this regard, it is essential that groundwater conditions both up-gradient and down-gradient be evaluated. To date, our investigation suggests that groundwater up-gradient of the former Kast property is significantly contaminated. One potential source of this contamination appears to be the former Fletcher Oil Refinery, which we understand the County Sanitation District is remediating.

We look forward to further dialogue with the RWQCB regarding the draft Feasibility Study outline, recently submitted, as well as the Site Conceptual Model, to be submitted later this month. The Site Conceptual Model will provide: (1) an overview of our investigation efforts to date; (2) additional information regarding potential on and off-site sources for the COCs; and (3) a review of the available options for remediation of the former Kast property.

We appreciate your leadership on this project.

Sincerely,

William E. Platt
Manager, Environmental Claims
Shell Oil Company

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EXHIBIT B

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

CLEANUP AND ABATEMENT ORDER NO. R4-2011-0046
REQUIRING

SHELL OIL COMPANY

TO CLEANUP AND ABATE WASTE
DISCHARGED TO WATERS OF THE STATE
PURSUANT TO CALIFORNIA WATER CODE SECTION 13304[1]
AT THE FORMER KAST PROPERTY TANK FARM,
CARSON, CALIFORNIA

(FILE NO. 97-043)

Cleanup and Abatement Order No. R4-2011-0046 (Order) requires Shell Oil Company (hereinafter, the "Discharger") to assess, monitor, and cleanup and abate the effects of petroleum hydrocarbon compounds and other contaminants of concern discharged to soil and groundwater at their former Kast Property Tank Farm facility (hereinafter, the "Site") located southeast of the intersection of Marbella Avenue and East 244th Street, in Carson, California.

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) herein finds:

BACKGROUND

1. **Discharger:** Shell Oil Company (SOC), previously Shell Company of California, is a Responsible Party (RP) due to its: (a) ownership of the former Kast Property Tank Farm, and (b) former operation of a petroleum hydrocarbon tank farm at the Site. The Discharger has caused or permitted waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and has created a condition of pollution or nuisance.

2. **Location:** The Site is located southeast of the intersection of Marbella Avenue and East 244th Street in the City of Carson, California. The Site occupies approximately 44 acres of land and is bordered by the Los Angeles County Metropolitan Transportation Authority railroad right-of-way on the north, Lomita Boulevard on the south, Marbella Avenue on the west, and Panama Avenue on the east (Figure 1). The Site was previously owned by the Discharger, who operated three oil storage reservoirs from the 1920s to the mid-1960s. The central and southern reservoirs each had a capacity of 750,000 barrels of oil and the northernmost reservoir had a capacity of 2,000,000 barrels of oil. The Site presently consists of the Carousel residential neighborhood and city streets.

[1] Water Code section 13304 (a) states: Any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts.

3. **Groundwater Basin:** The Site is located on the Torrance Plain of the West Coast Groundwater Basin (Basin), in the southwestern part of the Coastal Plain of Los Angeles County. Beneath the Site, the first encountered groundwater is estimated at 54 feet below ground surface (bgs). The Basin is underlain by a series of aquifers, the deeper of which are used for drinking water production. These aquifers are with increasing depth, the Gage aquifer, Lynwood aquifer, and Silverado aquifer. The nearest municipal water supply well is located approximately 400 feet west of the Site. As set forth in the *Water Quality Control Plan for the Los Angeles Region* (the Basin Plan), adopted on June 13, 1994, the Regional Board has designated beneficial uses for groundwater (among which include municipal and domestic drinking water supplies) in the West Coast Basin and has established water quality objectives for the protection of these beneficial uses.

4. As detailed in the findings below, the Discharger's activities at the Site have caused or permitted the discharge of waste resulting in soil, soil vapor, and groundwater pollution, including discharges of waste to the waters of the state, and nuisance.

SITE HISTORY

5. **Property Ownership and Leasehold Information:** Based on information submitted to the Regional Board by the Discharger, the Site has the following property ownership and leasehold history:

    a. According to the Sanborn maps dated 1924 and 1925, the Site was owned and operated by "Shell Company of California (Kast Property)" beginning in approximately 1924 until the mid-1960s. The Site was used as a tank farm, which included three crude oil storage reservoirs, Reservoir Nos. 5, 6 and 7. Reservoir No.5, the center reservoir, had a capacity of 750,000 barrels of oil and was under lease to General Petroleum Corporation. Reservoir No. 6, the southernmost reservoir, had a capacity of 750,000 barrels of oil; and Reservoir No. 7, the northernmost reservoir, had a capacity of 2,000,000 barrels of oil. According to Sanborn map notations, the reservoirs had concrete-lined earth-slopes with frame roofs on wood posts, surrounded by earth levees averaging 20 feet in height with 7 foot wide walks on top. One oil pump house was depicted on the 1925 Sanborn map within the southern portion of the Site. Since construction, the Site was used as a crude oil storage reservoir.

    b. In 1966, SOC sold the Site to Lomita Development Company, an affiliate of Richard Barclay and Barclay-Hollander-Curci (BHC), with the reservoirs in place. The Pacific Soils Engineering Reports dated January 7, 1966; March 11, 1966; July 31, 1967; and June 11, 1968 documented that: 1) Lomita Development Company emptied and demolished the reservoirs, and graded the Site prior to it developing the Site as residential housing; 2) part of the concrete floor of the central reservoir was removed by Lomita Development Company from the Site; and 3) where the reservoir bottoms were left in place, Lomita Development Company made 8-inch wide circular trenches in concentric circles approximately 15 feet apart to permit water drainage to allow the percolation of water and sludge present in the reservoirs into the subsurface.

c. In phases between 1967 and 1969, Lomita Development Company developed the Site into one- and two-story single family residential parcels and sold the developed lots to individual homeowners.

6. **Site Description and Activities:** According to information in the Regional Board's file on this Site, oil related operations at the Site began in 1923 and ended by the early 1960s. The Site was previously owned and operated by Shell Company of California, which was subsequently renamed Shell Oil Company, as a crude oil storage facility. The facility included equipment that pumped the oil to the nearby SOC's refinery for processing from three concrete-lined oil storage reservoirs with a total capacity of 3.5 million barrels. In 1966, SOC closed the Site and SOC sold the Site to Lomita Development Company, an affiliate of Richard Barclay and Barclay-Hollander-Curci. Subsequently, Lomita Development Company developed the Site into the Carousel residential neighborhood, which contains 285 single-family homes.

7. **Chemical Usage:** Based on the Phase I Environmental Site Assessment (ESA) dated July 14, 2008 conducted by Shell Oil Products[2] (SOPUS) consultant, URS Corporation, the Site was used for the storage of crude oil in all three reservoirs on the property from at least 1924 to 1966. Subsequent records indicate that in the 1960s the reservoirs may also have been used for storage of bunker oil. Ongoing investigations indicate petroleum hydrocarbon compounds including volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) are impacted in the subsurface soil, soil vapor, and groundwater underlying the Site.

EVIDENCE OF DISCHARGES OF WASTE AND BASIS FOR ORDER

8. **Waste Discharges:** The following summarizes assessment activities associated with the Site:

a. In 2007, under the regulatory oversight of the California Department of Toxic Substances Control (DTSC), an environmental investigation was initiated at the former Turco Products Facility (TPF). Soil vapor and groundwater were investigated in areas directly west of the Site and at locations in the northwestern portion of the Site. The DTSC-required investigation detected petroleum hydrocarbons, benzene, toluene, and chlorinated solvents in soil and soil vapor. A multi-depth soil vapor survey, which included soil vapor sampling on the Site at locations coincident with the former Kast Site footprints, detected benzene at concentrations up to 150 micrograms per liter (µg/l). Benzene was detected at TPF groundwater monitoring well MW-8, which has a northeast flow direction, at a concentration of 1,800 µg/l. Therefore, groundwater monitoring well MW-8 is located upgradient of the Kast Site. Chlorinated solvents were also detected at the Kast Site groundwater monitoring well MW-5.

b. The *Final Phase I Site Characterization Report* dated October 15, 2009, which was prepared by URS Corporation on behalf of SOPUS showed that soil impacts consisted primarily of petroleum hydrocarbons spanning a wide range of carbon chains and including Total Petroleum Hydrocarbons (TPH) as gasoline (g), TPH

[2] Shell Oil Products US is the d/b/a for Equilon Enterprises LLC, which is wholly owned by Shell Oil Company.

as diesel (TPHd), TPH as motor oil (TPHmo), benzene, and naphthalene (See Tables 1, 2A, 2B, and 3).

I. In June 2009, a subsurface investigation of public streets in the Carousel neighborhood consisting of ten cone penetrometer/rapid optical screening tools (CPT/ROST) was performed. The CPT/ROST logs indicated several locations within the Site with elevated hydrocarbon concentrations. The CPT/ROST logs also showed that the highest apparent soil impacts occurred at depths of 12 feet bgs, 36 feet bgs, and 40 feet bgs.

II. A total of 228 soil samples were collected during the Phase I Site Characterization. The analytical data for soil samples collected from soil borings advanced on public streets across the Site (Figure 2) were as follows:

i. The highest detected concentration of TPH was 22,000 milligrams per kilogram (mg/kg) and TPHg, TPHd, and TPHmo were 8,800, 22,000, and 21,000 mg/kg, respectively;

ii. Benzene, ethylbenzene, toluene, and xylenes were detected in concentrations as high as 21,000 micrograms per kilogram (µg/kg), 32,000 µg/kg, 12,000 µg/kg, and 140,000 µg/kg, respectively;

iii. SVOCs were detected in concentrations as high as 47 mg/kg of naphthalene, 38 mg/kg of 1-methylnaphthalene, 63 mg/kg of 2-methylnaphthalne, 12 mg/kg phenanthrene, and 9.0 mg/kg pyrene; and

iv. Arsenic and lead were detected in concentrations as high as 53.2 mg/kg and 52.5 mg/kg, respectively.

III. Soil vapor samples collected from a 5-foot depth and greater below the public streets in the Carousel neighborhood indicated elevated benzene and methane (Figures 3 and 4). Benzene was detected at a maximum concentration of 3,800µg/l, which exceeds the California Human Health Screening Level (CHHSL) value of 0.036 µg/l for benzene set for shallow soil vapor in a residential area. Methane was also detected in concentrations as high as 59.7 % (by volume) that significantly exceed its lower explosive limit of 5% (by volume), posing a potential safety hazard.

c. Between September 2009 and February 2010, residential soil and sub-slab soil vapor sampling was conducted at 41 parcels (Figure 5 a – f; Tables 1 and 2) and the results were as follows:

I. Surface and subsurface soil (0 to 10 feet bgs) detected concentrations of chemicals of concern that significantly exceeded soil screening levels as follows:

i. VOCs - Benzene (14,000 µg/kg), tetrachloroethylene (PCE) (22,000 µg/kg), 1,2,4-trimethylbenzene (34,000 µg/kg), and 1,3,5-trimethylbenzene (14,000 µg/kg);

ii. SVOCs - Naphthalene (18 mg/kg), Benzo(a)pyrene (2.9 mg/kg), benzo(a)anthracene (0.1 mg/kg), chrysene (0.27 mg/kg), phenanthrene (0.28 mg/kg), and pyrene (0.19 mg/kg); and

iii. Lead was also detected at a maximum concentration of 307 mg/kg.

II. The highest detected concentration of TPHg was 5,000 mg/kg, TPHd was 33,000 mg/kg, and TPHmo was 41,000 mg/kg;

III. As of September 27, 2010, sub-slab soil vapor samples have been collected from 172 homes in the Carousel neighborhood. Additional data continues to be collected as part of the Phase II Site Characterization. The validated data from the first 41 homes detected benzene, naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, ethylbenzene, p/m-xylenes, toluene, and acetone, at a maximum concentration of 4,500 micrograms per cubic meter (µg/m^3), 2,200 µg/m^3, 1,000 µg/m^3, 1,100 µg/m^3, 5,200 µg/m^3, 700 µg/m^3, 270 µg/m^3, respectively.

d. Between November 19, 2009 and February 15, 2010, additional step-out soil and soil vapor sampling at the elevated soil vapor sampling locations were conducted in selected locations beneath the public streets at the Site. The measured concentrations for petroleum hydrocarbons in soil were as follows:

I. The highest detected concentrations of TPHg was 9,800 mg/kg, TPHd was 22,000 mg/kg, and TPHmo was 21,100 mg/kg;

II. The highest detected concentrations of benzene was 33,000 µg/kg, Ethylbenzene was 42,000 µg/kg, toluene was 11,000 µg/kg, and xylenes were 140,000 µg/kg, respectively;

III. SVOCs were detected in concentrations as high as 47 mg/kg of naphthalene, 33 mg/kg of 1-methylnaphthalene, 53 mg/kg of 2-methylnaphthalne, 6.1 mg/kg phenanthrene, and 3.9 mg/kg pyrene; and

IV. Arsenic and lead were detected in concentrations as high as 28.2 mg/kg and 13.6 mg/kg, respectively.

e. In July 2009, the installation of six on-site groundwater monitoring wells (Figure 6) were completed and quarterly groundwater monitoring was initiated. Groundwater was encountered at 53 feet bgs. Groundwater samples from five of the six wells contained concentrations of benzene at a maximum concentration of 140 µg/L and trichloroethylene (TCE) at a maximum concentration of 290 µg/L. One of the monitoring wells (MW-3) contains a free product or a light non-aqueous phase liquid (LNAPL) with a maximum measured thickness of 9.01 foot as of May 27, 2010.

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9. **Source Elimination and Remediation Status at the Site**

   a. The results of the initial soil and soil vapor investigation indicate the presence of elevated methane and benzene at concentrations exceeding the Lower Explosive Limit and the CHHSL for shallow soil vapor, at several locations beneath the public streets at the Site. On October 15, 2009, the Regional Board directed the Discharger to expeditiously design and implement an interim remedial action.

   b. On May 12, 2010 the Regional Board approved SOPUS's proposed Soil Vapor Extraction (SVE) pilot test in order to evaluate the use of this technology as a remedial option for VOCs at the Site.

10. **Summary of Findings from Subsurface Investigations**

   a. Regional Board staff have reviewed and evaluated numerous technical reports and records pertaining to the release, detection, and distribution of wastes on the Site and its vicinity. The Discharger has stored, used, and/or discharged petroleum hydrocarbon compounds at the Site. Elevated levels of TPH and other wastes have been detected in soil, soil vapor and groundwater beneath the Site.

   b. The sources for the evidence summarized above include, but are not limited to:

      I. Various technical reports and documents submitted by the Discharger or its representatives to Regional Board staff.

      II. Site inspections conducted by Regional Board staff, as well as meetings, letters, electronic mails, and telephone communications between Regional Board staff and the Discharger and/or its representatives.

      III. Subsurface drainage study for the Site reservoirs submitted by Girardi and Keese, the law firm retained by some of the residents of the Carousel neighborhood.

11. **Summary of Current Conditions Requiring Cleanup and Abatement**

   a. Based on the Phase I ESA for the Site dated July 14, 2008 (prepared by URS Corporation) and the most recent information provided to the Regional Board by SOPUS: 1) SOC sold the Kast Site to Lomita Development Company, an affiliate of Richard Barclay and Barclay-Hollander-Curci, in 1966 with the reservoirs in place; 2) the Pacific Soils Engineering Reports from 1966 to 1968 indicate that Lomita Development Company emptied and demolished the reservoirs, and residential housing; 3) part of the concrete floor of the central reservoir was removed by Lomita Development Company from the Site; and 4) where the reservoir bottoms were left in place, Lomita Development Company made 8-inch wide circular trenches in concentric circles approximately 15 feet apart to permit water drainage to allow percolation of water and sludge present in the reservoirs into the subsurface.

b. There is no consistent trend in the vertical distribution of detected concentrations of petroleum hydrocarbon compounds that can be discerned from soil boring data to date. Although, the majority of the aforementioned highest detected TPH concentrations were obtained from the 2.5-foot depth samples, there were multiple locations where the highest concentrations were in the 5-foot or 10-foot samples. This may be due to the nature of previous development activities by Lomita Development Company at the Site (i.e., the construction and demolition of the former reservoirs and site grading in preparation for development of the residential tract).

c. On May 11, 2010, Environmental Engineering and Contracting, consultants hired by Girardi and Keese, conducted exploratory trenching in order to locate and identify the obstructions that have been frequently encountered during the advancement of shallow soil borings at many of the residential homes investigated to date. Regional Board staff observed the encountering of an approximately 8-inch thick concrete slab extending at the trench excavation termination depth of 9 feet, 2 inches. The Pacific Soils Engineering Report dated January 7, 1966 states that the reservoirs were lined with a "four inch blanket of reinforced concrete". These obstructions are presumed to be remnants of the concrete liners of the former reservoir.

d. Results from the 169 Interim Residential Sampling Reports submitted to the Regional Board through November 17, 2010 indicate that for surface and subsurface soil sampling (0 to 10 feet bgs), the cancer risk index estimate is between 0 and 10 for 107 residential parcels, between 10 and 100 for 60 parcels, and exceeded 100 for 2 parcels. In the area where the highest cancer index is documented, SVOCs (i.e. Benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene and chrysene), benzene, and ethylbenzene were the primary chemicals of potential concern (COPCs) contributing to the cancer risk index.

   For the Carousel neighborhood investigation, the Regional Board is using the most protective cancer risk screening levels recommended by the State and federal governments, which is one in one million (1×10^{-6}) additional risks. For screening purposes, the Regional Board routinely uses the most conservative (health-protective assumptions) risk based screening levels of 1×10^{-6} for the target chemical. This screening level is based on a target risk level at the lower end of the US Environmental Protection Agency (USEPA) risk management range of one-in-a-million risk (1×10^{-6}) for cancer risk and a hazard quotient of 1.

   The presence of a chemical at concentrations in excess of a CHHSL does not indicate that adverse impacts to human health are occurring or will occur, but suggests that further evaluation of potential human health concerns is warranted (Cal-EPA, 2005). It should also be noted that CHHSLs are not intended to "set ... final cleanup or action levels to be applied at contaminated sites" (Cal-EPA, 2005).

e. Results from the 169 Interim Residential Sampling Reports submitted to the Regional Board through November 17, 2010 also indicate that for the sub-slab

soil vapor data collected from the residential parcels, the cancer risk index estimate was between 0 and 10 for 147 parcels, between 10 and 100 for 20 parcels, and greater than 100 for 2 parcels. The two highest cancer risk index were estimated as 550 and 120. In most cases, benzene was the primary contributor to the cancer risk index estimate.

f. The Office of Environmental Health Hazard Assessment (OEHHA) performed a quantitative risk evaluation of TPH using surface and subsurface (0 to 10 feet bgs) soil TPH fractionation data for the 41 residential parcels (Table 3). Based on the risk calculation, OEHHA estimated maximum exposures for a child and compared the resulting exposure estimates of reference dosages with that provided by DTSC interim guidance dated June 16, 2009. OEHHA concluded that aromatic hydrocarbons in the C-9 to C-32 range at five parcels exceeded their reference values for children (Exhibit 1).

g. The San Francisco Bay Regional Water Quality Control Board developed the Environmental Screening Level (ESL) as guidance for determining when concentration of TPH may present a nuisance and detectable odor. The ESL, based on calculated odor indexes, for residential land-use. is 100 mg/kg for TPHg and TPHd. The soil TPHg and TPHd data obtained from the Site were detected up to 9,800 mg/kg and 85,000 mg/kg, respectively, which exceed the ESL.

12. **Pollution of Waters of the State:** The Discharger has caused or permitted waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance. As described in this Order and the record of the Regional Board, the Discharger owned and/or operated the site in a manner that resulted in the discharges of waste. The constituents found at the site as described in Finding 8 constitute "waste" as defined in Water Code section 13050(d). The discharge of waste has resulted in pollution, as defined in Water Code section 13050(l). The concentration of waste constituents in soil and groundwater exceed water quality objectives contained in the Water Quality Control Plan for the Los Angeles Region (Basin Plan), including state-promulgated maximum contaminant levels. The presence of waste at the Site constitutes a "nuisance" as defined in Water Code section 13050(m). The waste is present at concentrations and locations that *"is injurious to health, or is indecent, or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property . . . and [a]ffects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal."*

13. **Need for Technical Reports:** This Order requires the submittal of technical or monitoring reports pursuant to Water Code section 13267[3]. The Discharger is required to submit the reports because, as described in the Findings in this Order, the Discharger is responsible for the discharge of waste that has caused pollution and nuisance. The reports are necessary to evaluate the extent of the impacts on water quality and public health and to determine the scope of the remedy.

[3] Water Code section 13267 authorized the Regional Board to require any person who has discharged, discharges, or is suspect of having discharged or discharging, waste to submit technical or monitoring program reports.

13. Although requested by the Discharger, the Regional Board is declining to name additional potentially responsible parties (PRPs) to this Order at this time. Substantial evidence indicates that the Discharger caused or permitted waste to be discharged into waters of state and is therefore appropriately named as a responsible party in this Order. However, the Regional Board will continue to investigate whether additional PRPs (including, but not limited to, Lomita Development Company, Richard Barclay, Barclay-Hollander-Curci, and/or any of its successors) caused or permitted the discharge of waste at the Site and whether these or other parties should be named as additional responsible parties to this Order or a separate Order. The Regional Board may amend this Order or issue a separate Order in the future as a result of this investigation. Although investigation concerning additional PRPs is ongoing, the Regional Board desires to issue this Order as waiting will only delay remediation of the Site.

14. The Discharger, in a letter to the Regional Board dated May 5, 2010 (Exhibit 2), stated that it is considering a variety of potential alternatives that can be applied at specific parcels and in the public streets in order to avoid environmental impacts and avoid any significant risks to human health at this Site. The Discharger also indicated that if it becomes necessary for residents to relocate temporarily to perform this work, the Discharger will take appropriate steps to minimize any inconvenience and compensate them for any resulting expenses.

15. Issuance of this Order is being taken for the protection of the environment and as such is exempt from provisions of the California Environmental Quality Act (CEQA) (Pubic Resources Code section 21000 et seq.) in accordance with California Code of Regulations, title 14, sections 15061(b)(3), 15306, 15307, 15308, and 15321. This Order generally requires the Discharger to submit plans for approval prior to implementation of cleanup activities at the Site. Mere submittal of plans is exempt from CEQA as submittal will not cause a direct or indirect physical change in the environment and/or is an activity that cannot possibly have a significant effect on the environment. CEQA review at this time would be premature and speculative, as there is simply not enough information concerning the Discharger's proposed remedial activities and possible associated environmental impacts. If the Regional Board determines that implementation of any plan required by this Order will have a significant effect on the environment, the Regional Board will conduct the necessary and appropriate environmental review prior to Executive Officer approval of the applicable plan.

16. Pursuant to section 13304 of the California Water Code, the Regional Board may seek reimbursement for all reasonable costs to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action.

THEREFORE, IT IS HEREBY ORDERED, pursuant to California Water Code section 13304 and 13267, that the Discharger shall cleanup the waste and abate the effects of the discharge, including, but not limited to, total petroleum hydrocarbons (TPH) and other TPH-related wastes discharged to soil and groundwater at the Site in accordance with the following requirements:

1. **Complete Delineation of On- and Off-Site Waste Discharges**: Completely delineate the extent of waste in soil, soil vapor, and groundwater caused by the discharge of wastes including, but not limited to, TPH and other TPH-related waste constituents at

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the Site into the saturated and unsaturated zones. Assessment has been ongoing under Regional Board oversight, but assessment is not yet complete. If ongoing reinterpretation of new data derived from the tasks performed suggests that modification or expansion of the tasks approved by the Regional Board is necessary for complete assessment, the Discharger is required to submit a work plan addendum(a).

2. **Continue to Conduct Groundwater Monitoring and Reporting:**

   a. Continue the existing quarterly groundwater monitoring and reporting program previously required by the Regional Board, and

   b. As new wells are installed, they are to be incorporated into the existing groundwater monitoring and reporting program

3. **Conduct Remedial Action**: Initiate a phased cleanup and abatement program for the cleanup of waste in soil, soil vapor, and groundwater and abatement of the effects of the discharges, but not limited to, petroleum and petroleum-related contaminated shallow soils and pollution sources as highest priority.

   Shallow soils in this Order are defined as soils found to a nominal depth of 10 feet, where potential exposure for residents and/or construction and utility maintenance workers is considered likely (Ref. Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste Sites and Permitted Facilities – CalEPA 1996).

   Specifically, the Discharger shall:

   a. Develop a pilot testing work plan, which includes 1) evaluation of the feasibility of removing impacted soils to 10 feet and removal of contaminated shallow soils and reservoir concrete slabs encountered within the uppermost 10 feet, including areas beneath residential houses; and 2) remedial options that can be carried out where site characterization (including indoor air testing) is completed; 3) plans for relocation of residents during soil removal activities, plans for management of excavated soil on-site, and plans to minimize odors and noise during soil removal. The Discharger is required to submit this Pilot Test Work Plan to the Regional Board for review and approval by the Executive Officer no later than 60 days after the date of issuance of this Order. Upon approval of the Pilot Test Work Plan by the Executive Officer, the Discharger shall implement the Pilot Test Work Plan submit the Pilot Test Report that includes the findings, conclusions, and recommendations within 120 days of the issuance of the approval of the Pilot Test Work Plan.

   b. Conduct an assessment of any potential environmental impacts of the residual concrete slabs of the former reservoir that includes: (1) the impact of the remaining concrete floors on waste migration where the concrete floors might still be present; (2) whether there is a need for the removal of the concrete; and (3) the feasibility of removing the concrete floors beneath (i) unpaved areas at the Site, (ii) paved areas at the Site, and (iii) homes at the Site. The Discharger is required to submit this environmental impact assessment of the residual

concrete slabs to the Regional Board no later than 30 days after the completion of the Pilot Test.

c. Prepare a full-scale impacted soil Remedial Action Plan (RAP) for the Site. The Discharger is required to submit the RAP to the Regional Board for review and approval by the Executive Officer no later than 60 days after the date of the Executive Officer's approval of the Pilot Test Report.

I. The RAP shall include, at a minimum, but is not limited to:

i. A detailed plan for remediation of wastes in shallow soil that will incorporate the results from the Soil Vapor Extraction Pilot Test currently being performed.

ii. A plan to address any impacted area beneath any existing paved areas and concrete foundations of the homes, if warranted;

iii. A detailed surface containment and soil management plan;

iv. An evaluation of all available options including proposed selected methods for remediation of shallow soil and soil vapor; and

v. Continuation of interim measures for mitigation according to the Regional Board approved Interim Remediation Action Plan (IRAP).

vi. A schedule of actions to implement the RAP.

II. The RAP, at a minimum, shall apply the following guidelines and Policies to cleanup wastes in soil and groundwater. The cleanup goals shall include:

i. Soil cleanup goals set forth in the Regional Board's *Interim Site Assessment and Cleanup Guidebook, May 1996,* waste concentrations, depth to the water table, the nature of the chemicals, soil conditions and texture, and attenuation trends, human health protection levels set forth in *USEPA Regional Screening Levels (Formerly Preliminary Remediation Goals),* for evaluation of the potential intrusion of subsurface vapors (soil vapor) into buildings and subsequent impact to indoor air quality, California Environmental Protection Agency's *Use of Human Heath Screening Levels (CHHSLS) in Evaluation of Contaminated Properties*, dated January 2005, or its latest version, and Total Petroleum Hydrocarbon Criteria Working Group, Volumes 1 through 5, 1997, 1998, 1999; Commonwealth of Massachusetts, Department of Environmental Protection, *Characterizing Risks Posed by Petroleum Contaminated*

Sites: Implementation of MADEP VPH/EPH approach; MADEP 2002; Commonwealth of Massachusetts, Department of Environmental Protection, *Updated Petroleum Hydrocarbon Fraction Toxicity Values for the VPH/EPH/APH Methodology*; MADEP 2003; Commonwealth of Massachusetts, Department of Environmental Protection, Method for the Determination of *Air-Phase Petroleum Hydrocarbons (APH) Final*, MADEP 2008, Soil vapor sampling requirements are stated in the *DTSC Interim Guidance* and the Regional Board's *Advisory – Active Soil Gas Investigations*, dated January 28, 2003, or its latest version, DTSC's *Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air*, revised February 7, 2005, or its latest version, USEPA Risk Assessment Guidance for Superfund, Parts A through E; USEPA User's Guide for Evaluating Subsurface Vapor Intrusion into Buildings, 2003; USEPA Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites, 2002; USEPA Supplemental Guidance for Comparing Background and Chemical Concentrations in Soil for CERCLA Sites, 2002; CalEPA Selecting Inorganic Constituents as Chemicals of Potential Concern at Risk Assessments at Hazardous Waste Sites and Permitted Facilities, CalEPA DTSC, February 1997; CalEPA Use of the Northern and Southern California Polynuclear Aromatic Hydrocarbons (PAH) Studies in the Manufactured Gas Plant Site Cleanup Process, CalEPA DTSC, July 2009. Cleanup goals for all contaminant of concerns shall be based on residential (i.e., unrestricted) land use.

ii. Groundwater cleanup goals shall at a minimum achieve applicable Basin Plan water quality objectives, including California's Maximum Contaminant Levels or Action Levels for drinking water as established by the California Department of Public Health, and the State Water Resources Control Board's "Antidegradation Policy" (State Board Resolution No. 68-16), at a point of compliance approved by the Regional Board, and comply with other applicable implementation programs in the Basin Plan.

iii. The State Water Resources Control Board's "Antidegradation Policy",which requires attainment of background levels of water quality, or the highest level of water quality that is reasonable in the event that background levels cannot be restored. Cleanup levels other than background must be consistent with the maximum benefit to the people of the State, not unreasonably affect present and anticipated beneficial uses of water, and not result in exceedence of water quality objectives in the Regional Board's *Basin Plan*.

iv. The State Water Resources Control Board's "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304" (State Board Resolution No. 92-49), requires cleanup to background or the best water quality which is reasonable if background levels cannot be achieved and sets forth criteria to consider where cleanup to background water quality may not be reasonable.

III. The Discharger shall submit site-specific cleanup goals for residential (i.e., unrestricted) land use for the Executive Officer's approval concurrent with the submittal date of the Pilot Test Report. The proposed site-specific cleanup goals shall include detailed technical rationale and assumptions underlying each goal.

IV. Upon approval of the RAP by the Executive Officer, the Discharger shall implement the RAP within 60 days of the issuance of the approval of the RAP.

d. Continue to conduct residential surface and subsurface soil and sub-slab soil vapor sampling under the current Regional Board approved work plan dated September 24, 2009. If the ongoing reinterpretation of new assessment data derived from the tasks described in the work plan suggests that modification or expansion of the tasks proposed in the RAP is necessary for complete cleanup, then the Discharger shall submit addenda to the September 24, 2009 work plan to the Regional Board for review and approval by the Executive Officer no later than 60 days of the date of issuance of this Order.

e. If the ongoing groundwater monitoring and investigation warrants, the Discharger shall:

I. Install new wells in order to complete the groundwater monitoring well network and to fully delineate the impacted groundwater plume, and

II. Prepare a detailed impacted groundwater RAP. The Regional Board will set forth the due date of the groundwater RAP at a later date.

4. **Public Review and Involvement:**

a. Cleanup proposals and RAP submitted to the Regional Board for approval in compliance with the terms of this Order shall be made available to the public for a minimum 30-day period to allow for public review and comment. The Regional Board will consider any comments received before taking final action on a cleanup proposal and RAP.

b. The Discharger shall encourage public participation. The Discharger is required to prepare and submit a Public Participation Plan for review and approval by the Executive Officer, with the goal of having the Regional Board provide the stakeholders and other interested persons with:

I. Information, appropriately targeted to the literacy and translational needs of the community, about the investigation and remedial activities concerning the discharges of waste at the Site; and

II. Periodic, meaningful opportunities to review, comment upon, and to influence investigation and cleanup activities at the Site.

c. Public participation activities shall coincide with key decision making points throughout the process as specified or as directed by the Executive Officer of the Regional Board.

5. **Time Schedule:** The Discharger shall submit all required technical work plans and reports by the deadlines stated in this Order, which are summarized in Table 4. As field activities at this Site are in progress, additional technical documents may be required and/or new or revised deadlines for the technical documents may be issued. Therefore, Table 4 may be updated as necessary. The Discharger shall continue any remediation or monitoring activities until such time as the Executive Officer determines that sufficient cleanup has been accomplished to fully comply with this Order..

6. The Regional Board's authorized representative(s) shall be allowed:

a. Entry upon premises where a regulated facility or activity is located, conducted, or where records are stored, under the conditions of this Order;

b. Access to copy any records that are stored under the conditions of this Order;

c. Access to inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

d. The right to photograph, sample, and monitor the Site for the purpose of ensuring compliance with this Order, or as otherwise authorized by the California Water Code.

7. **Contractor/Consultant Qualification:** A California licensed professional civil engineer or geologist, or a certified engineering geologist or hydrogeologist shall conduct or direct the subsurface investigation and cleanup program. All technical documents required by this Order shall be signed by and stamped with the seal of the above-mentioned qualified professionals.

8. This Order is not intended to permit or allow the Discharger to cease any work required by any other Order issued by this Regional Board, nor shall it be used as a reason to stop or redirect any investigation or cleanup or remediation programs ordered by this Regional Board or any other agency. Furthermore, this Order does

not exempt the Discharger from compliance with any other laws, regulations, or ordinances which may be applicable, nor does it legalize these waste treatment and disposal facilities, and it leaves unaffected any further restrictions on those facilities which may be contained in other statues or required by other agencies.

9. The Discharger shall submit 30-day advance notice to the Regional Board of any planned changes in name, ownership, or control of the facility; and shall provide 30-day advance notice of any planned physical changes to the Site that may affect compliance with this Order. In the event of a change in ownership or operator, the Discharger also shall provide 30-day advance notice, by letter, to the succeeding owner/operator of the existence of this Order, and shall submit a copy of this advance notice to the Regional Board.

10. Abandonment of any groundwater well(s) at the Site must be approved by and reported to the Executive Officer of the Regional Board at least 14 days in advance. Any groundwater wells removed must be replaced within a reasonable time, at a location approved by the Executive Officer. With written justification, the Executive Officer may approve of the abandonment of groundwater wells without replacement. When a well is removed, all work shall be completed in accordance with California Department of Water Resources Bulletin 74-90, "California Well Standards," Monitoring Well Standards Chapter, Part III, Sections 16-19.

11. The Regional Board, through its Executive Officer or other delegate, may revise this Order as additional information becomes available. Upon request by the Discharger, and for good cause shown, the Executive Officer may defer, delete or extend the date of compliance for any action required of the Discharger under this Order. The authority of the Regional Board, as contained in the California Water Code, to order investigation and cleanup, in addition to that described herein, is in no way limited by this Order.

12. Any person aggrieved by this action of the Regional Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

    http://www.waterboards.ca.gov/public_notices/petitions/water_quality

    or will be provided upon request.

13. Failure to comply with the terms or conditions of this Order may result in imposition of civil liabilities, imposed either administratively by the Regional Board or judicially by the Superior Court in accordance with Sections 13268, 13308, and/or 13350, of the California Water Code, and/or referral to the Attorney General of the State of California.

14. None of the obligations imposed by this Order on the Discharger are intended to constitute a debt, damage claim, penalty or other civil action which should be limited

or discharged in a bankruptcy proceeding. All obligations are imposed pursuant to the police powers of the State of California intended to protect the public health, safety, welfare, and environment.

Ordered by: _____ Date: 3-11-11

Deborah J. Smith
Chief Deputy Executive Officer

ATTACHMENTS

FIGURES

Figure 1: Site Vicinity Map
Figure 2: Previous Exploration Location
Figure 3: Proposed Soil Vapor Sampling Locations
Figure 4: Benzene and Methane Concentrations in Soil Vapor
Figure 5a: Carousel Houses Tested as of March 15, 2010
Figure 5b: Residential Methane Screening Results as of March 15, 2010
Figure 5c: Summary of Results of Testing for Benzene Concentrations in Soil Vapor as of March 15, 2010
Figure 5d: Summary of Results of Testing for Non-Benzene Concentrations in Soil Vapor as of March 15, 2010
Figure 5e: Summary of Soil Sampling Results (0-10' Below Surface) as of March 15, 2010
Figure 5f: Methane Concentrations in Soil Vapor at 5 Feet Below Surface as of March 15, 2010
Figure 6: Proposed Groundwater Monitoring Well Locations

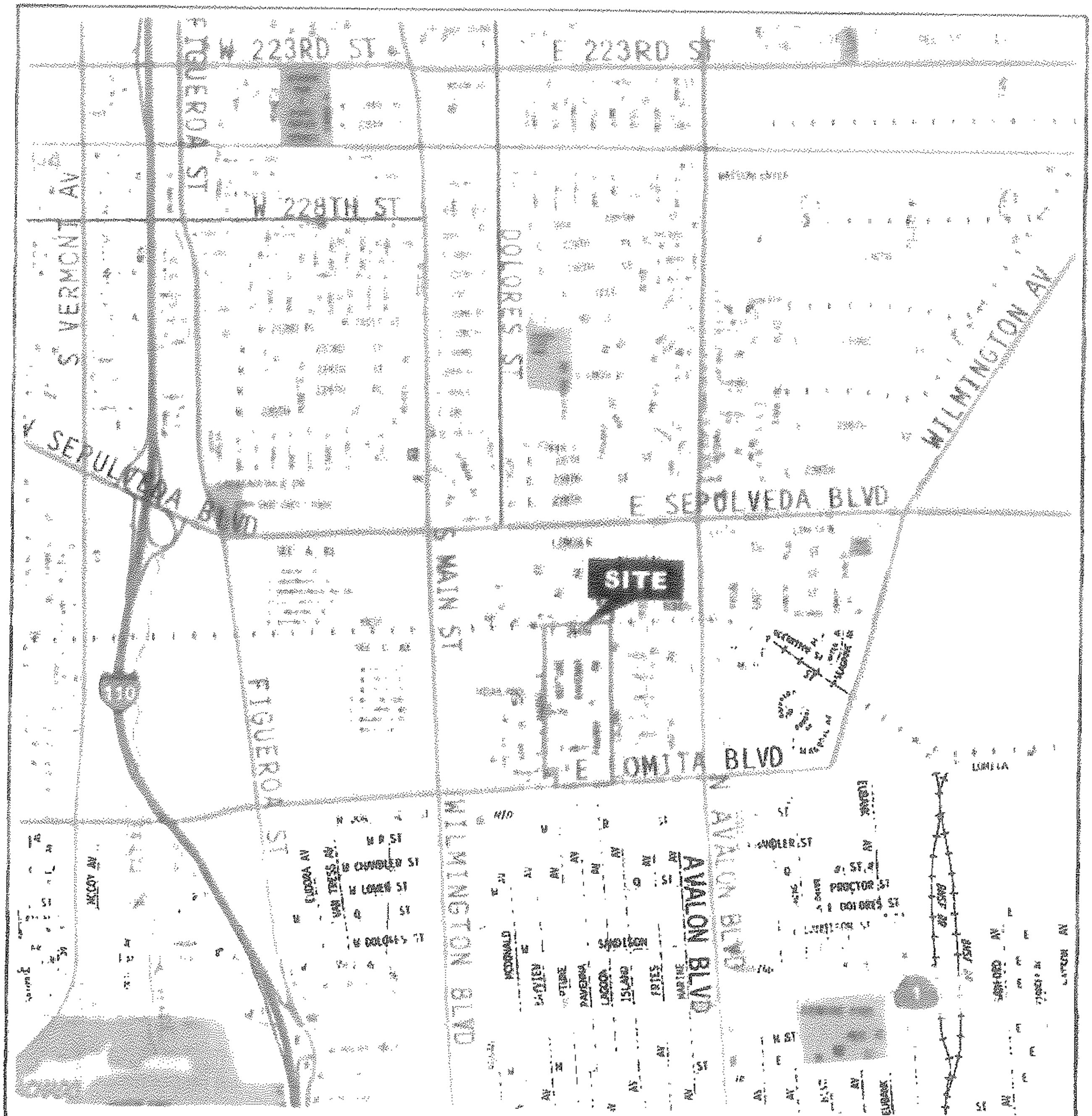
TABLES

Table 1: Data Summary from Phase I and Phase II Site Characterization for Soil and Soil Vapor
Table 2A: Summary of Soil Samples Analytical Results -VOCs, SVOCs, and TPH
Table 2B: Summary of Soil Vapor Analytical Results -VOCS and Fixed Gases
Table 3: Maximum Concentration of Aliphatic and Aromatic Hydrocarbons by Hydrocarbon Fractionations at Individual Properties
Table 4: Deadlines for Technical Work Plans and Reports

EXHIBITS

Exhibit 1: OEHHA's Memorandum dated May 19, 2010
Exhibit 2: Shell Oil Company Letter to the Regional Board dated May 5, 2010

Note: All Figures and Tables, except Table 4, were taken from technical reports prepared by SOPUS's consultant, URS Corporation



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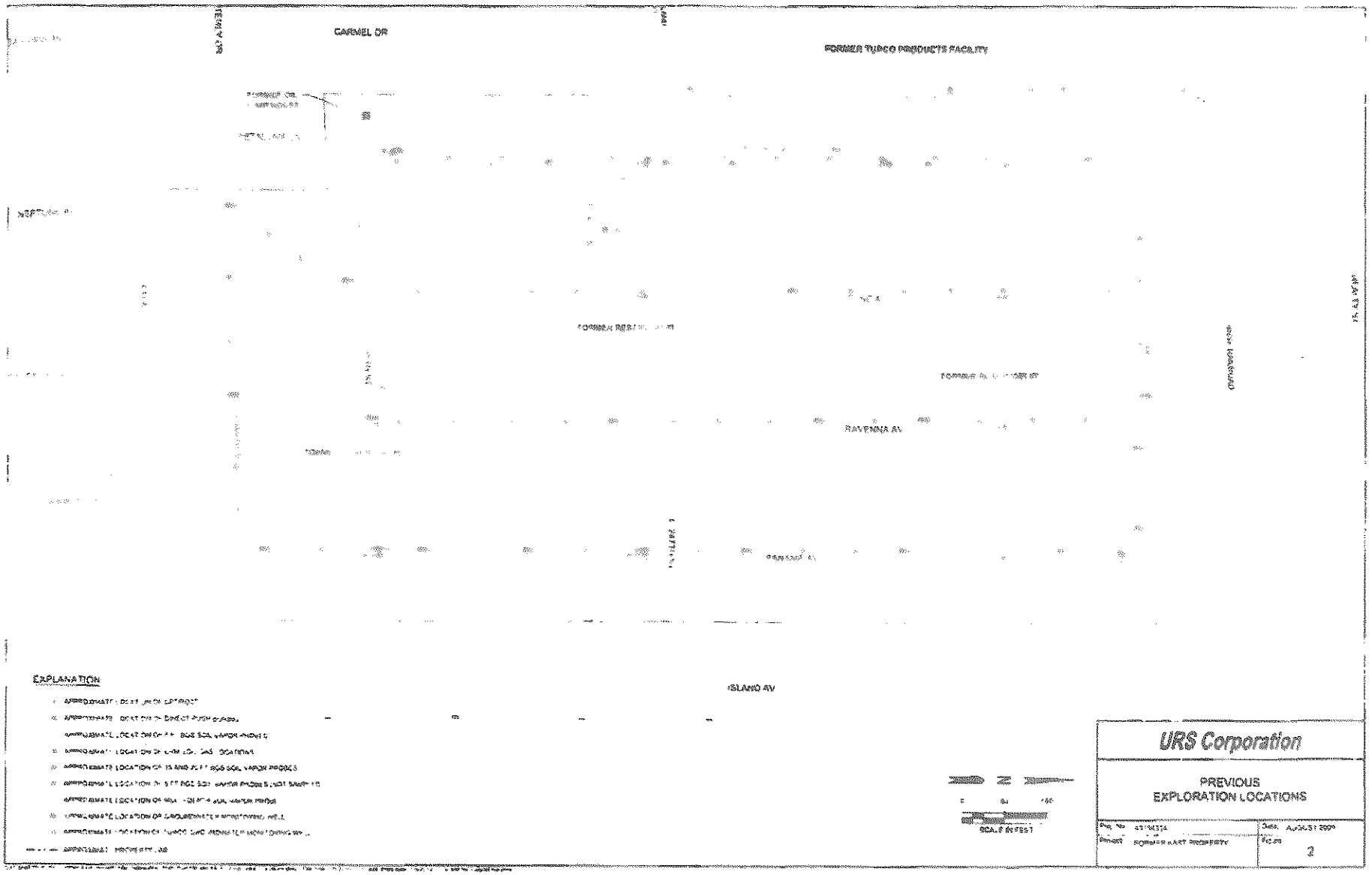
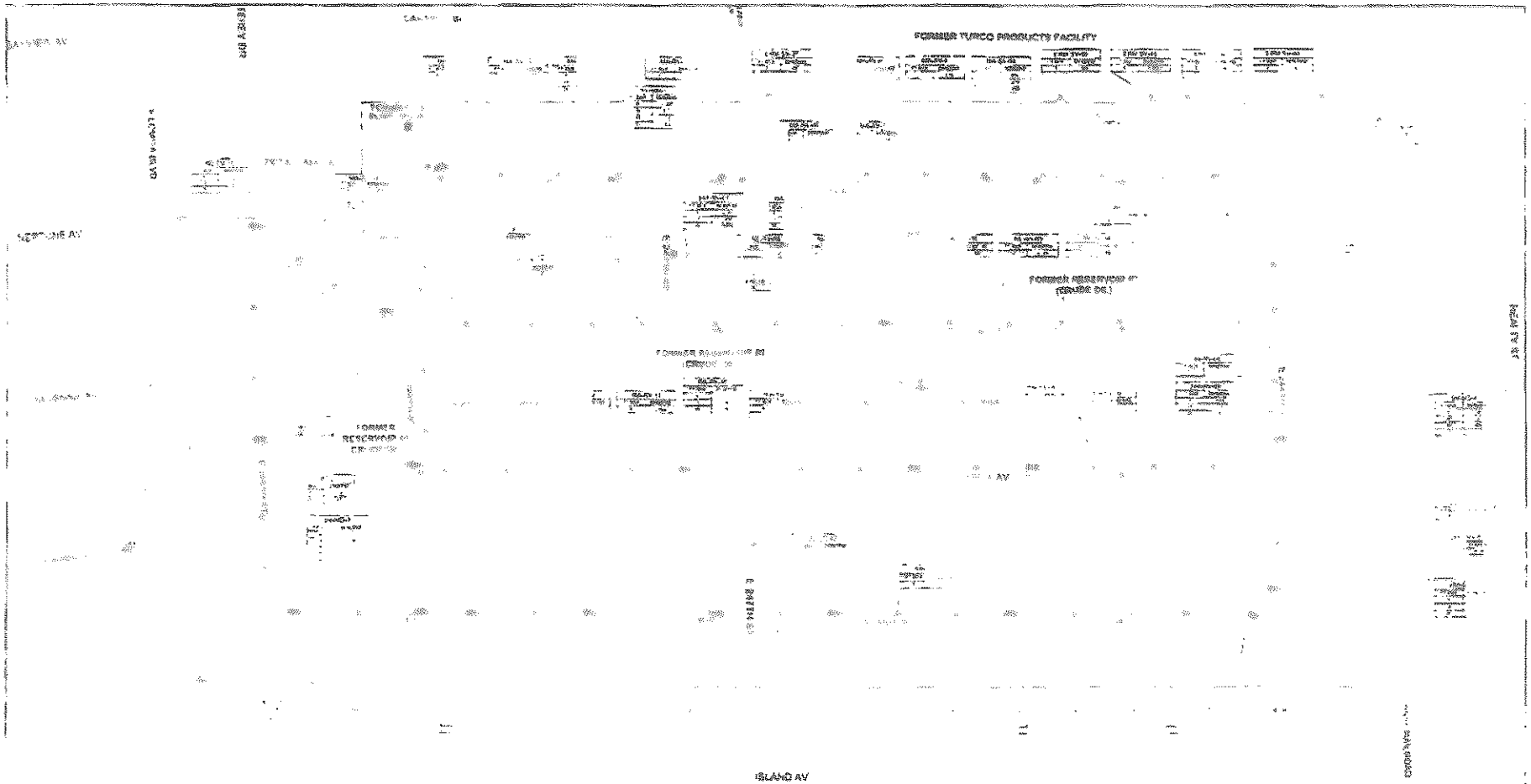
K:/2008/KAST/figure 1 Vic Map.ai

SITE VICINITY MAP

Project No. 49194314	Date: JUNE 2008	Project: Former KAST Property	Figure 1

URS


CARMEL DR
FORMER TURCO PRODUCTS FACILITY
RAVENNA AV
ISLAND AV
EXPLANATION
URS Corporation
PREVIOUS
EXPLORATION LOCATIONS
FORMER HART PROPERTY
2



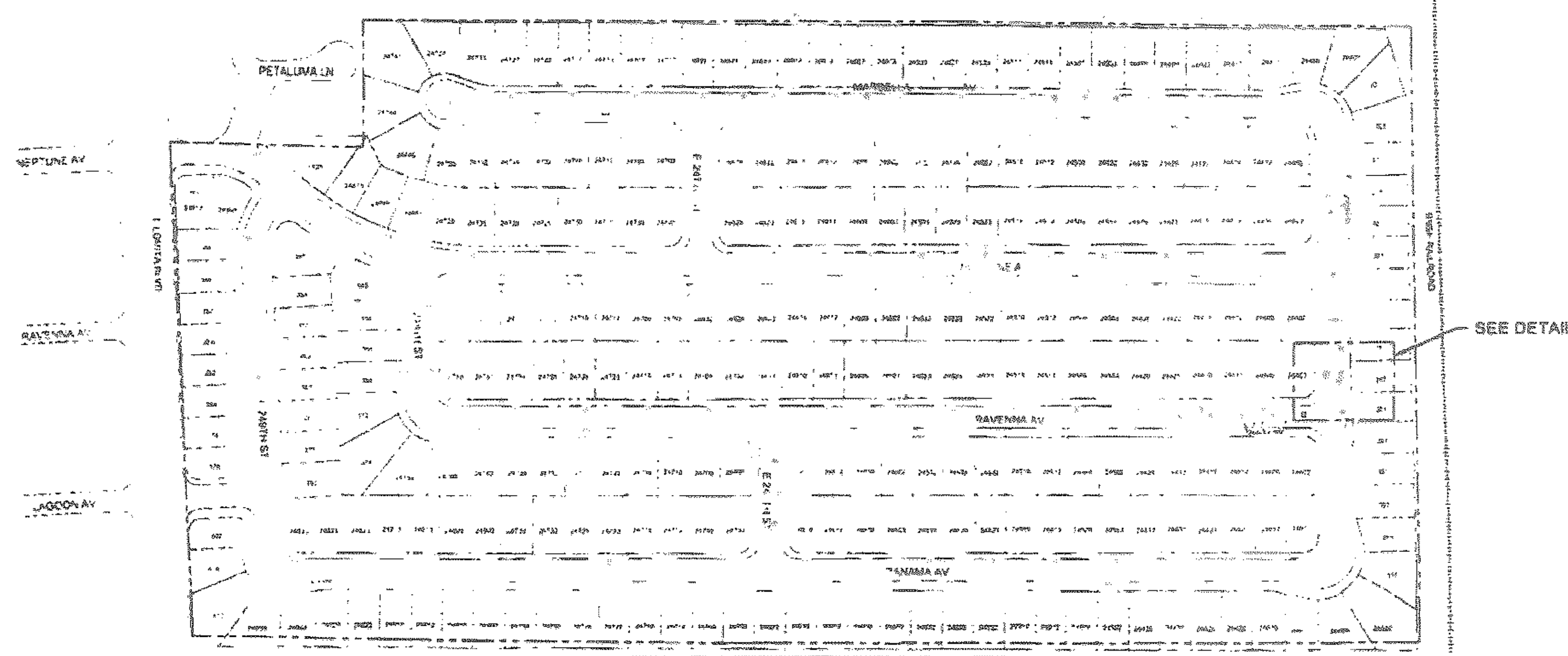
EXPLANATION

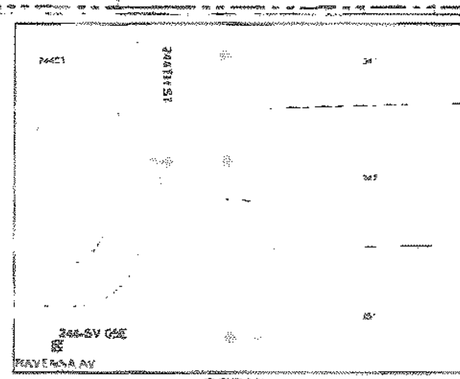
URS Corporation

PROPOSED
SOIL VAPOR SAMPLING LOCATIONS

FORMER WEST PROPERTY

3





DETAIL

EXPLANATION

URS Corporation

BENZENE AND METHANE CONCENTRATIONS IN SOIL VAPOR

4

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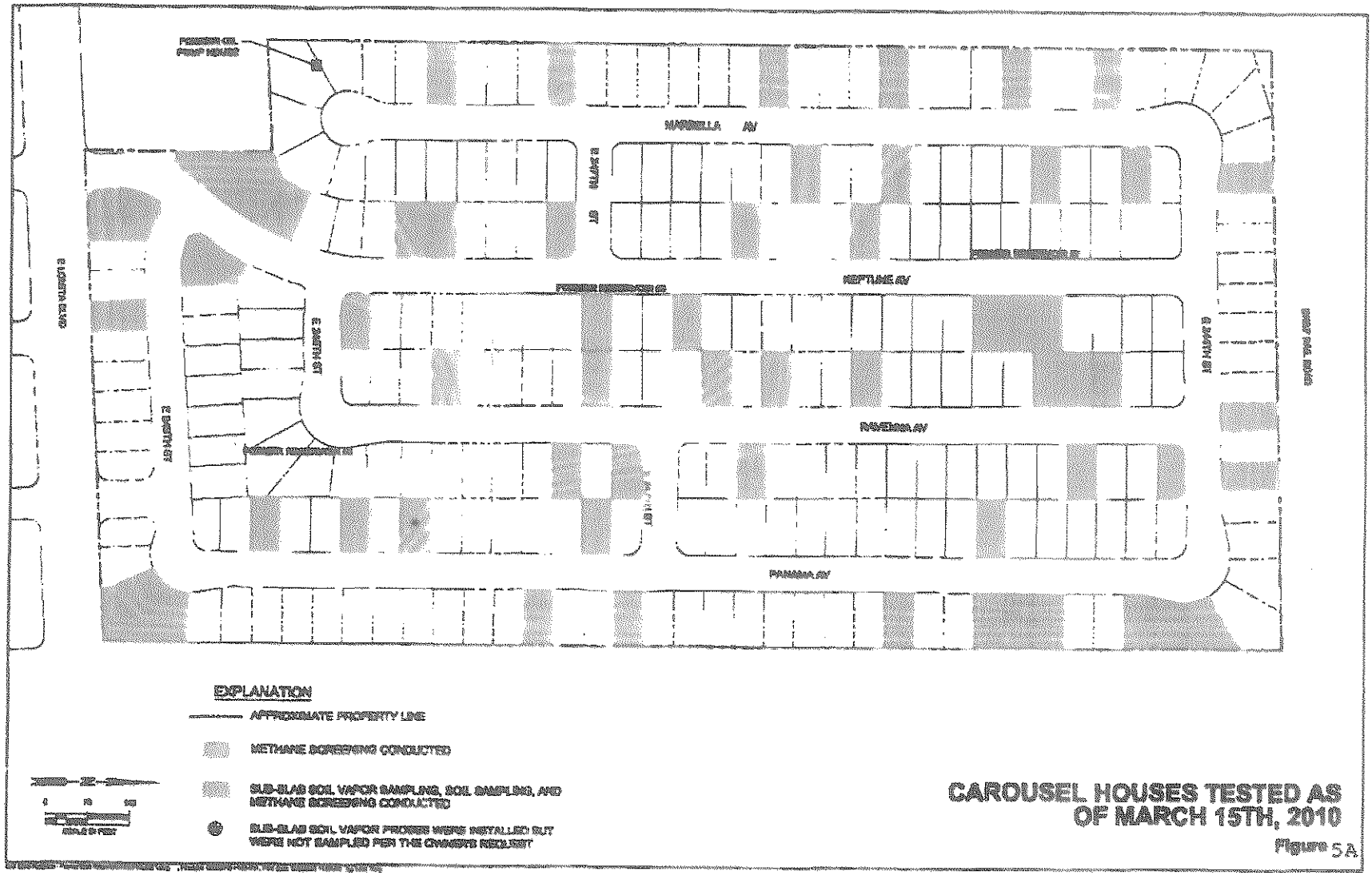
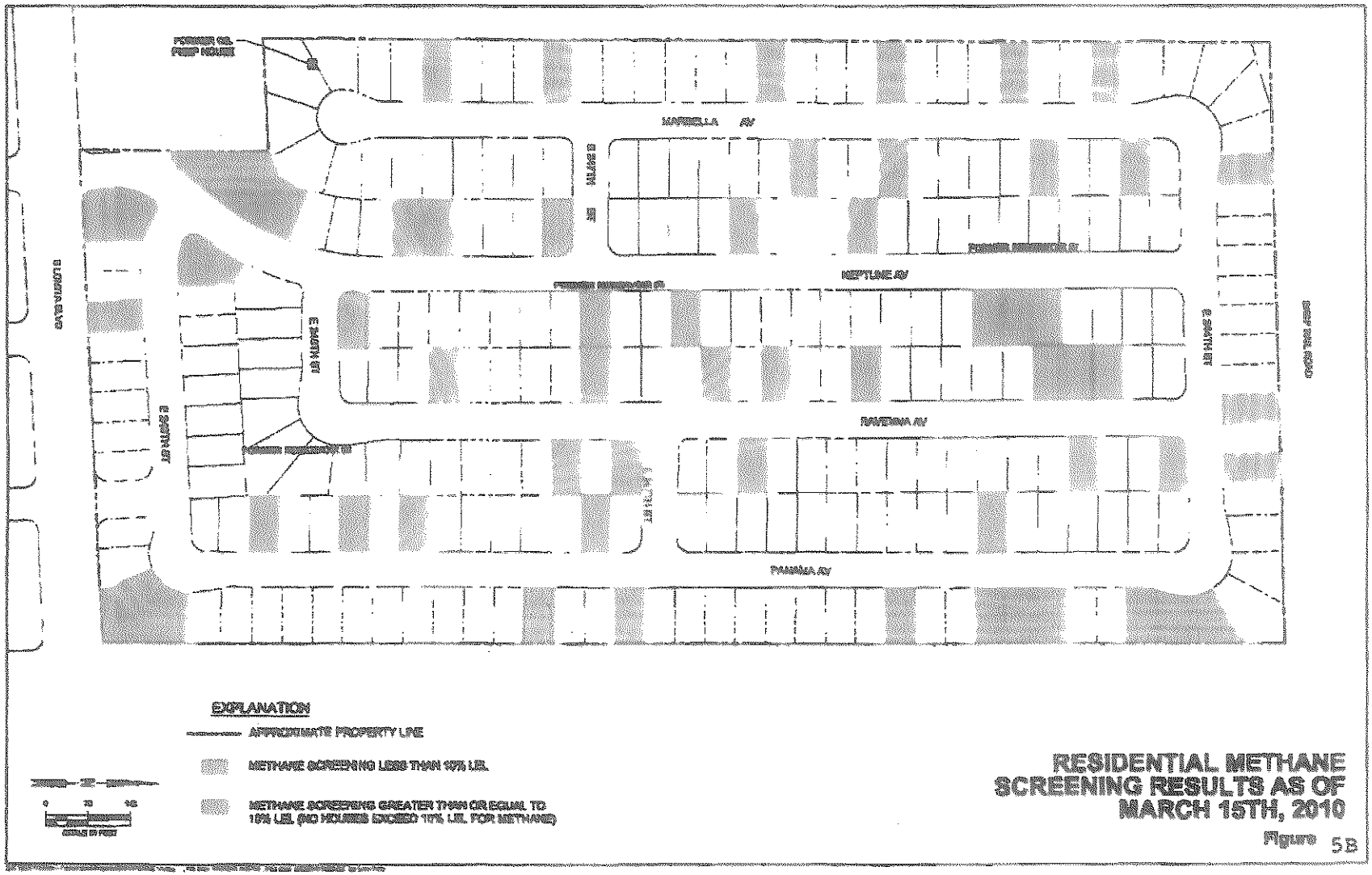


CAROUSEL HOUSES TESTED AS OF MARCH 15TH, 2010

Figure 5A



RESIDENTIAL METHANE SCREENING RESULTS AS OF MARCH 15TH, 2010

Figure 5B

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EXPLANATION

APPROXIMATE PROPERTY LINE

PROPERTIES WHERE SUB-SLAB SOIL VAPOR SAMPLES WERE COLLECTED AND RESULTS WERE LESS THAN SCREENING LEVELS

PROPERTIES WHERE ADDITIONAL SAMPLING IS RECOMMENDED BASED ON BENZENE CONCENTRATIONS IN SOIL VAPOR

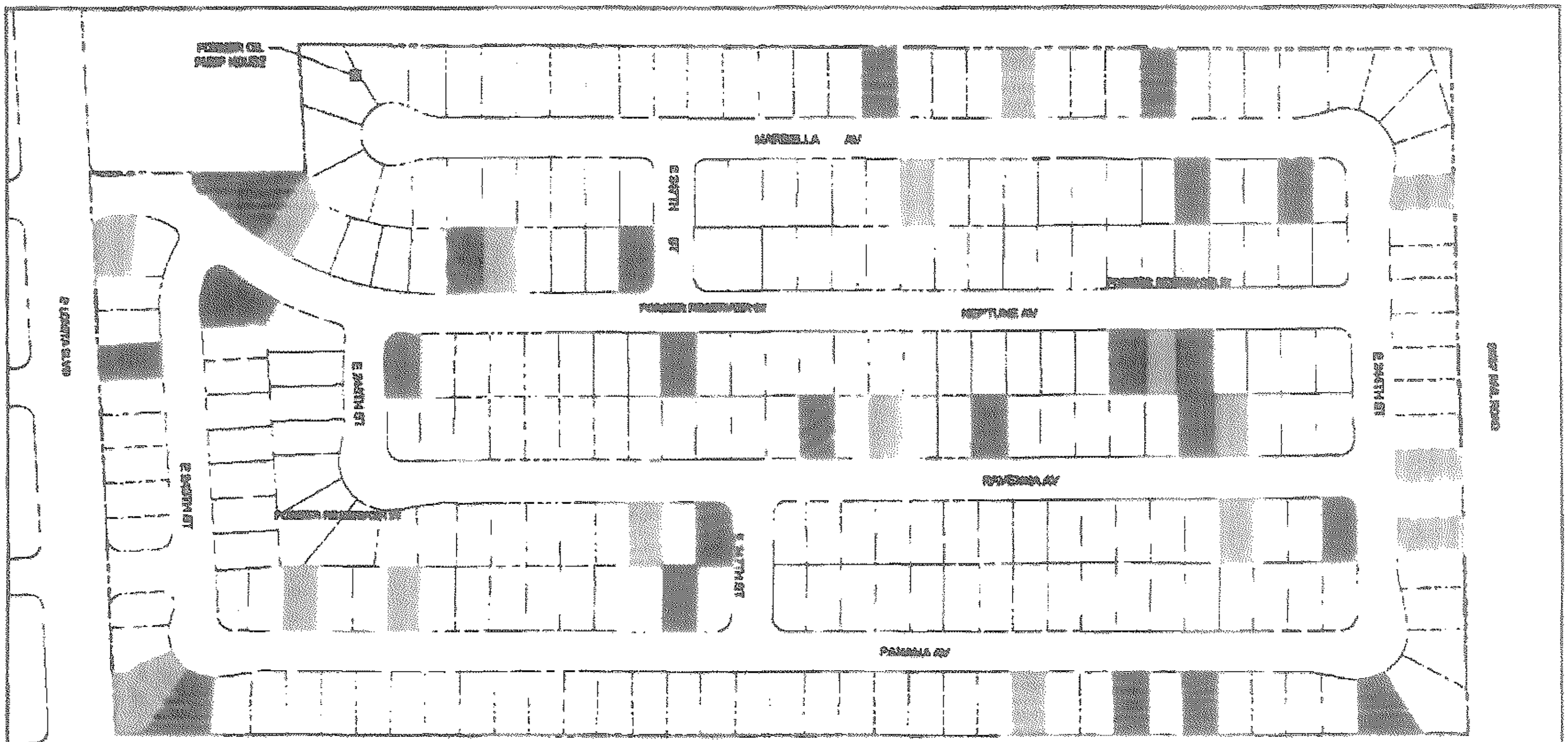
0 75 150

SCALE IN FEET

SUMMARY OF RESULTS OF TESTING FOR BENZENE CONCENTRATIONS IN SOIL VAPOR AS OF MARCH 15TH, 2010

Figure 5C

127



EXPLANATION

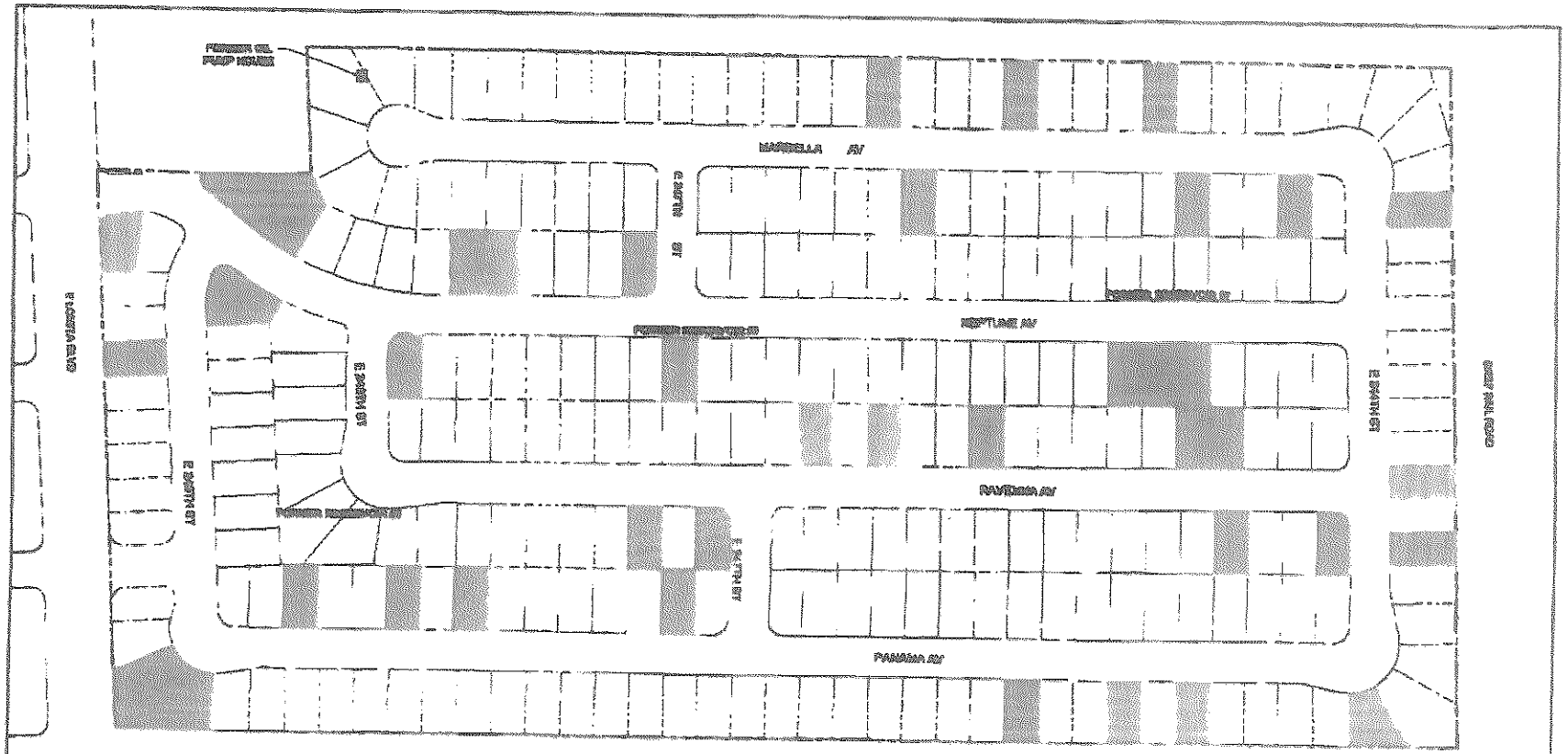
—— APPROXIMATE PROPERTY LINE

PROPERTIES WHERE SUB-SLAB SOIL VAPOR SAMPLES WERE COLLECTED AND RESULTS WERE LESS THAN SCREENING LEVELS

PROPERTIES WHERE ADDITIONAL SAMPLING IS RECOMMENDED BASED ON NON-BENZENE CONCENTRATIONS IN SOIL VAPOR

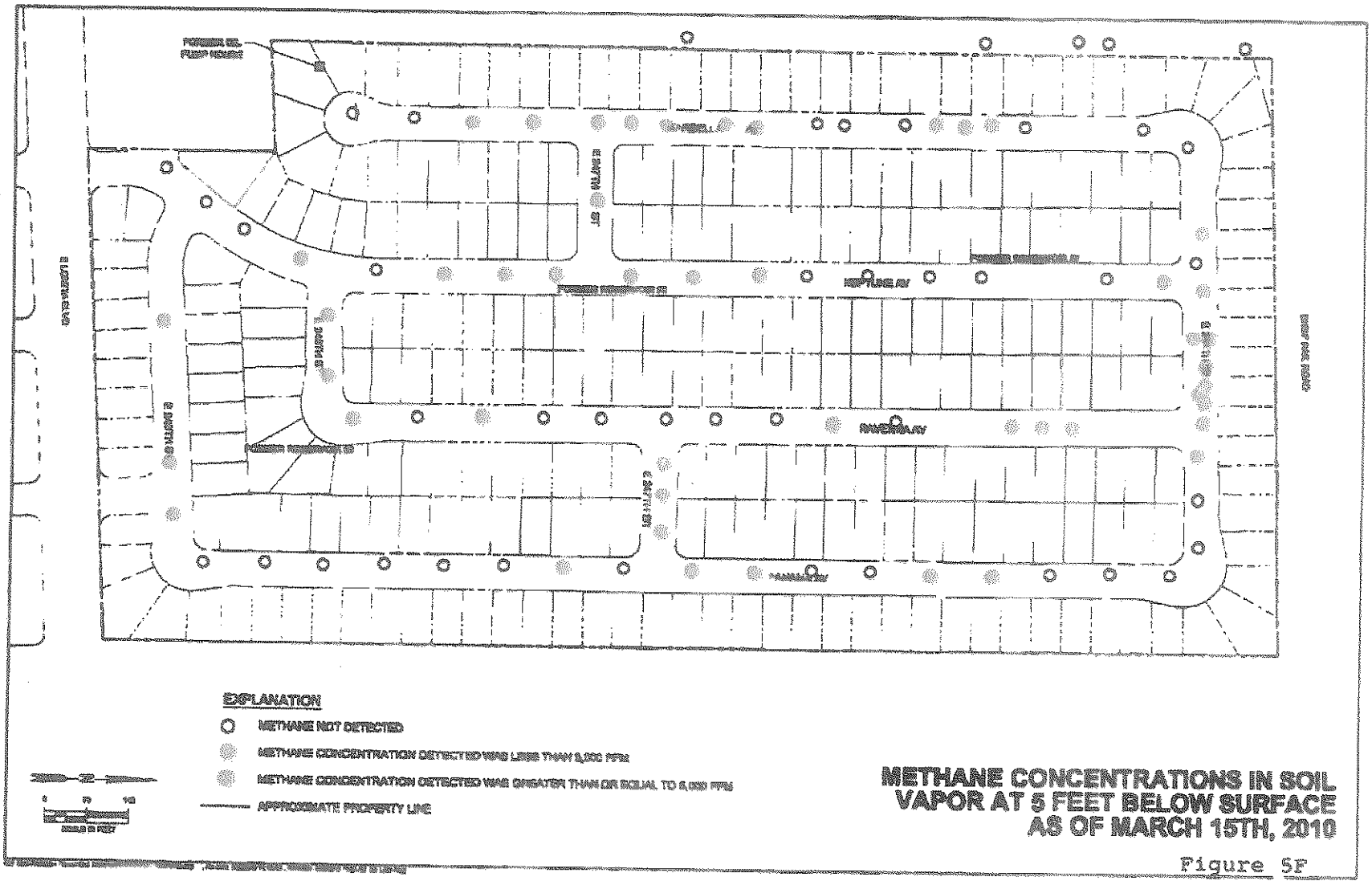
SUMMARY OF RESULTS OF TESTING FOR NON-BENZENE CONCENTRATIONS IN SOIL VAPOR AS OF MARCH 15TH, 2010

Figure- 5D



SUMMARY OF SOIL SAMPLING RESULTS (0-10' BELOW SURFACE) AS OF MARCH 15TH, 2010

Figure 5E



METHANE CONCENTRATIONS IN SOIL VAPOR AT 5 FEET BELOW SURFACE AS OF MARCH 15TH, 2010

Figure 5F

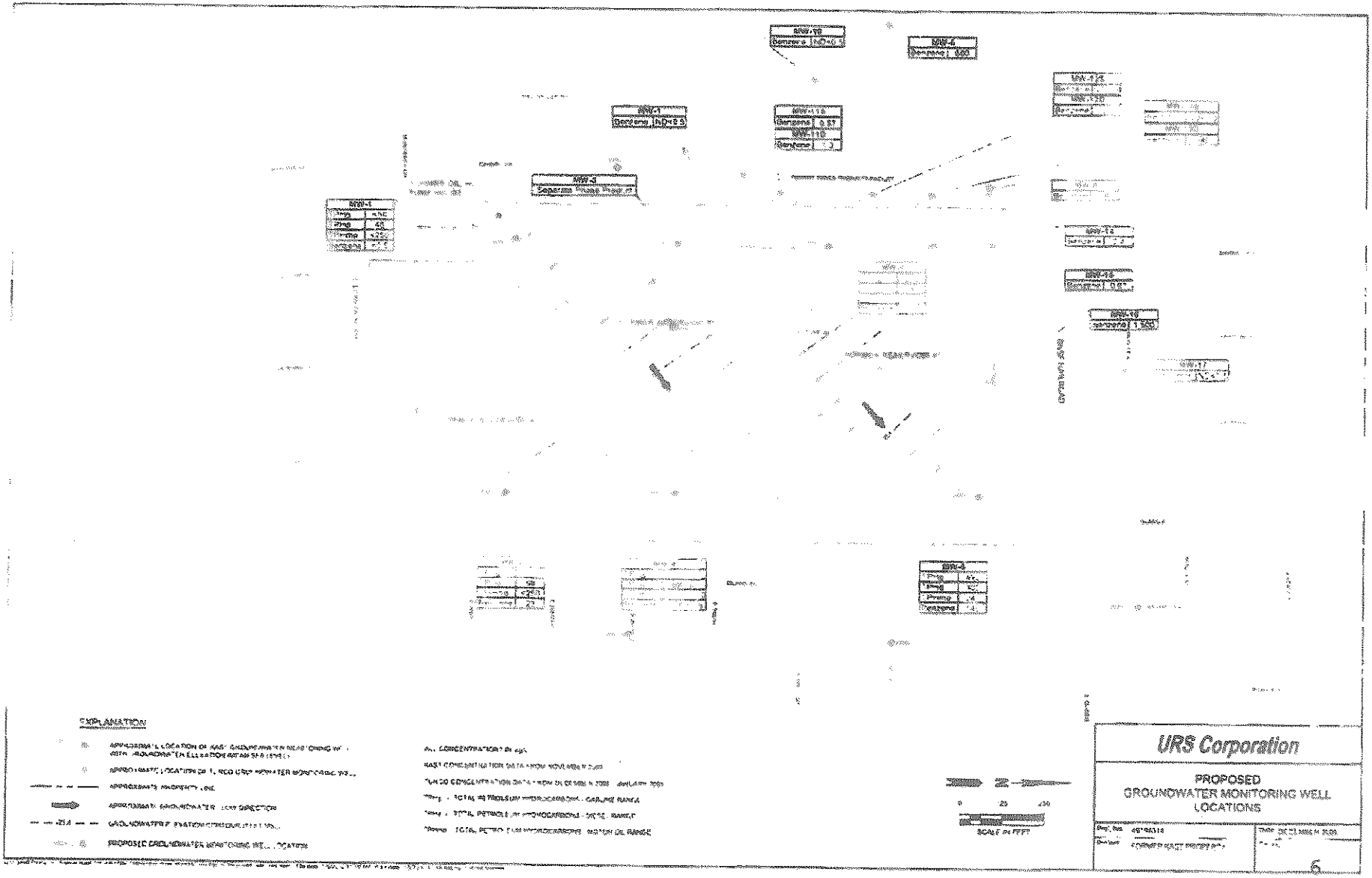
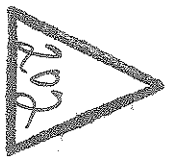

EXPLANATION
SCALE IN FEET
URS Corporation
PROPOSED
GROUNDWATER MONITORING WELL
LOCATIONS

Table 1. Data Summary - Phase I & II Site Characterization

Medium	Constituents	Phase	Units	% of Sample Detection	5%ile	25%ile	Median	75%ile	95%ile	Maximum Detected Concentration
Soil	Benzene	I	UG/KG	24.0%	ND 0.445	ND 0.5	ND 0.6	ND 110	4600	34000
		II	UG/KG	55.2%	ND 0.13	ND 0.24	0.405	0.48	180	14000
	Benzo (a) Pyrene	I	MG/KG	0%	ND 0.25	ND 0.25	ND 0.25	ND 1.25	ND 2.5	ND
		II	MG/KG	67.2%	ND 0.0025	ND 0.011	0.25	0.25	2.5	3.6
	Naphthalene	I	MG/KG	22.3%	ND 0.00455	ND 0.0055	ND 0.25	ND	14	29
		II	MG/KG	43.5%	0.0015	0.0041	0.013	ND 0.25	4.7	61
	TPH as Diesel	I	MG/KG	39.4%	ND 2.5	ND 2.5	ND 2.5	2700	13000	22000
		II	MG/KG	71.8%	ND 2.5	ND 2.5	70	470	7300	33000
	TPH as Gasoline	I	MG/KG	40.6%	ND 0.11	ND 0.125	ND 0.14	190	4300	8800
		II	MG/KG	43.7%	ND 0.063	ND 0.10	ND 0.10	0.18	660	5500
	TPH as Motor Oil	I	MG/KG	36.0%	ND 12.5	ND 12.5	ND 12.5	3500	11000	21000
		II	MG/KG	74.7%	ND 12.5	ND 12.5	205	930	8900	41000
Soil Vapor	Methane	I	%	55.1%	ND 0.39	ND 0.42	1.35	12.6	50.3	62.6
		II	%	4.1%	ND 0.00011	ND 0.00012	ND 0.00012	ND 0.00012	ND 0.00024	78
	Benzene	I	UG/L	85.1%	ND 0.0016	0.028	0.10	3.3	150	3800
		II	UG/L	27.6%	ND 0.0018	ND 0.0018	ND 0.0019	0.0038	0.013	6.5
	Naphthalene	I	UG/L	3.4%	ND 0.016	ND 0.12	ND 1.1	ND 8.5	ND 46	1.2
		II	UG/L	26.7%	ND 0.0031	ND 0.0115	ND 0.012	0.0125	0.017	0.18

Shaded cells indicate not-detected result. 1/2 Detection limit reported
Phase II investigation reports submitted to Regional Board as of July 19, 2010



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	TPH as Diesel	I	MG/KG	39.4%	ND 2.5	ND 2.5	ND 2.5	2700	13000	22000
		II	MG/KG	71.8%	ND 2.5	ND 2.5	70	470	7300	33000
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		II	MG/KG	74.7%	ND 12.5	ND 12.5	205	930	8900	41000
Soil Vapor	Methane	I	%	55.1%	ND 0.39	ND 0.42	1.35	12.6	50.3	62.6
		II	%	4.1%	ND 0.00011	ND 0.00012	ND 0.00012	ND 0.00012	ND 0.00024	78
	Benzene	I	UG/L	85.1%	ND 0.0016	0.028	0.10	3.3	150	3800
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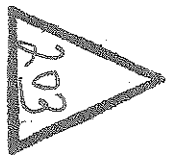

TABLE 1A
Summary of Soil Sample Analytical Results- VOCs, SVOCs, and TPH
Addendum to the IRAP- Further Site Characterization Report
Former Kast Property

LOCATION NAME			244SV05A7	244SV05A7	244SV05A7
SAMPLE DATE			2/2/2010	2/2/2010	2/2/2010
SAMPLE DEPTH, ft bgs			2.5	5	10
SAMPLE NAME			244SV05A7-2.5	244SV05A7-5	244SV05A7-10
SAMPLE DELIVERY GROUP (SDG)	Method	Unit	10-02-0133	10-02-0133	10-02-0133
1,2,4-Trimethylbenzene	SW8260B	µg/kg	14,000	9,700	33,000
1,3,5-Trimethylbenzene			3,300	300	12,000
Acetone			< 4000	< 4200	< 11000
Benzene			11,000	9,600	3,900
Chlorobenzene			< 80	< 85	< 220
cis-1,2-Dichloroethene			< 80	< 85	< 220
Cumene (Isopropylbenzene)			4,000	4,500	6,300
Ethylbenzene			12,000	12,000	19,000
Methyl-tert-Butyl Ether			< 160	< 170	< 440
Naphthalene			7,300	7,200	9,800
n-Butylbenzene			2,800	2,400	5,100
p-Isopropyltoluene			2,500	1,900	5,000
Propylbenzene			6,200	6,800	9,600
sec-Butylbenzene			2,100	2,500	3,500
tert-Butylbenzene			94	120	< 220
Toluene			< 80	< 85	< 220
Vinyl Acetate			< 800	< 850	< 2200
Xylenes, Total			7,300	2,500	56,000
1-Methylnaphthalene	SW8270C	mg/kg	19	9.9	13
2-Methylnaphthalene			28	16	21
Fluorene			< 5.0	< 5.0	< 5.0
Naphthalene			11	7.8	10
Phenanthrene			7.4	< 5.0	< 5.0
Pyrene			< 5.0	< 5.0	< 5.0
TPH as Gasoline	M8015	mg/kg	2,600	2,500	5,000
TPH as Motor Oil	M8015	mg/kg	8,100	6,200	8,700
TPH as Diesel	SW8015B	mg/kg	86,000	6,500	8,600

Notes:

Bold text indicates results above laboratory reporting limit.

µg/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

ft bgs = feet below ground surface

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TABLE 2D
Summary of Soil Vapor Analytical Results - VOCs and Fixed Gases
IRAP Further Site Characterization
Former Kast Property

LOCATION NAME			244-SV-05A5	244-SV-05A6	244-SV-05A7
SAMPLE DATE			2/4/2010	2/4/2010	2/4/2010
SAMPLE DEPTH, FT BGS			2.5	5	10
SAMPLE NAME			244-SV05A5-2.5	244-SV05A6-5	244-SV05A7-10
SAMPLE DELIVERY GROUP (SDG)	Method	Unit	1002129A/B	1002129A/B	1002129A/B
1,2,4-Trimethylbenzene	TO15	UG/M3	18000	< 2800	31000
1,3,5-Trimethylbenzene			< 6200	< 2800	8800
4-Ethyltoluene			17000	< 2800	20000
Benzene			390000 j	430000 j	630000
Cumene (Isopropylbenzene)			7600	8200	14000
Cyclohexane			1800000 j	470000 j	2700000 E
Ethylbenzene			50000	44000	85000
Heptane			1000000 j	< 2400	120000
Hexane			1900000 j	3300 j	260000
Naphthalene			590 J b	760 J b	1300 J b
o-Xylene			20000	< 2500	< 4900
p/m-Xylene			110000	< 2500	120000
Propylbenzene			8400	9300	15000
Toluene			33000	< 2200	< 4200
Carbon Dioxide	D1946	%	5.2	0.89	11
Methane			23	0.086	25
Oxygen			4.5	20	7.3

Notes:
Bold text indicates results above laboratory reporting limit.
$\mu g/m^3$ = micrograms per cubic meter
% = percent
B = Compound detected in associated laboratory method blank (laboratory qualified)
J = Estimated value (laboratory qualified)
b = Compound detected in associated laboratory method blank (qualified during validation)
j = Estimated value (qualified during validation as the result is possibly biased high)
E = Estimated value. Result exceeded instrument calibration range during analysis
FT BGS = Feet below ground surface

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Table 3

Maximum Concentrations of Aliphatic and Aromatic Hydrocarbons by Hydrocarbon Fractionation at Individual Properties

Street Name	House No	Units	Aliphatics (C5 - C8)	Aromatics (C6 - C8)	Aliphatics (C9 - C18)	Aromatics (C9 - C16)	Aliphatics (C19 - C32)	Aromatics (C17 - C32)
244TH ST	351	MG/KG	ND	ND	ND	ND	46	26
244TH ST	361	MG/KG	ND	ND	ND	ND	30	29
249TH ST	345	MG/KG	0.84	ND	140	300	220	240
249TH ST	352	MG/KG	ND	ND	ND	17	48	59
249TH ST	412	MG/KG	ND	0.014	ND	39	80	71
MARBELLA AVE	24412	MG/KG	2300	2	4100	2400	3100	4400
MARBELLA AVE	24426	MG/KG	2.2	0.1	220	240	340	210
MARBELLA AVE	24433	MG/KG	ND	ND	1300	6800	7200	6000
MARBELLA AVE	24517	MG/KG	ND	ND	ND	15	12	27
MARBELLA AVE	24532	MG/KG	350	54	1000	1200	1900	1600
MARBELLA AVE	24603	MG/KG	2	0.058	980	2400	1300	2000
NEPTUNE AVE	24422	MG/KG	1.4	ND	79	170	190	180
NEPTUNE AVE	24426	MG/KG	ND	ND	37	63	99	92
NEPTUNE AVE	24502	MG/KG	0.64	ND	32	72	94	110
NEPTUNE AVE	24632	MG/KG	ND	ND	51	220	300	420
NEPTUNE AVE	24703	MG/KG	68	2.5	1100	2500	2000	2300
NEPTUNE AVE	24725	MG/KG	ND	ND	ND	ND	ND	ND
NEPTUNE AVE	24729	MG/KG	ND	ND	ND	ND	37	35
NEPTUNE AVE	24738	MG/KG	710	130	2100	2000	1900	1300
NEPTUNE AVE	24815	MG/KG	ND	ND	ND	ND	100	54
NEPTUNE AVE	24825	MG/KG	ND	ND	ND	22	84	160
NEPTUNE AVE	24912	MG/KG	ND	ND	ND	ND	12	10
PANAMA AVE	24406	MG/KG	ND	ND	ND	56	260	250
PANAMA AVE	24430	MG/KG	ND	ND	ND	ND	ND	ND
PANAMA AVE	24502	MG/KG	ND	ND	ND	ND	ND	ND
PANAMA AVE	24518	MG/KG	ND	ND	17	48	110	130
PANAMA AVE	24709	MG/KG	2.8	1.1	1100	5100	5100	7200
PANAMA AVE	24739	MG/KG	5.8	0.25	14	240	96	250
PANAMA AVE	24809	MG/KG	53	3.8	220	520	440	570
PANAMA AVE	24823	MG/KG	210	ND	610	540	560	1000
PANAMA AVE	24838	MG/KG	ND	ND	ND	22	96	130
RAVENNA AVE	24402	MG/KG	680	60	680	630	920	730
RAVENNA AVE	24416	MG/KG	3.8	0.32	640	1500	2000	1900
RAVENNA AVE	24419	MG/KG	1.2	0.07	280	510	790	890
RAVENNA AVE	24423	MG/KG	780	23	820	830	700	600
RAVENNA AVE	24523	MG/KG	2.4	0.16	100	250	210	390
RAVENNA AVE	24603	MG/KG	ND	ND	ND	ND	15	ND
RAVENNA AVE	24613	MG/KG	76	ND	500	340	590	760
RAVENNA AVE	24700	MG/KG	ND	ND	15	67	340	410
RAVENNA AVE	24712	MG/KG	1.1	0.013	140	130	240	360

Note: The concentrations shown are the maximum concentration detected at each property.

The maximum concentration of aliphatic or aromatic hydrocarbons in a particular carbon-chain range may not occur in the same sample as the maximum concentrations in a different carbon-chain range.

Table 4: Target Schedule

Task	Estimated Start Date	Target Completion Date	Schedule (on, ahead or behind)	Comments
Pilot Testing Work Plan	03/11/11	05/10/11		Within 60 days of the issuance of the CAO
Regional Board review of Pilot Testing Work Plan	05/11/11	07/11/11		Regional Board reviews Report and issues Response and approval
Pilot Test Report	07/12/11	11/07/11		Final Report due within 120 days with a bi monthly progress reporting
Environmental Impact Assessment (EIA) Report	NA	12/07/11		Within 30 days of the completion of the Pilot Testing Report
Regional Board Review of Pilot Test and EIA Reports	11/08/11	01/09/12		Review of Piolot Test & EIA Reports and Response
Site- Specific Cleanup Goals (SSCG)	NA	11/07/11		Due date is concurrent with the Pilot Test Report due date.
30 day Public Review of SSCG	11/08/11	12/08/11		
Remedial Action Plan (RAP)	01/11/12	03/11/12		Within 30 days of the completion of the Pilot Testing Report
30 day Public Review of RAP	03/12/12	04/12/12		
Regional Board Review of Remedial Action Plan	04/13/12	06/13/12		
Implementation of RAP	06/20/12			
Groundwater Monitoring and Reporting	On going			Quarterly Monitoring Program

Notes: (1) Dates are considered estimates and subject to revision in response to evolving field conditions and potential weather-related delays.
(2) Project schedule reconciled/updated at the end of each calendar month.

Exhibit 1

Office of Environmental Health Hazard Assessment

Joan E. Denton, Ph.D., Director
Headquarters • 1001 I Street • Sacramento, California 95814
Mailing Address: P.O. Box 4010 • Sacramento, California 95812-4010
Oakland Office • Mailing Address: 1515 Clay Street, 16th Floor • Oakland, California 94612

Linda S. Adams
Secretary for Environmental Protection

Arnold Schwarzenegger
Governor

MEMORANDUM

TO: Dr. Teklewold Ayalew
Engineering Geologist
Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013

FROM: James C. Carlisle, D.V.M., M.Sc.,
Lead Staff Toxicologist
Integrated Risk Assessment Branch

DATE: May 19, 2010

SUBJECT: TPH DATA FOR 41 HOMES AT THE FORMER KAST SITE IN CARSON, CA (R4-09-17) OEHHA # 880212-01

Document reviewed

- Memo: "Kast TPH Data for 41 homes" dated April 6, 2010.

Site characterization

- Analytical data for TPH in soils data are supplied for 41 homes. Sample depths are not always stated but those that are provided are either 0.5 or 5 feet.

Hazard Assessment

Based on the data in the memo, I estimated maximum exposures for a child and compared the resulting exposure estimates to DTSC reference dosages (RfDs).

- In the table below, columns 3-8 show the maximum TPH concentrations detected at each property.
- Columns 9-14 show the corresponding TPH ingestion by a 15 kg child ingesting 200 mg soil per day.
- Columns 15-20 show the corresponding hazard quotients for a 15 kg child, obtained by dividing the daily ingestion by the reference dose. Hazard quotients exceeding unity are in bold font.

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Street Name	House No	Aliphatics (C5 - C8)	Aromatics (C6 - C8)	Aliphatics (C9 – C18)	Aromatics (C9 - C16)	Aliphatics (C19 - C32)	Aromatics (C17 - C32)	Aliphatics (C5 - C8)	Aromatics (C6 - C8)	Aliphatics (C9 - C18)	Aromatics (C9 - C16)	Aliphatics (C19 - C32)	Aromatics (C17 - C32)	Aliphatics (C5 - C8)	Aromatics (C6 - C8)	Aliphatics (C9 - C18)	Aromatics (C9 - C16)	Aliphatics (C19 - C32)	Aromatics (C17 - C32)
		Detected concentrations (mg/kg)						Estimated child dose (mg/kg/day)						Hazard ratio (child)					
244TH ST	351	ND	ND	ND	ND	46	26					6.1E-4	3.5E-4	0.0E+0	*	0.0E+0	0.0E+0	3.1E-4	1.2E-2
244TH ST	361	ND	ND	ND	ND	30	29					4.0E-4	3.9E-4	0.0E+0	*	0.0E+0	0.0E+0	2.0E-4	1.3E-2
249TH ST	345	0.84	ND	140	300	220	240	1.1E-5		1.9E-3	4.0E-3	2.9E-3	3.2E-3	2.8E-4	*	1.9E-2	1.3E-1	1.5E-3	1.1E-1
249TH ST	352	ND	ND	ND	17	48	59				2.3E-4	6.4E-4	7.9E-4	0.0E+0	*	0.0E+0	7.6E-3	3.2E-4	2.6E-2
249TH ST	412	ND	0.014	ND	39	80	71				5.2E-4	1.1E-3	9.5E-4	0.0E+0	*	0.0E+0	1.7E-2	5.3E-4	3.2E-2
MARBELLA AVE	24412	2300	2	4100	2400	3100	4400	3.1E-2	2.7E-5	5.5E-2	3.2E-2	4.1E-2	5.9E-2	7.7E-1	*	5.5E-1	**1.1**	2.1E-2	**2.0**
MARBELLA AVE	24426	2.2	0.1	220	240	340	210	2.9E-5	1.3E-6	2.9E-3	3.2E-3	4.5E-3	2.8E-3	7.3E-4	*	2.9E-2	1.1E-1	2.3E-3	9.3E-2
MARBELLA AVE	24433	ND	ND	1300	6800	7200	6000			1.7E-2	9.1E-2	9.6E-2	8.0E-2	0.0E+0	*	1.7E-1	**3.0**	4.8E-2	**2.7**
MARBELLA AVE	24517	ND	ND	ND	15	12	27				2.0E-4	1.6E-4	3.6E-4	0.0E+0	*	0.0E+0	6.7E-3	8.0E-5	1.2E-2
MARBELLA AVE	24532	350	54	1000	1200	1900	1600	4.7E-3	7.2E-4	1.3E-2	1.6E-2	2.5E-2	2.1E-2	1.2E-1	*	1.3E-1	5.3E-1	1.3E-2	7.1E-1
MARBELLA AVE	24603	2	0.058	980	2400	1300	2000	2.7E-5	7.7E-7	1.3E-2	3.2E-2	1.7E-2	2.7E-2	6.7E-4	*	1.3E-1	**1.1**	8.7E-3	8.9E-1
NEPTUNE AVE	24422	1.4	ND	79	170	190	180	1.9E-5		1.1E-3	2.3E-3	2.5E-3	2.4E-3	4.7E-4	*	1.1E-2	7.6E-2	1.3E-3	8.0E-2
NEPTUNE AVE	24426	ND	ND	37	63	99	92			4.9E-4	8.4E-4	1.3E-3	1.2E-3	0.0E+0	*	4.9E-3	2.8E-2	6.6E-4	4.1E-2
NEPTUNE AVE	24502	0.64	ND	32	72	94	110	8.5E-6		4.3E-4	9.6E-4	1.3E-3	1.5E-3	2.1E-4	*	4.3E-3	3.2E-2	6.3E-4	4.9E-2
NEPTUNE AVE	24632	ND	ND	51	220	300	420			6.8E-4	2.9E-3	4.0E-3	5.6E-3	0.0E+0	*	6.8E-3	9.8E-2	2.0E-3	1.9E-1
NEPTUNE AVE	24703	68	2.5	1100	2500	2000	2300	9.1E-4	3.3E-5	1.5E-2	3.3E-2	2.7E-2	3.1E-2	2.3E-2	*	1.5E-1	**1.1**	1.3E-2	**1.02**
NEPTUNE AVE	24725	ND	ND	ND	ND	ND	ND							0.0E+0	*	0.0E+0	0.0E+0	0.0E+0	0.0E+0
NEPTUNE AVE	24729	ND	ND	ND	ND	37	35					4.9E-4	4.7E-4	0.0E+0	*	0.0E+0	0.0E+0	2.5E-4	1.6E-2
NEPTUNE AVE	24738	710	130	2100	2000	1900	1300	9.5E-3	1.7E-3	2.8E-2	2.7E-2	2.5E-2	1.7E-2	2.4E-1	*	2.8E-1	8.9E-1	1.3E-2	5.8E-1
NEPTUNE AVE	24815	ND	ND	ND	ND	100	54					1.3E-3	7.2E-4	0.0E+0	*	0.0E+0	0.0E+0	6.7E-4	2.4E-2
NEPTUNE AVE	24825	ND	ND	ND	22	84	160				2.9E-4	1.1E-3	2.1E-3	0.0E+0	*	0.0E+0	9.8E-3	5.6E-4	7.1E-2
NEPTUNE AVE	24912	ND	ND	ND	ND	12	10					1.6E-4	1.3E-4	0.0E+0	*	0.0E+0	0.0E+0	8.0E-5	4.4E-3
PANAMA AVE	24406	ND	ND	ND	56	260	250				7.5E-4	3.5E-3	3.3E-3	0.0E+0	*	0.0E+0	2.5E-2	1.7E-3	1.1E-1
PANAMA AVE	24430	ND	ND	ND	ND	ND	ND							0.0E+0	*	0.0E+0	0.0E+0	0.0E+0	0.0E+0
PANAMA AVE	24502	ND	ND	ND	ND	ND	ND							0.0E+0	*	0.0E+0	0.0E+0	0.0E+0	0.0E+0
PANAMA AVE	24518	ND	ND	17	48	110	130			2.3E-4	6.4E-4	1.5E-3	1.7E-3	0.0E+0	*	2.3E-3	2.1E-2	7.3E-4	5.8E-2
PANAMA AVE	24709	2.8	1.1	1100	6100	5100	7200	3.7E-5	1.5E-5	1.5E-2	8.1E-2	6.8E-2	9.8E-2	9.3E-4	*	1.5E-1	**2.7**	3.4E-2	**3.2**
PANAMA AVE	24739	5.9	0.25	14	240	96	250	7.9E-5	3.3E-6	1.9E-4	3.2E-3	1.3E-3	3.3E-3	2.0E-3	*	1.9E-3	1.1E-1	6.4E-4	1.1E-1
PANAMA AVE	24809	53	3.8	220	520	440	570	7.1E-4	5.1E-5	2.9E-3	6.9E-3	5.9E-3	7.6E-3	1.8E-2	*	2.9E-2	2.3E-1	2.9E-3	2.5E-1

PANAMA AVE	24823	210	ND	610	540	560	1000	2.8E-3		8 1E-3	7.2E-3	7.5E-3	1.3E-2	7.0E-2	*	8.1E-2	2.4E-1	3.7E-3	4.4E-1
PANAMA AVE	24838	ND	ND	ND	22	96	130				2.9E-4	1.3E-3	1.7E-3	0.0E+0	*	0.0E+0	9.8E-3	6.4E-4	5.8E-2
RAVENNA AVE	24402	680	60	680	630	920	730	9.1E-3	8.0E-4	9 1E-3	8.4E-3	1.2E-2	9.7E-3	2.3E-1	*	9.1E-2	2.8E-1	6.1E-3	3.2E-1
RAVENNA AVE	24416	3.8	0.32	640	1500	2000	1900	5.1E-5	4.3E-6	8 5E-3	2.0E-2	2.7E-2	2.5E-2	1.3E-3	*	8.5E-2	6.7E-1	1.3E-2	8.4E-1
RAVENNA AVE	24419	1.2	0.07	280	510	790	890	1.6E-5	9.3E-7	3 7E-3	6.8E-3	1.1E-2	1.2E-2	4.0E-4	*	3.7E-2	2.3E-1	5.3E-3	4.0E-1
RAVENNA AVE	24423	780	23	820	830	700	600	1.0E-2	3.1E-4	1 1E-2	1.1E-2	9.3E-3	8.0E-3	2.6E-1	*	1.1E-1	3.7E-1	4.7E-3	2.7E-1
RAVENNA AVE	24523	2.4	0.16	100	250	210	290	3.2E-5	2.1E-6	1 3E-3	3.3E-3	2.8E-3	3.9E-3	8.0E-4	*	1.3E-2	1.1E-1	1.4E-3	1.3E-1
RAVENNA AVE	24603	ND	ND	ND	ND	15	ND					2.0E-4		0.0E+0	*	0.0E+0	0.0E+0	1.0E-4	0.0E+0
RAVENNA AVE	24613	76	ND	500	340	590	760	1.0E-3		6 7E-3	4.5E-3	7.9E-3	1.0E-2	2.5E-2	*	6.7E-2	1.5E-1	3.9E-3	3.4E-1
RAVENNA AVE	24700	ND	ND	15	67	340	410			2.0E-4	8.9E-4	4.5E-3	5.5E-3	0.0E+0	*	2.0E-3	3.0E-2	2.3E-3	1.8E-1
RAVENNA AVE	24712	1.1	0.013	140	130	240	360	1.5E-5	1.7E-7	1 9E-3	1.7E-3	3.2E-3	4.8E-3	3.7E-4	*	1.9E-2	5.8E-2	1.6E-3	1.6E-1
RfD								0.04		0.1	0.03	2	0.03	* = No RfD					

- Aromatic hydrocarbons in the C-9 to C-32 range at 24412, 24433, and 24603 Marbella Avenue, 24709 Panama Avenue, and 24703 Panama Neptune exceed their reference values for children (i.e. the hazard quotient is ≥ 1.
- While a hazard quotient ≥ 1does not indicate that there will be definite toxic effects, it does indicate that the concentration exceeds the level that we can say is definitely safe.

Conclusions

- Aromatic hydrocarbons in the C-9 to C-32 range at five properties exceed their reference values for children (i.e. the hazard quotient is ≥ 1).

If you have any questions, do not hesitate to call or e-mail me at 916-323-2635 or JCarlisle@OEHHA.CA.gov, respectively.

Memo reviewed by:

Ned Butler, PhD
Staff Toxicologist
Integrated Risk Assessment Branch

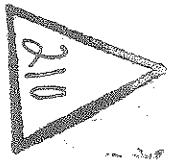

Exhibit 2

May 5, 2010

Ms. Tracy Egoscue
Executive Officer
California Regional Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Shell Oil Company
One Shell Plaza
910 Louisiana Street
Houston, TX 77002
Tel (713) 241 5126
Email: ed.platt@shell.com
Internet http://www.shell.com

Reference: Former Kast Property, Carson, California
Site Cleanup No. 1230; Site ID 2040330

Dear Ms Egoscue:

As you know, during the past several months, Shell Oil Company employees and contractors have worked tirelessly to investigate and address the environmental issues at the former Kast Property. To date, we have sampled at approximately one-third of the homes in the Carousel neighborhood, and we will continue our work in conjunction with the RWQCB, based upon applicable and appropriate scientific and regulatory standards that are protective of human health and the environment. Like the RWQCB, our goal is to protect the residents of the Carousel neighborhood and address the environmental issues, while minimizing disruption to residents and preserving the integrity of the community.

Although elevated levels of compounds of concern (COCs) have been found beneath the streets and at certain residential properties, based on the data collected so far, there is no imminent risk to residents or the public in the Carousel neighborhood. Also, while Shell's investigation is not yet complete, it does not appear at this time that there is any significant off-site migration of soil impacts or soil vapor impacts from the former Kast Property.

Our approach, which is to develop a coherent conceptual framework for the mitigation and remediation of the Carousel neighborhood, is consistent with the RWQCB's guidelines providing for a principled, phased approach to investigating and remediating environmental impacts Specifically, this approach follows the guidance set out in the State Water Resources Control Board's Resolution 92-49. In accordance with these guidelines, it includes "an evaluation of cleanup alternatives that are feasible at the site" and consistent with the maximum benefit to the people of the State. Because the soil and groundwater assessment is ongoing, a full evaluation of cleanup alternatives is premature at this time.

Nevertheless, we are considering a variety of potential alternatives that can be applied at specific properties and in the public streets in order to address environmental impacts and avoid any significant risk to human health in the Carousel neighborhood. For example, Shell has submitted a work plan for the soil vapor extraction pilot test. While evaluating alternatives, we place a priority on keeping the community intact and minimizing any disruption to residents of the Carousel community If it becomes necessary for residents to relocate temporarily to perform this work, Shell will take appropriate steps to minimize any inconvenience and compensate them for any resulting expenses. We are also sensitive to the residents' concerns about their property values and are open to a dialogue with the RWQCB regarding these issues.

In addition, Shell is continuing to monitor the groundwater to ensure that there are no significant impacts emanating from the former Kast Property. In this regard, it is essential that groundwater conditions both up-gradient and down-gradient be evaluated. To date, our investigation suggests that groundwater up-gradient of the former Kast property is significantly contaminated. One potential source of this contamination appears to be the former Fletcher Oil Refinery, which we understand the County Sanitation District is remediating.

We look forward to further dialogue with the RWQCB regarding the draft Feasibility Study outline, recently submitted, as well as the Site Conceptual Model, to be submitted later this month. The Site Conceptual Model will provide: (1) an overview of our investigation efforts to date; (2) additional information regarding potential on and off-site sources for the COCs; and (3) a review of the available options for remediation of the former Kast property.

We appreciate your leadership on this project.

Sincerely,

William E. Platt
Manager, Environmental Claims
Shell Oil Company

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California Regional Water Quality Control Board
Los Angeles Region

320 West Fourth Street, Suite 200, Los Angeles, California 90013
(213) 576-6600 • Fax (213) 576-6640
http://www.waterboards.ca.gov/losangeles

Linda S. Adams
Acting Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

March 11, 2011

Mr. Edward E. Freed
Shell Oil Products US
Environmental Services Company
20945 S Wilmington Ave.
Carson, CA 90810

Certified Mail
Return Receipt Requested
Claim No.7009 0820 0001 6811 7806

CLEANUP AND ABATEMENT ORDER NO. R4-2011-0046 - FORMER KAST PROPERTY TANK FARM LOCATED SOUTHEAST OF THE INTERSECTION OF MARBELLA AVENUE AND EAST 244TH STREET, CARSON, CALIFORNIA (SCP NO. 1230, SITE ID NO. 2040330, FILE NO. 11-043)

Dear Mr. Freed:

Enclosed please find Cleanup and Abatement Order (CAO) No. R4-2011-0046, directing Shell Oil Company to assess, monitor, and cleanup and abate total petroleum hydrocarbons and other contaminants of concern discharged to soil and groundwater at the former Kast Property Tank Farm (currently the Carousel neighborhood) located southeast of the intersection of Marbella Avenue and East 244th Street, in Carson, California. Note that I have made several clarifying revisions to the proposed CAO consistent with the comments and responses provided with the proposed Order for my review and applicable law and policies. These revisions are minor, non-substantive and do not require recirculation of the CAO for comments.

This CAO is issued pursuant to the authority of the Regional Water Quality Control Board, Los Angeles Region, set forth in sections 13304 and 13267 of the California Water Code. Pursuant to California Water Code section 13350 and 13268, failure to comply with any of the requirements contained in this CAO may result in the assessment of administrative civil liability of up to $5,000 per day in which the violation occurs. These civil liabilities may be assessed by the Regional Board for failure to comply, beginning with the date that the violations first occurred, and without further warning. The Regional Board may also request that the Attorney General seek judicial civil liabilities, or injunctive relief and/or request the United States Attorney, appropriate county District Attorney, or City Attorney seek criminal prosecution.

If you have any questions, please contact the project manager, Dr. Teklewold Ayalew, at (213) 576-6739 (tayalew@waterboards.ca.gov), or Ms. Thizar Tintut-Williams, Site Cleanup Unit III Chief, at (213) 576-6723 (twilliams@waterboards.ca.gov).

Sincerely,

Deborah J. Smith
Chief Deputy Executive Officer

Enclosure: Cleanup and Abatement Order No. R4-2011-0046
cc: List

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List

Laura Richardson, Honorable Congresswoman, US House of Representatives, California's 37th District
Mr. Mark Ridley-Thomas, Supervisor, Second District County of Los Angeles
Jenny Oropeza, Senator, 28th Senate District
Warren T. Furtani, Assembly member, 55th Assembly District
Jim Dear, Mayor of Carson
Sheri Repp-Loadsman, City of Carson
Ky Truong, City of Carson
Jennifer Fordyce, Office of Chief Counsel, State Water Resources Control Board
Alexander Morelam, LAUSD
Patrick Schanen, LAUSD
Jerome G. Groomes, Carson's City Manager
James Carlisle, Office of Environmental Health Hazard Assessment
Robert Romero, Department of Toxic Substances Control
Wendy W. Arano, Department of Toxic Substances Control
Bill Jones, Los Angeles County Fire Department
Barry Nugent, Los Angeles County Fire Department
Shahin Nourishad, Los Angeles County Fire Department
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EXHIBIT C

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

CLEANUP AND ABATEMENT ORDER NO. R4-2011-0046
REQUIRING

SHELL OIL COMPANY
AND
BARCLAY HOLLANDER CORPORATION

TO CLEANUP AND ABATE WASTE
DISCHARGED TO WATERS OF THE STATE
PURSUANT TO CALIFORNIA WATER CODE SECTION 13304[1]
AT THE FORMER KAST PROPERTY TANK FARM,
CARSON, CALIFORNIA
OCTOBER 31, 2013
(FILE NO. 97-043)55=

Cleanup and Abatement Order No. R4-2011-0046 (Order) requires Shell Oil Company and Barclay Hollander Corporation, (hereinafter "Discharger") to assess, monitor, and cleanup and abate the effects of petroleum hydrocarbon compounds and other contaminants of concern discharged to soil and groundwater at the former Kast Property Tank Farm facility (hereinafter, the "Site") located southeast of the intersection of Marbella Avenue and East 244th Street, in Carson, California.

On March 11, 2011, the Regional Water Quality Control Board, Los Angeles Region (Regional Board) issued the Order requiring Shell Oil Company (Shell) to investigate and cleanup the Site. On July 28, 2010 in comments on the draft Order, the law firm of Morgan Lewis on behalf of Shell, requested that the Regional Board name Dole Food Company, Inc. (Dole) and its wholly-owned subsidiary Barclay Hollander Corporation (BHC) as responsible parties in the Order ("Morgan Lewis 2010 Letter"). At that time, the Regional Board declined to add Dole and BHC to the draft Order and issued the Order to Shell only. Subsequently, on April 22, 2011, the Regional Board issued an order pursuant to California Water Code section 13267 (13267 Order) requiring Dole to provide technical information about the Site. On September 15, 2011, the law firm of Gibson Dunn on behalf of Dole provided a detailed letter and attachments in response to the 13267 Order disputing that it and/or BHC should be named as responsible parties in the Order ("Gibson Dunn 2011 Letter"). For the reasons discussed below, the Order is hereby revised to add BHC, a wholly-owned subsidiary of Dole, as a responsible party in the Order based on information provided by Shell and Dole.

As of the date of this revised Order, Shell has completed many of the tasks required by the Order since its issuance on March 11, 2011. This Order is not being revised to delete tasks already

[1] Water Code section 13304 (a) states, in part: Any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts.

completed by Shell but is being revised to add BHC as a responsible party and to make appropriate findings based on the information provided by Dole and Shell since issuance of the Order and to clarify that the Discharger is responsible for preparing draft environmental documentation. The Regional Board's files include records documenting the activities associated with this Order.

The Regional Board herein finds:

BACKGROUND

1. **Discharger:** ~~Shell Oil Company~~ Shell, previously Shell Company of California, is a Responsible Party due to its: (a) ownership of the former Kast Property Tank Farm, and (b) former operation of a petroleum hydrocarbon tank farm at the Site resulting in discharges of waste at the Site. Barclay Hollander Corporation (BHC) is a responsible party due to its (a) past ownership and/or as a successor to past owners of the Site, and (b) development of the property resulting in discharges of waste at the Site. Shell and BHC are hereafter referred to collectively as "Discharger". The actions of the Discharger have caused or permitted waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and have created a condition of pollution or nuisance.

2. **Location:** The Site is located southeast of the intersection of Marbella Avenue and East 244th Street in the City of Carson, California. The Site occupies approximately 44 acres of land and is bordered by the Los Angeles County Metropolitan Transportation Authority railroad right-of-way on the north, Lomita Boulevard on the south, Marbella Avenue on the west, and Panama Avenue on the east (Figure 1). The Site was previously owned by ~~the Discharger~~ Shell, who operated three oil storage reservoirs from the 1920s to the mid-1960s. The central and southern reservoirs each had a capacity of 750,000 barrels of oil and the northernmost reservoir had a capacity of 2,000,000 barrels of oil. The Site presently consists of the Carousel residential neighborhood and city streets.

3. **Groundwater Basin:** The Site is located on the Torrance Plain of the West Coast Groundwater Basin (Basin), in the southwestern part of the Coastal Plain of Los Angeles County. Beneath the Site, the first encountered groundwater is estimated at 54 feet below ground surface (bgs). The Basin is underlain by a series of aquifers, the deeper of which are used for drinking water production. These aquifers are with increasing depth, the Gage aquifer, Lynwood aquifer, and Silverado aquifer. The nearest municipal water supply well is located approximately 400 feet west of the Site. As set forth in the *Water Quality Control Plan for the Los Angeles Region* (the Basin Plan), adopted on June 13, 1994, the Regional Board has designated beneficial uses for groundwater (among which include municipal and domestic drinking water supplies) in the West Coast Basin and has established water quality objectives for the protection of these beneficial uses.

4. As detailed in the findings below, the Discharger's activities at the Site have caused or permitted the discharge of waste resulting in soil, soil vapor, and groundwater pollution, including -discharges of waste to the waters of the state, and nuisance.

SITE HISTORY

5. **Property Ownership and Leasehold Information:** Based on information submitted to the Regional Board by the Discharger, the Site has the following property ownership and leasehold history:

   a. According to the Sanborn maps dated 1924 and 1925, the Site was owned and operated by "Shell Company of California (Kast Property)" beginning in approximately 1924 until the mid-1960s. The Site was used as a tank farm, which included three crude oil storage reservoirs, Reservoir Nos. 5, 6 and 7. Reservoir No.5, the center reservoir, had a capacity of 750,000 barrels of oil and was under lease to General Petroleum Corporation. Reservoir No. 6, the southernmost reservoir, had a capacity of 750,000 barrels of oil; and Reservoir No. 7, the northernmost reservoir, had a capacity of 2,000,000 barrels of oil. According to Sanborn map notations, the reservoirs had concrete-lined earth-slopes with frame roofs on wood posts, surrounded by earth levees averaging 20 feet in height with 7 foot wide walks on top. One oil pump house was depicted on the 1925 Sanborn map within the southern portion of the Site. Since construction, the Site was used as a crude oil storage reservoir.

   ~~b. In 1966, SOC sold the Site to Lomita Development Company, an affiliate of Richard Barclay and Barclay Hollander Curci (BHC), with the reservoirs in place. The Pacific Soils Engineering Reports dated January 7, 1966; March 11, 1966; July 31, 1967; and June 11, 1968 documented that: 1) Lomita Development Company emptied and demolished the reservoirs, and graded the Site prior to it developing the Site as residential housing; 2) part of the concrete floor of the central reservoir was removed by Lomita Development Company from the Site; and 3) where the reservoir bottoms were left in place, Lomita Development Company made 8 inch wide circular trenches in concentric circles approximately 15 feet apart to permit water drainage to allow the percolation of water and sludge present in the reservoirs into the subsurface.~~

   ~~c. In phases between 1967 and 1969, Lomita Development Company developed the Site into one and two story single family residential parcels and sold the developed lots to individual homeowners.~~

   d. In 1965, Richard Barclay and Shell executed a Purchase Option Agreement, wherein Richard Barclay (or his nominee) agreed to purchase the Property, subject to a favorable engineering report and other restrictions. Richard Barclay was a principal in an entity known as Barclay-Hollander-Curei. In 1966, Lomita Development Company (Lomita), a California partnership, was designated as Mr. Barclay's "nominee" and purchased the Property from Shell with the reservoirs in place. Lomita explicitly agreed in writing to complete decommissioning of the reservoirs. In phases between 1967 and 1969, Lomita developed the Site into one- and two-story single family residential parcels and sold the developed lots to individual homeowners. In 1969, a group of companies, including Lomita, merged into a company known as Barclay Hollander Curci, Inc., which was then acquired by Castle & Cooke, Inc. and it became a wholly-owned subsidiary of Castle & Cooke, Inc. Barclay Hollander Curci, Inc. continued to sell parcels to residential

owners. Barclay Hollander Curci, Inc. was later renamed Barclay Hollander Corporation, Inc. (BHC). Castle & Cooke, Inc. merged with Flexi-Van Corporation in 1985, which in 1991, changed its name to Dole Food Company, Inc. BHC agreed to be responsible for the liabilities of Lomita and the other entities. BHC is currently a wholly-owned subsidiary of Dole, but has no assets.[2]

6. **Site Description and Activities:** According to information in the Regional Board's file on this Site, oil related operations at the Site began in 1923 and ended by the early 1960s. The Site was previously owned and operated by Shell Company of California, which was subsequently renamed Shell Oil Company, as a crude oil storage facility. The facility included equipment that pumped the oil to the nearby ~~SOC's~~ Shell refinery for processing from three concrete-lined oil storage reservoirs with a total capacity of 3.5 million barrels. In 1966, ~~SOC~~ Shell closed the Site and ~~SOC~~ sold the Site to Lomita ~~Development Company~~, an affiliate of Richard Barclay and Barclay-Hollander-Curci. Subsequently, Lomita ~~Development Company~~ developed the Site into the Carousel residential neighborhood, which contains 285 single-family homes.

In 1965, prior to the purchase of the property from Shell, Richard Barclay and/or Barclay Hollander Curci requested permission from Shell to remove the liquid waste and petroleum residue from the property and to begin to grade the property for development. Shell agreed to allow the activities with some conditions, including that "all work done by or for [Barclay Hollander Curci] be done in a good, lawful and workmanlike manner." After purchasing the property in 1966, Lomita, as the owner of the property, actively participated in the decommissioning and grading activities. Lomita conducted the waste removal and grading activities and obtained the required permits from the County. Available information indicates that by August 15, 1966 all three reservoirs had been fully cleaned out. The Pacific Soils Engineering Reports dated January 7, 1966; March 11, 1966; July 31, 1967; and June 11, 1968[3] documented that: (1) Lomita emptied and demolished the reservoirs, and graded the Site prior to it developing the Site as residential housing; (2) part of the concrete floor of the central reservoir was removed by Lomita from the Site; and (3) where the reservoir bottoms were left in place, Lomita made 8-inch wide circular trenches in concentric circles approximately 15 feet apart to permit water drainage to allow the percolation of water and sludge present in the reservoirs into the subsurface. Various documents from the soil engineer describe the process of removing water and sludge in the reservoirs, burying concrete and compacting the concrete and soil, and drilling holes in the concrete to allow for percolation into the groundwater. The County's grading permit required that concrete fill must be at least seven feet below grade. Boring logs indicated that soils beneath the concrete slab in Reservoir 7 were "highly oil stained" and that soils in the borings had a "petroleum odor, however the amount of actual oil contained in the soil is unknown." [4] One of the soil engineering reports also indicated that soil used to fill in the reservoirs and return the Property to its natural grade came from the berms surrounding each reservoir and surrounding the perimeter of the Property.[5] In 1967, Lomita began transferring title of individual parcels. In

[2] See Exhibit 76 to Gibson Dunn 2011 Letter.
[3] See Exhibits 31, 78, 36, and 42 to Gibson Dunn 2011 Letter.
[4] See Exhibit 78 to Gibson Dunn 2011 Letter, March 11, 1966 Report by Pacific Soils Engineering Inc.
[5] See Exhibit 31 and Declaration of Lee Volmer, attached to Gibson Dunn 2011 Letter.

1969, title to remaining parcels was granted by grant deed from Lomita to BHC. Then BHC began transferring title to the rest of the parcels.

6. **Chemical Usage:** Based on the Phase I Environmental Site Assessment (ESA) dated July 14, 2008 conducted by Shell Oil Products[6] (SOPUS) consultant, URS Corporation, the Site was used for the storage of crude oil in all three reservoirs on the property from at least 1924 to 1966. Subsequent records indicate that in the 1960s the reservoirs may also have been used for storage of bunker oil. Ongoing investigations indicate petroleum hydrocarbon compounds including volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) are impacted in the subsurface soil, soil vapor, and groundwater underlying the Site.

EVIDENCE OF DISCHARGES OF WASTE AND BASIS FOR ORDER

7. **Waste Discharges:** The following summarizes assessment activities associated with the Site:

    a. In 2007, under the regulatory oversight of the California Department of Toxic Substances Control (DTSC), an environmental investigation was initiated at the former Turco Products Facility (TPF). Soil vapor and groundwater were investigated in areas directly west of the Site and at locations in the northwestern portion of the Site. The DTSC-required investigation detected petroleum hydrocarbons, benzene, toluene, and chlorinated solvents in soil and soil vapor. A multi-depth soil vapor survey, which included soil vapor sampling on the Site at locations coincident with the former Kast Site footprints, detected benzene at concentrations up to 150 micrograms per liter (µg/l). Benzene was detected at TPF groundwater monitoring well MW-8, which has a northeast flow direction, at a concentration of 1,800 µg/l. Therefore, groundwater monitoring well MW-8 is located upgradient of the Kast Site. Chlorinated solvents were also detected at the Kast Site groundwater monitoring well MW-5.

    b. The *Final Phase I Site Characterization Report* dated October 15, 2009, which was prepared by URS Corporation on behalf of SOPUS showed that soil impacts consisted primarily of petroleum hydrocarbons spanning a wide range of carbon chains and including Total Petroleum Hydrocarbons (TPH) as gasoline (g), TPH as diesel (TPHd), TPH as motor oil (TPHmo), benzene, and naphthalene (See Tables 1, 2A, 2B, and 3).

        i. In June 2009, a subsurface investigation of public streets in the Carousel neighborhood consisting of ten cone penetrometer/rapid optical screening tools (CPT/ROST) was performed. The CPT/ROST logs indicated several locations within the Site with elevated hydrocarbon concentrations. The CPT/ROST logs also showed that the highest apparent soil impacts occurred at depths of 12 feet bgs, 36 feet bgs, and 40 feet bgs.

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[6] Shell Oil Products US is the d/b/a for Equilon Enterprises LLC, which is wholly owned by Shell Oil Company.

II. A total of 228 soil samples were collected during the Phase I Site Characterization. The analytical data for soil samples collected from soil borings advanced on public streets across the Site (Figure 2) were as follows:

i. The highest detected concentration of TPH was 22,000 milligrams per kilogram (mg/kg) and TPHg, TPHd, and TPHmo were 8,800, 22,000, and 21,000 mg/kg, respectively;

ii. Benzene, ethylbenzene, toluene, and xylenes were detected in concentrations as high as 21,000 micrograms per kilogram (µg/kg), 32,000 µg/kg, 12,000 µg/kg, and 140,000 µg/kg, respectively;

iii. SVOCs were detected in concentrations as high as 47 mg/kg of naphthalene, 38 mg/kg of 1-methylnaphthalene, 63 mg/kg of 2-methylnaphthalne, 12 mg/kg phenanthrene, and 9.0 mg/kg pyrene; and

iv. Arsenic and lead were detected in concentrations as high as 53.2 mg/kg and 52.5 mg/kg, respectively.

III. Soil vapor samples collected from a 5-foot depth and greater below the public streets in the Carousel neighborhood indicated elevated benzene and methane (Figures 3 and 4). Benzene was detected at a maximum concentration of 3,800µg/l, which exceeds the California Human Health Screening Level (CHHSL) value of 0.036 µg/l for benzene set for shallow soil vapor in a residential area. Methane was also detected in concentrations as high as 59.7 % (by volume) that significantly exceed its lower explosive limit of 5% (by volume), posing a potential safety hazard.

c. Between September 2009 and February 2010, residential soil and sub-slab soil vapor sampling was conducted at 41 parcels (Figure 5 a – f; Tables 1 and 2) and the results were as follows:

I. Surface and subsurface soil (0 to 10 feet bgs) detected concentrations of chemicals of concern that significantly exceeded soil screening levels as follows:

i. VOCs - Benzene (14,000 µg/kg), tetrachloroethylene (PCE) (22,000 µg/kg), 1,2,4-trimethylbenzene (34,000 µg/kg), and 1,3,5-trimethylbenzene (14,000 µg/kg);

ii. SVOCs - Naphthalene (18 mg/kg), Benzo(a)pyrene (2.9 mg/kg), benzo(a)anthracene (0.1 mg/kg), chrysene (0.27 mg/kg), phenanthrene (0.28 mg/kg), and pyrene (0.19 mg/kg); and

iii. Lead was also detected at a maximum concentration of 307 mg/kg.

II. The highest detected concentration of TPHg was 5,000 mg/kg, TPHd was 33,000 mg/kg, and TPHmo was 41,000 mg/kg;

III. As of September 27, 2010, sub-slab soil vapor samples have been collected from 172 homes in the Carousel neighborhood. Additional data continues to be collected as part of the Phase II Site Characterization. The validated data from the first 41 homes detected benzene, naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, ethylbenzene, p/m-xylenes, toluene, and acetone, at a maximum concentration of 4,500 micrograms per cubic meter ($\mu g/m^3$), 2,200 $\mu g/m^3$, 1,000 $\mu g/m^3$, 1,100 $\mu g/m^3$, 5,200 $\mu g/m^3$, 700 $\mu g/m^3$, 270 $\mu g/m^3$, respectively.

d. Between November 19, 2009 and February 15, 2010, additional step-out soil and soil vapor sampling at the elevated soil vapor sampling locations were conducted in selected locations beneath the public streets at the Site. The measured concentrations for petroleum hydrocarbons in soil were as follows:

I. The highest detected concentrations of TPHg was 9,800 mg/kg, TPHd was 22,000 mg/kg, and TPHmo was 21,100 mg/kg;

II. The highest detected concentrations of benzene was 33,000 µg/kg, Ethylbenzene was 42,000 µg/kg, toluene was 11,000 µg/kg, and xylenes were 140,000 µg/kg, respectively;

III. SVOCs were detected in concentrations as high as 47 mg/kg of naphthalene, 33 mg/kg of 1-methylnaphthalene, 53 mg/kg of 2-methylnaphthalne, 6.1 mg/kg phenanthrene, and 3.9 mg/kg pyrene; and

IV. Arsenic and lead were detected in concentrations as high as 28.2 mg/kg and 13.6 mg/kg, respectively.

e. In July 2009, the installation of six on-site groundwater monitoring wells (Figure 6) were completed and quarterly groundwater monitoring was initiated. Groundwater was encountered at 53 feet bgs. Groundwater samples from five of the six wells contained concentrations of benzene at a maximum concentration of 140 µg/L and trichloroethylene (TCE) at a maximum concentration of 290 µg/L. One of the monitoring wells (MW-3) contains a free product or a light non-aqueous phase liquid (LNAPL) with a maximum measured thickness of 9.01 foot as of May 27, 2010.

8. Source Elimination and Remediation Status at the Site

a. The results of the initial soil and soil vapor investigation indicate the presence of elevated methane and benzene at concentrations exceeding the Lower Explosive Limit and the CHHSL for shallow soil vapor, at several locations beneath the public streets at the Site. On October 15, 2009, the Regional Board directed the Discharger to expeditiously design and implement an interim remedial action.

b. On May 12, 2010 the Regional Board approved SOPUS's proposed Soil Vapor Extraction (SVE) pilot test in order to evaluate the use of this technology as a remedial option for VOCs at the Site.

9. Summary of Findings from Subsurface Investigations

a. Regional Board staff have reviewed and evaluated numerous technical reports and records pertaining to the release, detection, and distribution of wastes on the Site and its vicinity. The Discharger has stored, used, and/or discharged petroleum hydrocarbon compounds at the Site. Elevated levels of TPH and other wastes have been detected in soil, soil vapor and groundwater beneath the Site.

b. The sources for the evidence summarized above include, but are not limited to:

I. Various technical reports and documents submitted by the Discharger or its representatives to Regional Board staff.

II. Site inspections conducted by Regional Board staff, as well as meetings, letters, electronic mails, and telephone communications between Regional Board staff and the Discharger and/or its representatives.

III. Subsurface drainage study for the Site reservoirs submitted by Girardi and Keese, the law firm retained by some of the residents of the Carousel neighborhood.

10. Summary of Current Conditions Requiring Cleanup and Abatement

a. Based on the Phase I ESA for the Site dated July 14, 2008 (prepared by URS Corporation) and the most recent information provided to the Regional Board by SOPUS: 1) SOC sold the Kast Site to Lomita ~~Development Company~~, an affiliate of Richard Barclay and Barclay-Hollander-Curci, in 1966 with the reservoirs in place; 2) the Pacific Soils Engineering Reports from 1966 to 1968 indicate that Lomita ~~Development Company~~ emptied and demolished the reservoirs, and constructed residential housing; 3) part of the concrete floor of the central reservoir was removed by Lomita ~~Development Company~~ from the Site; and 4) where the reservoir bottoms were left in place, Lomita ~~Development Company~~ made 8-inch wide circular trenches in concentric circles approximately 15 feet apart to permit water drainage to allow percolation of water and sludge present in the reservoirs into the subsurface.

b. There is no consistent trend in the vertical distribution of detected concentrations of petroleum hydrocarbon compounds that can be discerned from soil boring data to date. Although, the majority of the aforementioned highest detected TPH concentrations were obtained from the 2.5-foot depth samples, there were multiple locations where the highest concentrations were in the 5-foot or 10-foot samples. This may be due to the nature of previous development activities by Lomita ~~Development Company~~ at the Site (i.e., the construction and demolition of the former reservoirs and site grading in preparation for development of the residential tract).

c. On May 11, 2010, Environmental Engineering and Contracting, consultants hired by Girardi and Keese, conducted exploratory trenching in order to locate and identify the obstructions that have been frequently encountered during the advancement of shallow soil borings at many of the residential homes investigated to date. Regional Board staff observed the encountering of an approximately 8-inch thick concrete slab extending at the trench excavation termination depth of 9 feet, 2 inches. The Pacific Soils Engineering Report dated January 7, 1966 states that the reservoirs were lined with a "four inch blanket of reinforced concrete". These obstructions are presumed to be remnants of the concrete liners of the former reservoir.

d. Results from the 169 Interim Residential Sampling Reports submitted to the Regional Board through November 17, 2010 indicate that for surface and subsurface soil sampling (0 to 10 feet bgs), the cancer risk index estimate is between 0 and 10 for 107 residential parcels, between 10 and 100 for 60 parcels, and exceeded 100 for 2 parcels. In the area where the highest cancer index is documented, SVOCs (i.e. Benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene and chrysene), benzene, and ethylbenzene were the primary chemicals of potential concern (COPCs) contributing to the cancer risk index.

   For the Carousel neighborhood investigation, the Regional Board is using the most protective cancer risk screening levels recommended by the State and federal governments, which is one in one million (1×10^{-6}) additional risks. For screening purposes, the Regional Board routinely uses the most conservative (health-protective assumptions) risk based screening levels of 1×10^{-6} for the target chemical. This screening level is based on a target risk level at the lower end of the US Environmental Protection Agency (USEPA) risk management range of one-in-a-million risk (1×10^{-6}) for cancer risk and a hazard quotient of 1.

   The presence of a chemical at concentrations in excess of a CHHSL does not indicate that adverse impacts to human health are occurring or will occur, but suggests that further evaluation of potential human health concerns is warranted (Cal-EPA, 2005). It should also be noted that CHHSLs are not intended to "set ... final cleanup or action levels to be applied at contaminated sites" (Cal-EPA, 2005).

e. Results from the 169 Interim Residential Sampling Reports submitted to the Regional Board through November 17, 2010 also indicate that for the sub-slab soil vapor data collected from the residential parcels, the cancer risk index estimate was between 0 and 10 for 147 parcels, between 10 and 100 for 20 parcels, and greater than 100 for 2 parcels. The two highest cancer risk index were estimated as 550 and 120. In most cases, benzene was the primary contributor to the cancer risk index estimate.

f. The Office of Environmental Health Hazard Assessment (OEHHA) performed a quantitative risk evaluation of TPH using surface and subsurface (0 to 10 feet bgs) soil TPH fractionation data for the 41 residential parcels (Table 3). Based on the risk calculation, OEHHA estimated maximum exposures for a child and compared

the resulting exposure estimates of reference dosages with that provided by DTSC interim guidance dated June 16, 2009. OEHHA concluded that aromatic hydrocarbons in the C-9 to C-32 range at five parcels exceeded their reference values for children (Exhibit 1).

g. The San Francisco Bay Regional Water Quality Control Board developed the Environmental Screening Level (ESL) as guidance for determining when concentration of TPH may present a nuisance and detectable odor. The ESL, based on calculated odor indexes, for residential land-use, is 100 mg/kg for TPHg and TPHd. The soil TPHg and TPHd data obtained from the Site were detected up to 9,800 mg/kg and 85,000 mg/kg, respectively, which exceed the ESL.

11. **Pollution of Waters of the State**: The Discharger has caused or permitted waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance. As described in this Order and the record of the Regional Board, the Discharger owned and/or operated the site in a manner that resulted in the discharges of waste. The constituents found at the site as described in Finding 8 constitute "waste" as defined in Water Code section 13050(d). The discharge of waste has resulted in pollution, as defined in Water Code section 13050(l). The concentration of waste constituents in soil and groundwater exceed water quality objectives contained in the Water Quality Control Plan for the Los Angeles Region (Basin Plan), including state-promulgated maximum contaminant levels. The presence of waste at the Site constitutes a "nuisance" as defined in Water Code section 13050(m). The waste is present at concentrations and locations that *"is injurious to health, or is indecent, or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property . . . and [a]ffects at the same time an entire community or neighborhood, or any considerable number of persons,although the extent of the annoyance or damage inflicted upon individuals may be unequal."*

12. **Need for Technical Reports:** This Order requires the submittal of technical or monitoring reports pursuant to Water Code section 13267[7]. The Discharger is required to submit the reports because, as described in the Findings in this Order, the Discharger is responsible for the discharge of waste that has caused pollution and nuisance. The reports are necessary to evaluate the extent of the impacts on water quality and public health and to determine the scope of the remedy.

13. ~~Although requested by the Discharger, the Regional Board is declining to name additional potentially responsible parties (PRPs) to this Order at this time.~~ Substantial evidence indicates that the Discharger caused or permitted waste to be discharged into waters of state and is therefore appropriately named as a responsible party in this Order. Shell owned and operated the Site, then sold the property to the developers, leaving in place three reservoirs and residual petroleum hydrocarbons in at least one tank and in soil surrounding the reservoir. The residual petroleum hydrocarbons are still present at the Site and continue to cause pollution and nuisance as documented in this Order and the Regional Board files.

[7] Water Code section 13267 authorizes the Regional Board to require any person who has discharged, discharges, or is suspect of having discharged or discharging, waste to submit technical or monitoring program reports.

~~However, the~~ The Regional Board ~~will continue to~~ has investigated ~~whether~~ additional potentially responsible parties (including, but not limited to, Lomita Development Company, Richard Barclay, Barclay-Hollander-Curci, Dole Foods, Inc., Barclay Hollander Corporation and/or any of its successors) and has determined that Barclay Hollander Corporation caused or permitted the discharge of waste at the Site ~~and whether these or other parties should be named as additional responsible parties to this Order or a separate Order. The Regional Board may amend this Order or issue a separate Order in the future as a result of this investigation. Although investigation concerning additional PRPs is ongoing, the Regional Board desires to issue this Order as waiting will only delay remediation of the Site.~~ BHC and/or its predecessor purchased the Site with explicit knowledge of the presence of the petroleum reservoirs and the presence of residual petroleum hydrocarbons and conducted various activities, including partially dismantling the concrete in the reservoirs and grading the onsite materials, thereby spreading the waste. The residual petroleum hydrocarbons are still present at the Site and continue to cause pollution and nuisance as documented in this Order and the Regional Board files. BHC is a wholly-owned subsidiary of Dole. Including BHC as a responsible party in this Order is consistent with orders of the State Water Resources Control Board construing Water Code section 13304 naming former owners who had knowledge of the activities that resulted in the discharge and the legal ability to control the continuing discharge.[8] If the Regional Board becomes aware of any other responsible parties it will consider naming such persons in this Order.

14. ~~The Discharger~~ Shell, in a letter to the Regional Board dated May 5, 2010 (Exhibit 2), stated that it is considering a variety of potential alternatives that can be applied at specific parcels and in the public streets in order to avoid environmental impacts and avoid any significant risks to human health at this Site. ~~The Discharger~~ Shell also indicated that if it becomes necessary for residents to relocate temporarily to perform this work, ~~the Discharger~~ Shell will take appropriate steps to minimize any inconvenience and compensate them for any resulting expenses.

15. Issuance of this Order is being taken for the protection of the environment and as such is exempt from provisions of the California Environmental Quality Act (CEQA) (Pubic Resources Code section 21000 et seq.) in accordance with California Code of Regulations, title 14, sections 15061(b)(3), 15306, 15307, 15308, and 15321. This Order generally requires the Discharger to submit plans for approval prior to implementation of cleanup activities at the Site. Mere submittal of plans is exempt from CEQA as submittal will not cause a direct or indirect physical change in the environment and/or is an activity that cannot possibly have a significant effect on the environment. CEQA review at this time would be premature and speculative, as there is simply not enough information concerning the Discharger's proposed remedial activities and possible associated environmental impacts. If the Regional Board determines that implementation of any plan required by this Order will have a significant effect on the environment, the Regional Board will conduct the necessary and appropriate environmental review prior to Executive Officer approval of the applicable plan.

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[8] See, e.g., In the Matter of Wenwest, Inc., et al., State Water Board Order No. WQ 92-13; In the Matter of Arthur Spitzer, et al., State Water Board Order WQ 89-8; In the Matter of Stinnes-Western Chemical Corporation, State Water Board Order WQ 86-16; In the Matter of Zoecon Corporation, State Water Board Order WQ 86-2.

16. Pursuant to section 13304 of the California Water Code, the Regional Board may seek reimbursement for all reasonable costs to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action.

THEREFORE, IT IS HEREBY ORDERED, pursuant to California Water Code section 13304 and 13267, that the Discharger shall cleanup the waste and abate the effects of the discharge, including, but not limited to, total petroleum hydrocarbons (TPH) and other TPH-related wastes discharged to soil and groundwater at the Site in accordance with the following requirements:

1. **Complete Delineation of On- and Off-Site Waste Discharges**: Completely delineate the extent of waste in soil, soil vapor, and groundwater caused by the discharge of wastes including, but not limited to, TPH and other TPH-related waste constituents at the Site into the saturated and unsaturated zones. Assessment has been ongoing under Regional Board oversight, but assessment is not yet complete. If ongoing reinterpretation of new data derived from the tasks performed suggests that modification or expansion of the tasks approved by the Regional Board is necessary for complete assessment, the Discharger is required to submit a work plan addendum(a).

2. **Continue to Conduct Groundwater Monitoring and Reporting**:

   a. Continue the existing quarterly groundwater monitoring and reporting program previously required by the Regional Board, and

   b. As new wells are installed, they are to be incorporated into the existing groundwater monitoring and reporting program

3. **Conduct Remedial Action**: Initiate a phased cleanup and abatement program for the cleanup of waste in soil, soil vapor, and groundwater and abatement of the effects of the discharges, but not limited to, petroleum and petroleum-related contaminated shallow soils and pollution sources as highest priority.

   Shallow soils in this Order are defined as soils found to a nominal depth of 10 feet, where potential exposure for residents and/or construction and utility maintenance workers is considered likely (Ref. Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste Sites and Permitted Facilities – CalEPA 1996).

   Specifically, the Discharger shall:

   a. Develop a pilot testing work plan, which includes 1) evaluation of the feasibility of removing impacted soils to 10 feet and removal of contaminated shallow soils and reservoir concrete slabs encountered within the uppermost 10 feet, including areas beneath residential houses; and 2) remedial options that can be carried out where site characterization (including indoor air testing) is completed; 3) plans for relocation of residents during soil removal activities, plans for management of excavated soil on-site, and plans to minimize odors and noise during soil removal. The Discharger is required to submit this Pilot Test Work Plan to the Regional Board for review and approval by the Executive Officer no later than 60 days after the date of issuance of this Order. Upon approval of the Pilot Test Work Plan by the Executive Officer, the

Discharger shall implement the Pilot Test Work Plan submit the Pilot Test Report that includes the findings, conclusions, and recommendations within 120 days of the issuance of the approval of the Pilot Test Work Plan.

b. Conduct an assessment of any potential environmental impacts of the residual concrete slabs of the former reservoir that includes: (1) the impact of the remaining concrete floors on waste migration where the concrete floors might still be present; (2) whether there is a need for the removal of the concrete; and (3) the feasibility of removing the concrete floors beneath (i) unpaved areas at the Site, (ii) paved areas at the Site, and (iii) homes at the Site. The Discharger is required to submit this environmental impact assessment of the residual concrete slabs to the Regional Board no later than 30 days after the completion of the Pilot Test.

c. Prepare a full-scale impacted soil Remedial Action Plan (RAP) for the Site. The Discharger is required to submit the RAP to the Regional Board for review and approval by the Executive Officer no later than 60 days after the date of the Executive Officer's approval of the Pilot Test Report.

I. The RAP shall include, at a minimum, but is not limited to:

i. A detailed plan for remediation of wastes in shallow soil that will incorporate the results from the Soil Vapor Extraction Pilot Test currently being performed.

ii. A plan to address any impacted area beneath any existing paved areas and concrete foundations of the homes, if warranted;

iii. A detailed surface containment and soil management plan;

iv. An evaluation of all available options including proposed selected methods for remediation of shallow soil and soil vapor; and

v. Continuation of interim measures for mitigation according to the Regional Board approved Interim Remediation Action Plan (IRAP).

vi. A schedule of actions to implement the RAP.

II. The RAP, at a minimum, shall apply the following guidelines and Policies to cleanup wastes in soil and groundwater. The cleanup goals shall include:

i. Soil cleanup goals set forth in the Regional Board's *Interim Site Assessment and Cleanup Guidebook, May 1996,* waste concentrations, depth to the water table, the nature of the chemicals, soil conditions and texture, and attenuation trends, human health protection levels set forth in *USEPA*

Regional Screening Levels (Formerly Preliminary Remediation Goals), for evaluation of the potential intrusion of subsurface vapors (soil vapor) into buildings and subsequent impact to indoor air quality, California Environmental Protection Agency's *Use of Human Heath Screening Levels (CHHSLS) in Evaluation of Contaminated Properties*, dated January 2005, or its latest version, and Total Petroleum Hydrocarbon Criteria Working Group, Volumes 1 through 5, 1997, 1998, 1999; Commonwealth of Massachusetts, Department of Environmental Protection, *Characterizing Risks Posed by Petroleum Contaminated Sites: Implementation of MADEP VPH/EPH approach*; MADEP 2002; Commonwealth of Massachusetts, Department of Environmental Protection, *Updated Petroleum Hydrocarbon Fraction Toxicity Values for the VPH/EPH/APH Methodology*; MADEP 2003; Commonwealth of Massachusetts, Department of Environmental Protection, Method for the Determination of *Air-Phase Petroleum Hydrocarbons (APH) Final*, MADEP 2008, Soil vapor sampling requirements are stated in the *DTSC Interim Guidance* and the Regional Board's *Advisory – Active Soil Gas Investigations*, dated January 28, 2003, or its latest version, DTSC's *Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air*, revised February 7, 2005, or its latest version, USEPA Risk Assessment Guidance for Superfund, Parts A through E; USEPA User's Guide for Evaluating Subsurface Vapor Intrusion into Buildings, 2003; USEPA Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites, 2002; USEPA Supplemental Guidance for Comparing Background and Chemical Concentrations in Soil for CERCLA Sites, 2002; CalEPA Selecting Inorganic Constituents as Chemicals of Potential Concern at Risk Assessments at Hazardous Waste Sites and Permitted Facilities, CalEPA DTSC, February 1997; CalEPA Use of the Northern and Southern California Polynuclear Aromatic Hydrocarbons (PAH) Studies in the Manufactured Gas Plant Site Cleanup Process, CalEPA DTSC, July 2009. Cleanup goals for all contaminant of concerns shall be based on residential (i.e., unrestricted) land use.

ii. Groundwater cleanup goals shall at a minimum achieve applicable Basin Plan water quality objectives, including California's Maximum Contaminant Levels or Action Levels for drinking water as established by the California Department of Public Health, and the State Water Resources Control Board's "Antidegradation Policy" (State Board Resolution No. 68-16), at a point of compliance approved by the Regional Board, and comply with other applicable implementation programs in the Basin Plan.

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iii. The State Water Resources Control Board's "Antidegradation Policy",which requires attainment of background levels of water quality, or the highest level of water quality that is reasonable in the event that background levels cannot be restored. Cleanup levels other than background must be consistent with the maximum benefit to the people of the State, not unreasonably affect present and anticipated beneficial uses of water, and not result in exceedence of water quality objectives in the Regional Board's *Basin Plan*.

iv. The State Water Resources Control Board's "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304" (State Board Resolution No. 92-49), requires cleanup to background or the best water quality which is reasonable if background levels cannot be achieved and sets forth criteria to consider where cleanup to background water quality may not be reasonable.

III. The Discharger shall submit site-specific cleanup goals for residential (i.e., unrestricted) land use for the Executive Officer's approval concurrent with the submittal date of the Pilot Test Report. The proposed site-specific cleanup goals shall include detailed technical rationale and assumptions underlying each goal.

IV. Upon approval of the RAP by the Executive Officer, the Discharger shall implement the RAP within 60 days of the issuance of the approval of the RAP.

d. Continue to conduct residential surface and subsurface soil and sub-slab soil vapor sampling under the current Regional Board approved work plan dated September 24, 2009. If the ongoing reinterpretation of new assessment data derived from the tasks described in the work plan suggests that modification or expansion of the tasks proposed in the RAP is necessary for complete cleanup, then the Discharger shall submit addenda to the September 24, 2009 work plan to the Regional Board for review and approval by the Executive Officer no later than 60 days of the date of issuance of this Order.

e. If the ongoing groundwater monitoring and investigation warrants, the Discharger shall:

I. Install new wells in order to complete the groundwater monitoring well network and to fully delineate the impacted groundwater plume, and

II. Prepare a detailed impacted groundwater RAP. The Regional Board will set forth the due date of the groundwater RAP at a later date.

4. **Public Review and Involvement:**

   a. Cleanup proposals and RAP submitted to the Regional Board for approval in compliance with the terms of this Order shall be made available to the public for a minimum 30-day period to allow for public review and comment. The Regional Board will consider any comments received before taking final action on a cleanup proposal and RAP.

   b. The Discharger shall encourage public participation. The Discharger is required to prepare and submit a Public Participation Plan for review and approval by the Executive Officer, with the goal of having the Regional Board provide the stakeholders and other interested persons with:

      I. Information, appropriately targeted to the literacy and translational needs of the community, about the investigation and remedial activities concerning the discharges of waste at the Site; and

      II. Periodic, meaningful opportunities to review, comment upon, and to influence investigation and cleanup activities at the Site.

   c. Public participation activities shall coincide with key decision making points throughout the process as specified or as directed by the Executive Officer of the Regional Board.

   d. The Discharger shall prepare draft environmental documentation evaluating the potential environmental impacts associated with the implementation of the RAP and submit to the Regional Board as directed by the Executive Officer.

5. **Time Schedule:** The Discharger shall submit all required technical work plans and reports by the deadlines stated in this Order, which are summarized in Table 4. As field activities at this Site are in progress, additional technical documents may be required and/or new or revised deadlines for the technical documents may be issued. Therefore, Table 4 may be updated as necessary. The Discharger shall continue any remediation or monitoring activities until such time as the Executive Officer determines that sufficient cleanup has been accomplished to fully comply with this Order..

6. The Regional Board's authorized representative(s) shall be allowed:

   a. Entry upon premises where a regulated facility or activity is located, conducted, or where records are stored, under the conditions of this Order;

   b. Access to copy any records that are stored under the conditions of this Order;

   c. Access to inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

d. The right to photograph, sample, and monitor the Site for the purpose of ensuring compliance with this Order, or as otherwise authorized by the California Water Code.

7. **Contractor/Consultant Qualification:** A California licensed professional civil engineer or geologist, or a certified engineering geologist or hydrogeologist shall conduct or direct the subsurface investigation and cleanup program. All technical documents required by this Order shall be signed by and stamped with the seal of the above-mentioned qualified professionals.

8. This Order is not intended to permit or allow the Discharger to cease any work required by any other Order issued by this Regional Board, nor shall it be used as a reason to stop or redirect any investigation or cleanup or remediation programs ordered by this Regional Board or any other agency. Furthermore, this Order does not exempt the Discharger from compliance with any other laws, regulations, or ordinances which may be applicable, nor does it legalize these waste treatment and disposal facilities, and it leaves unaffected any further restrictions on those facilities which may be contained in other statues or required by other agencies.

9. The Discharger shall submit 30-day advance notice to the Regional Board of any planned changes in name, ownership, or control of the facility; and shall provide 30-day advance notice of any planned physical changes to the Site that may affect compliance with this Order. In the event of a change in ownership or operator, the Discharger also shall provide 30-day advance notice, by letter, to the succeeding owner/operator of the existence of this Order, and shall submit a copy of this advance notice to the Regional Board.

10. Abandonment of any groundwater well(s) at the Site must be approved by and reported to the Executive Officer of the Regional Board at least 14 days in advance. Any groundwater wells removed must be replaced within a reasonable time, at a location approved by the Executive Officer. With written justification, the Executive Officer may approve of the abandonment of groundwater wells without replacement. When a well is removed, all work shall be completed in accordance with California Department of Water Resources Bulletin 74-90, "California Well Standards," Monitoring Well Standards Chapter, Part III, Sections 16-19.

11. The Regional Board, through its Executive Officer or other delegate, may revise this Order as additional information becomes available. Upon request by the Discharger, and for good cause shown, the Executive Officer may defer, delete or extend the date of compliance for any action required of the Discharger under this Order. The authority of the Regional Board, as contained in the California Water Code, to order investigation and cleanup, in addition to that described herein, is in no way limited by this Order.

12. Any person aggrieved by this action of the Regional Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day

following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

or will be provided upon request.

13. Failure to comply with the terms or conditions of this Order may result in imposition of civil liabilities, imposed either administratively by the Regional Board or judicially by the Superior Court in accordance with Sections 13268, 13308, and/or 13350, of the California Water Code, and/or referral to the Attorney General of the State of California.

14. None of the obligations imposed by this Order on the Discharger are intended to constitute a debt, damage claim, penalty or other civil action which should be limited or discharged in a bankruptcy proceeding. All obligations are imposed pursuant to the police powers of the State of California intended to protect the public health, safety, welfare, and environment.

Ordered by: _____ Date: _____

Samuel Unger
Executive Officer

ATTACHMENTS

FIGURES

Figure 1: Site Vicinity Map
Figure 2: Previous Exploration Location
Figure 3: Proposed Soil Vapor Sampling Locations
Figure 4: Benzene and Methane Concentrations in Soil Vapor
Figure 5a: Carousel Houses Tested as of March 15, 2010
Figure 5b: Residential Methane Screening Results as of March 15, 2010
Figure 5c: Summary of Results of Testing for Benzene Concentrations in Soil Vapor as of March 15, 2010
Figure 5d: Summary of Results of Testing for Non-Benzene Concentrations in Soil Vapor as of March 15, 2010
Figure 5e: Summary of Soil Sampling Results (0-10' Below Surface) as of March 15, 2010
Figure 5f: Methane Concentrations in Soil Vapor at 5 Feet Below Surface as of March 15, 2010
Figure 6: Proposed Groundwater Monitoring Well Locations

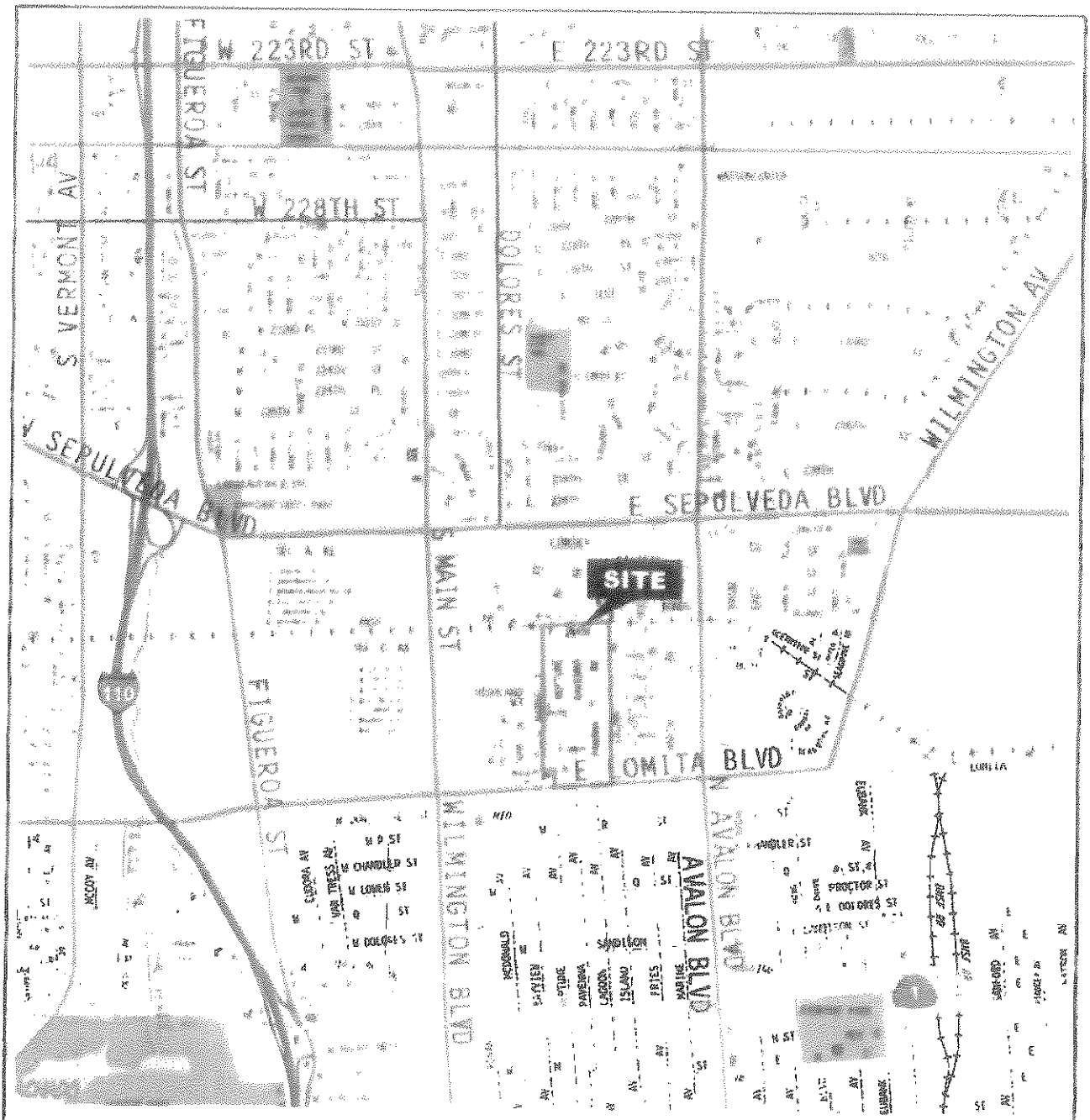
TABLES

Table 1: Data Summary from Phase I and Phase II Site Characterization for Soil and Soil Vapor
Table 2A: Summary of Soil Samples Analytical Results -VOCs, SVOCs, and TPH
Table 2B: Summary of Soil Vapor Analytical Results -VOCS and Fixed Gases
Table 3: Maximum Concentration of Aliphatic and Aromatic Hydrocarbons by Hydrocarbon Fractionations at Individual Properties
Table 4: Deadlines for Technical Work Plans and Reports

EXHIBITS

Exhibit 1: OEHHA's Memorandum dated May 19, 2010
Exhibit 2: Shell Oil Company Letter to the Regional Board dated May 5, 2010

Note: All Figures and Tables, except Table 4, were taken from technical reports prepared by SOPUS's consultant, URS Corporation

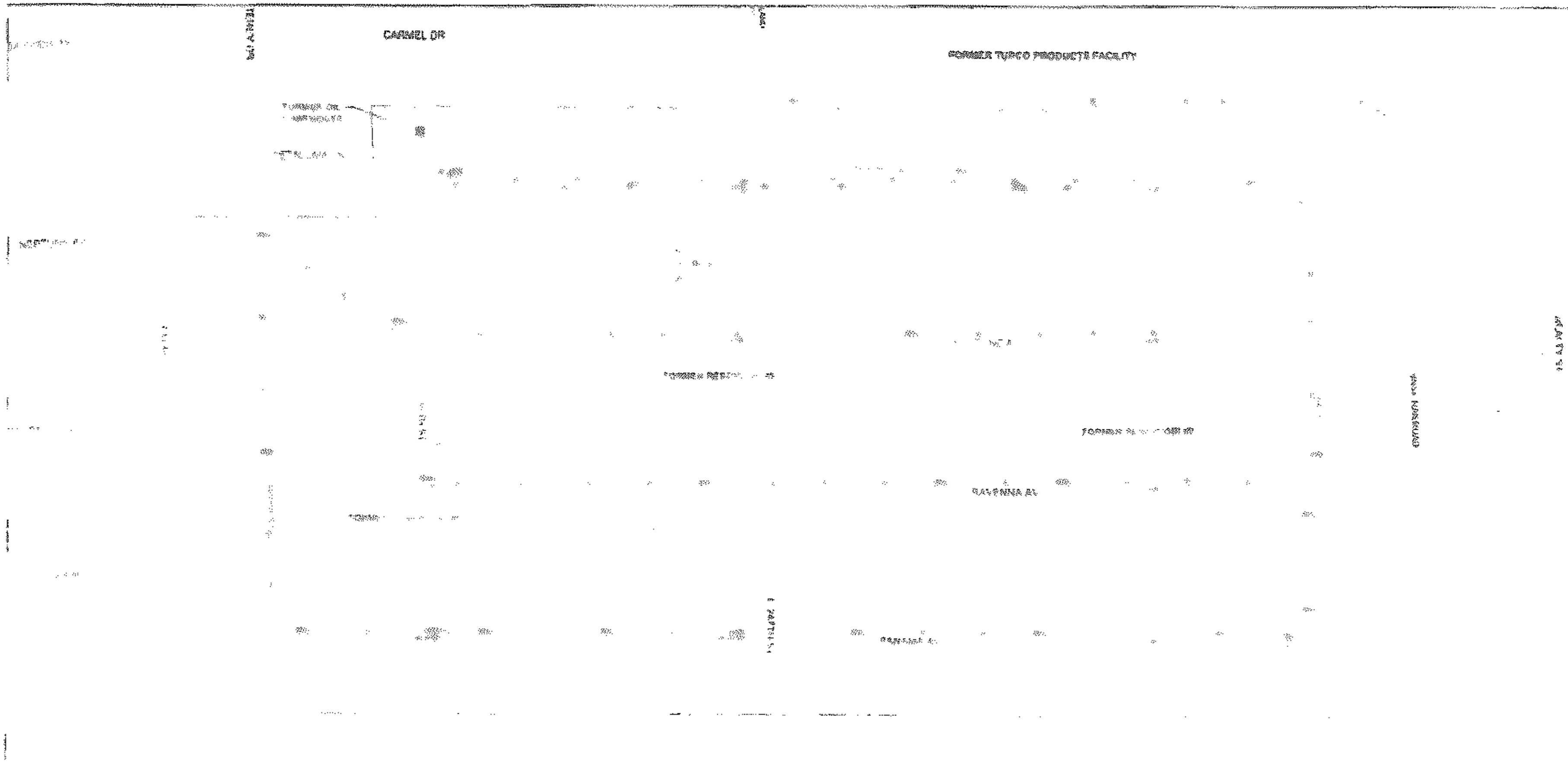


SITE VICINITY MAP

Project No. 49194314	Date: JUNE 2008	Project: Former KAST Property	Figure 1

URS

K:\2008\KAST\Figure 1 Vic Map.ai



EXPLANATION

URS Corporation

PREVIOUS
EXPLORATION LOCATIONS

FORMER EAST PROPERTY

2

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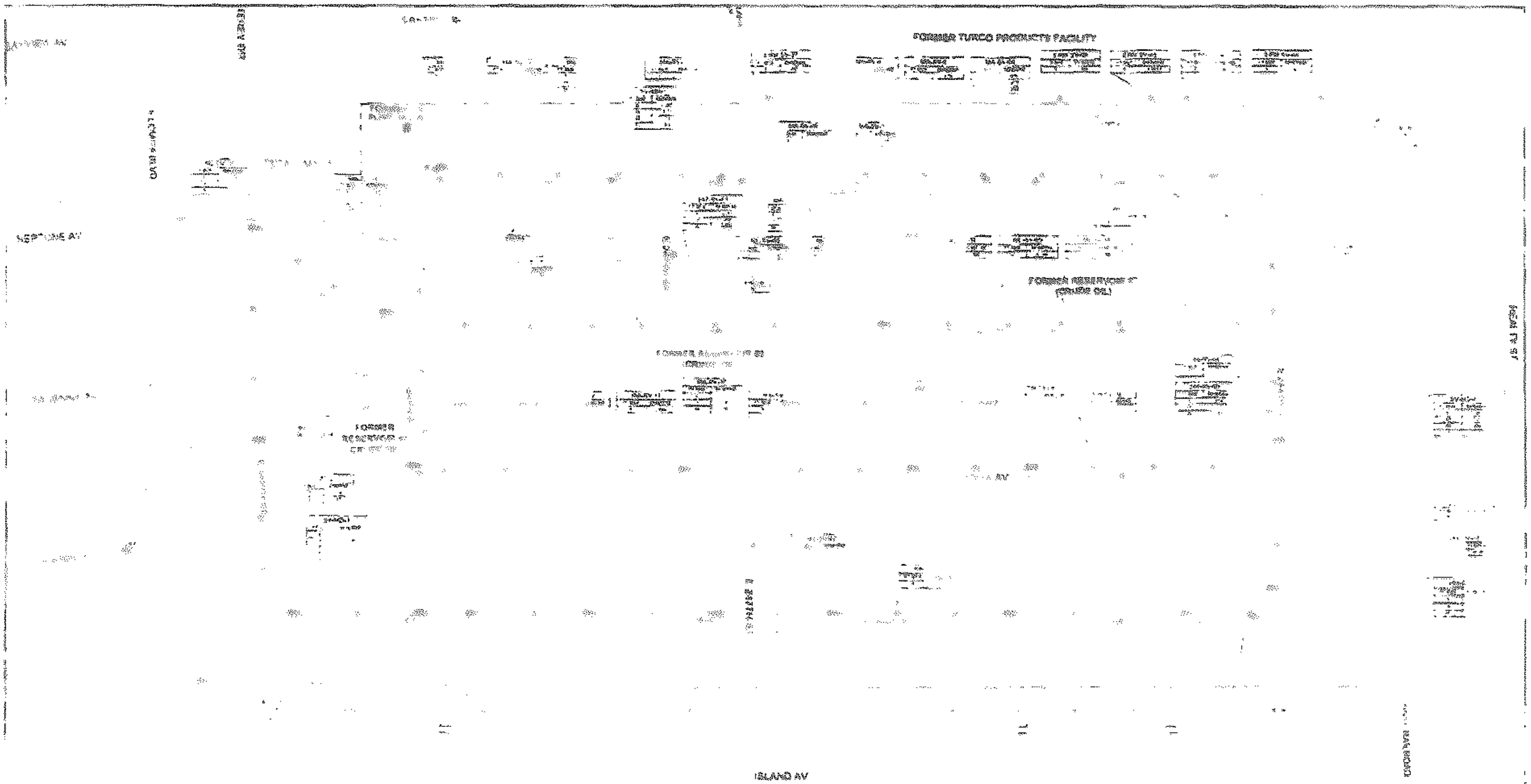


EXPLANATION

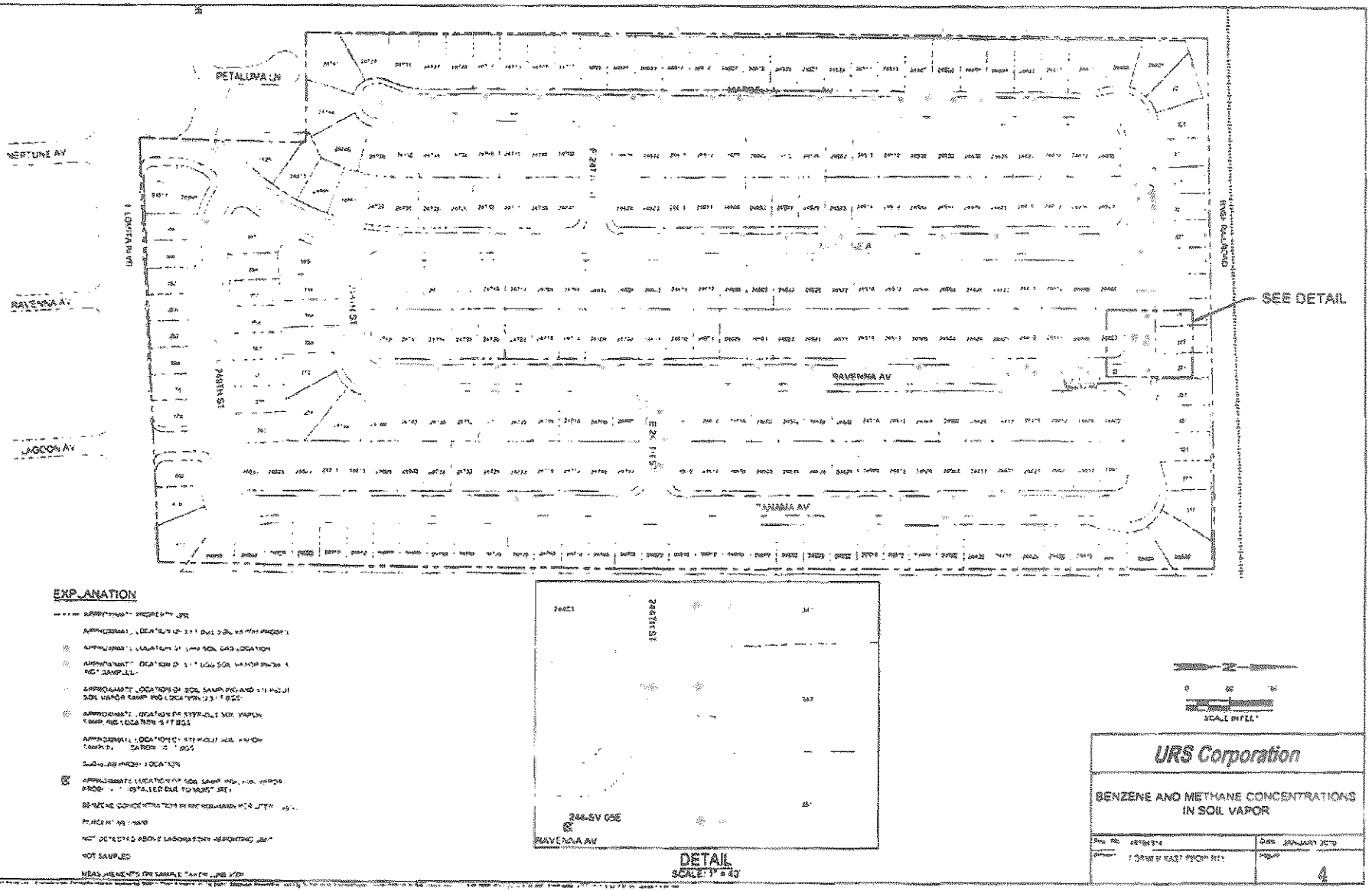
URS Corporation

PROPOSED
SOIL VAPOR SAMPLING LOCATIONS

FORMER HART PROPERTY

Figure 3

237

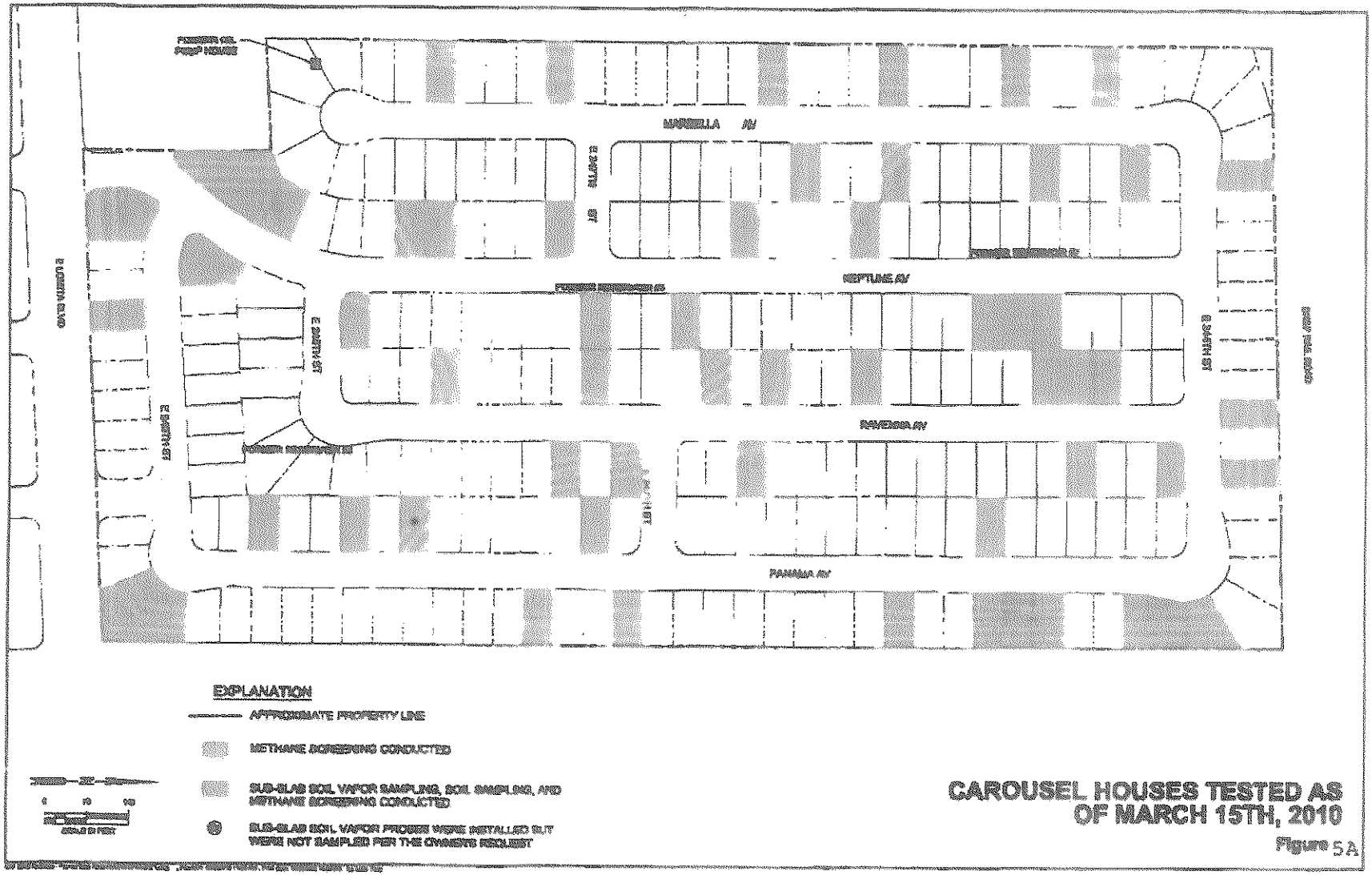


EXPLANATION

URS Corporation

BENZENE AND METHANE CONCENTRATIONS IN SOIL VAPOR

4

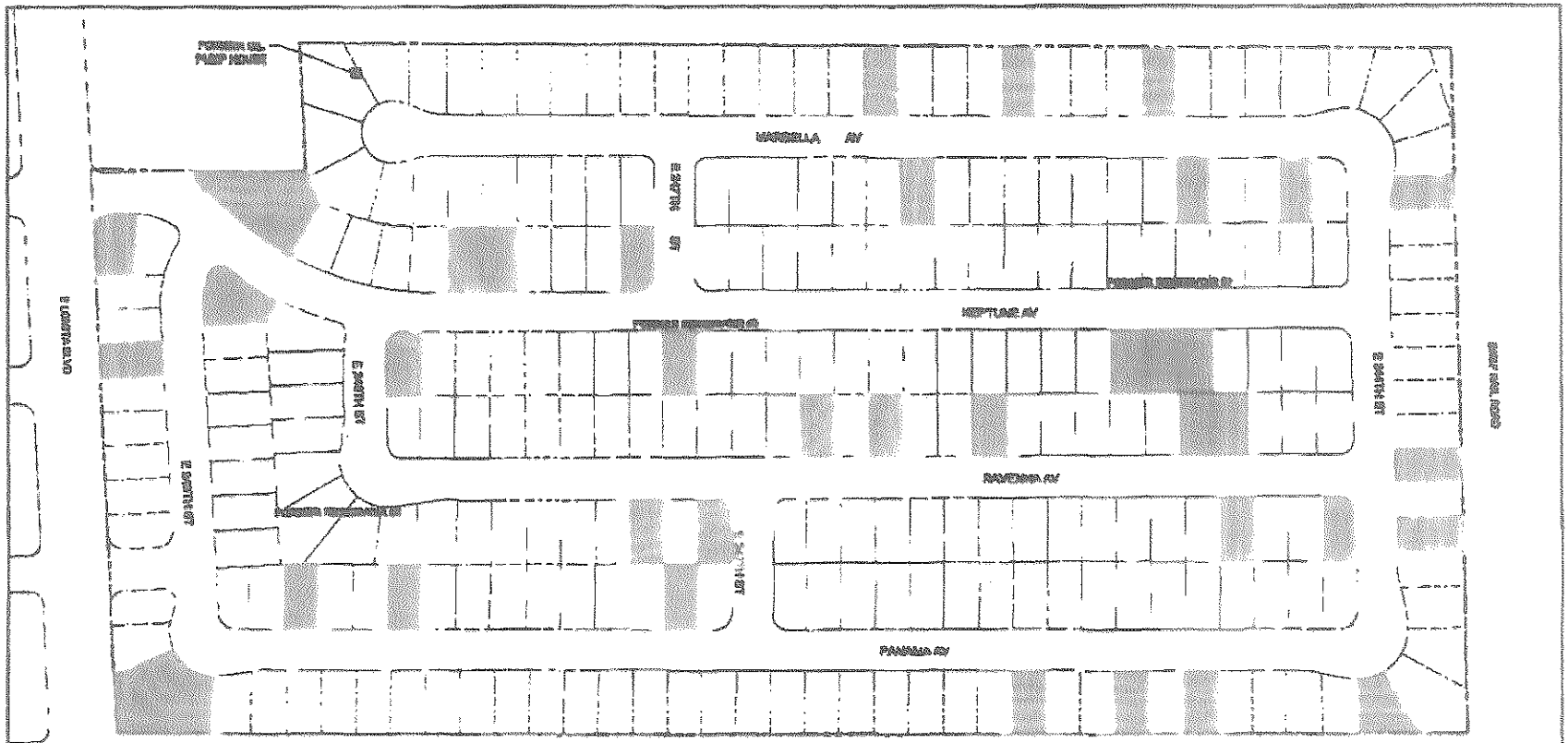


CAROUSEL HOUSES TESTED AS OF MARCH 15TH, 2010

Figure 5A

RESIDENTIAL METHANE SCREENING RESULTS AS OF MARCH 15TH, 2010

Figure 5B



SUMMARY OF RESULTS OF TESTING FOR BENZENE CONCENTRATIONS IN SOIL VAPOR AS OF MARCH 15TH, 2010

Figure 5C

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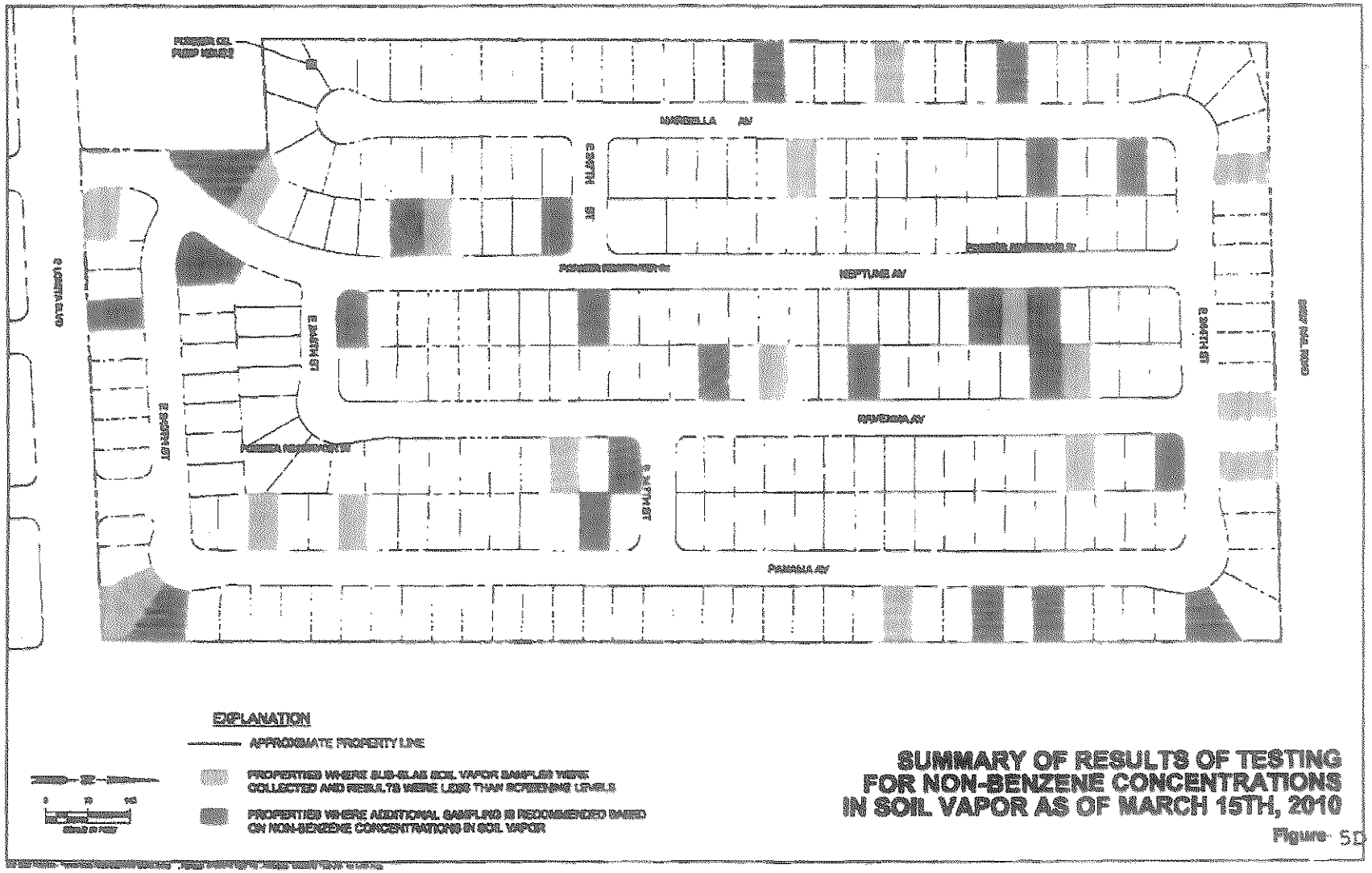
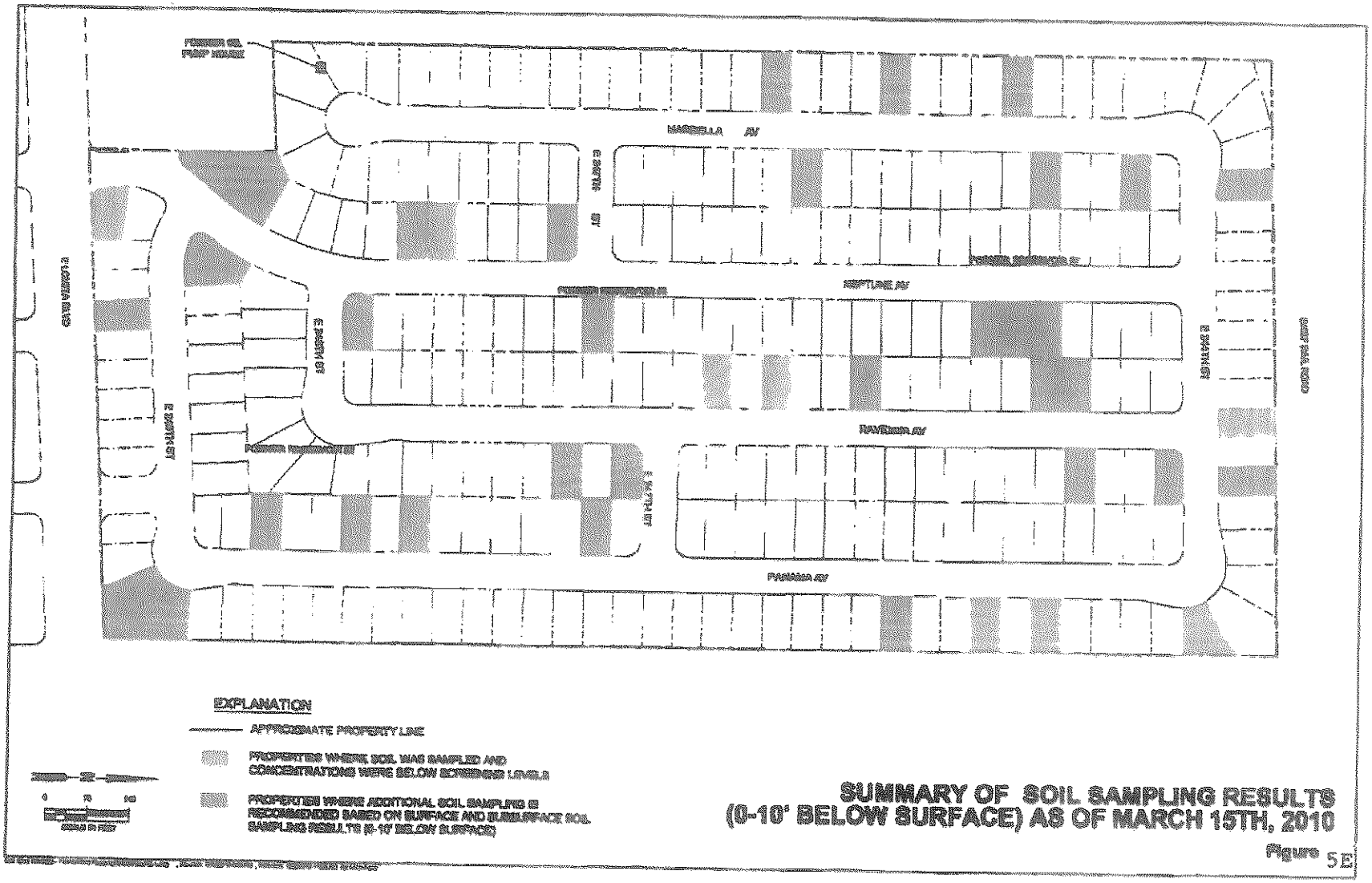


SUMMARY OF RESULTS OF TESTING FOR NON-BENZENE CONCENTRATIONS IN SOIL VAPOR AS OF MARCH 15TH, 2010

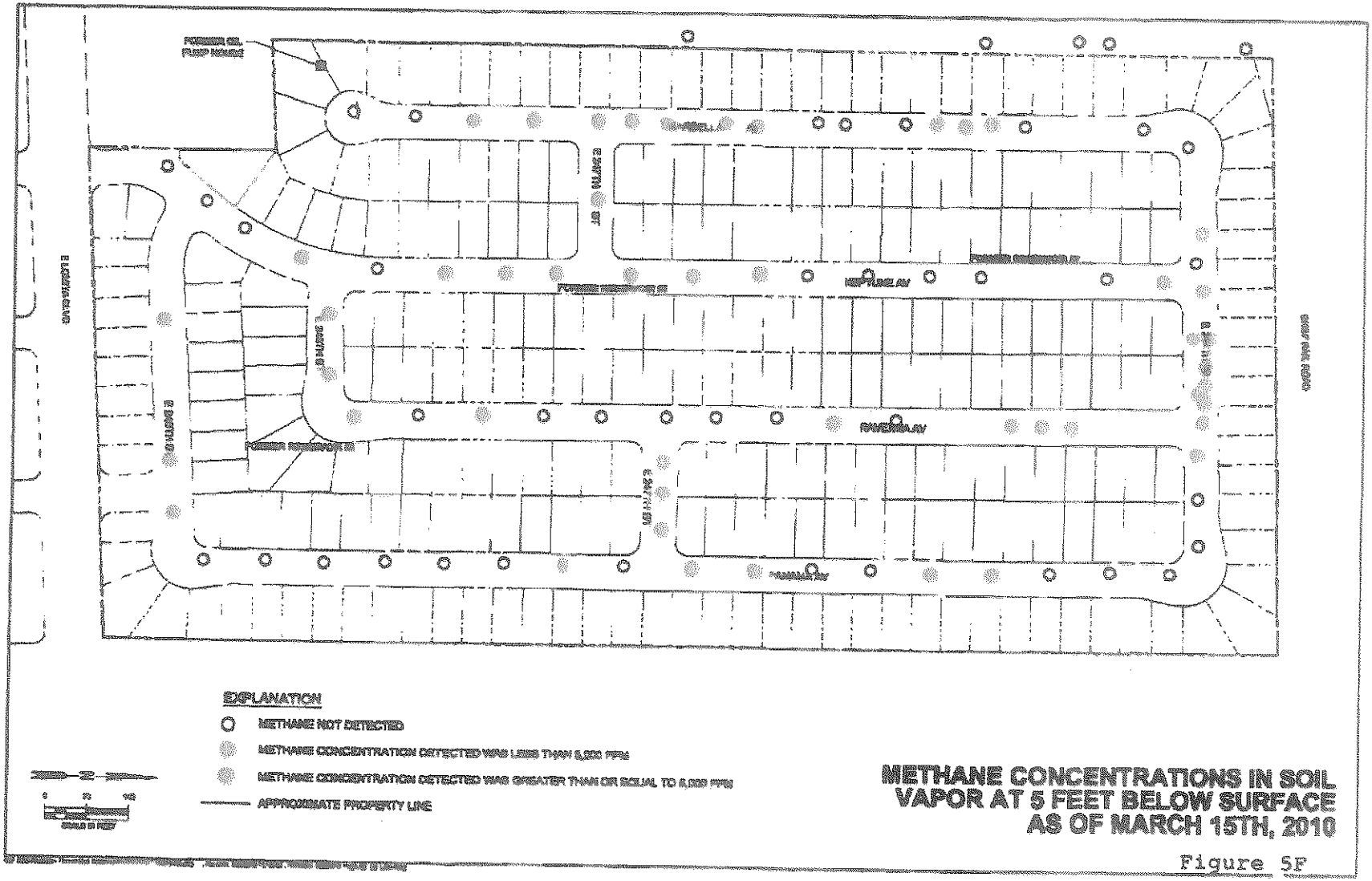
Figure 5D



SUMMARY OF SOIL SAMPLING RESULTS (0-10' BELOW SURFACE) AS OF MARCH 15TH, 2010

Figure 5E

2113



METHANE CONCENTRATIONS IN SOIL VAPOR AT 5 FEET BELOW SURFACE AS OF MARCH 15TH, 2010

Figure 5F

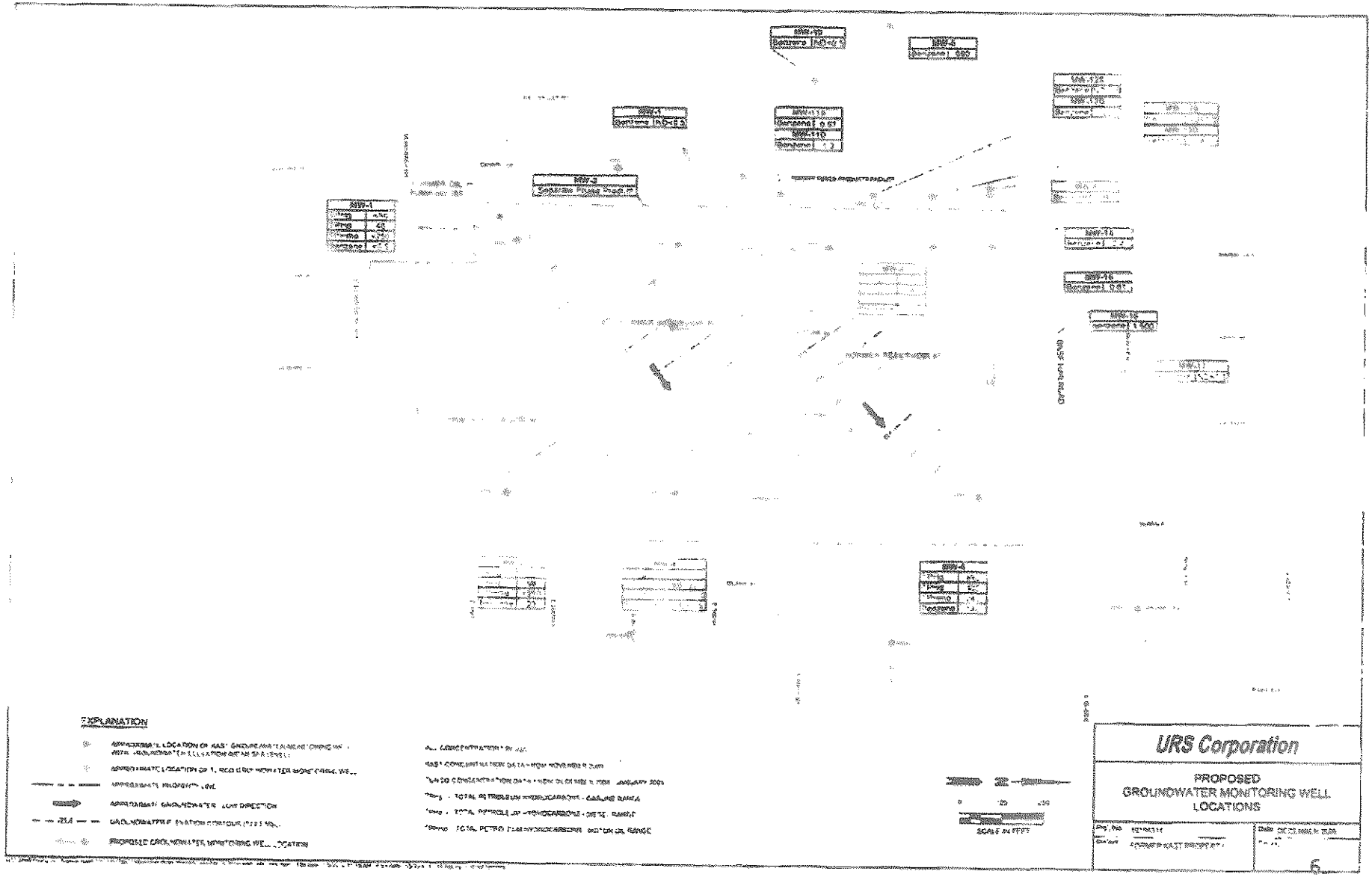
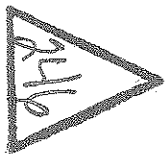

EXPLANATION
SCALE IN FEET
URS Corporation
PROPOSED
GROUNDWATER MONITORING WELL
LOCATIONS

Table 1. Data Summary - Phase I & II Site Characterization

Medium	Constituents	Phase	Units	% of Sample Detection	5%ile	25%ile	Median	75%ile	95%ile	Maximum Detected Concentration
Soil	Benzene	I	UG/KG	24.0%	ND 0.445	ND 0.5	ND 0.6	ND 110	4600	34000
		II	UG/KG	55.2%	ND 0.13	ND 0.24	0.405	0.48	180	14000
	Benzo (a) Pyrene	I	MG/KG	0%	ND 0.25	ND 0.25	ND 0.25	ND 1.25	ND 2.5	ND
		II	MG/KG	67.2%	ND 0.0025	ND 0.011	0.25	0.25	2.5	3.6
	Naphthalene	I	MG/KG	22.3%	ND 0.00455	ND 0.0055	ND 0.25	ND	14	29
		II	MG/KG	43.5%	0.0015	0.0041	0.013	ND 0.25	4.7	61
	TPH as Diesel	I	MG/KG	39.4%	ND 2.5	ND 2.5	ND 2.5	2700	13000	22000
		II	MG/KG	71.8%	ND 2.5	ND 2.5	70	470	7300	33000
	TPH as Gasoline	I	MG/KG	40.6%	ND 0.11	ND 0.125	ND 0.14	190	4300	8800
		II	MG/KG	43.7%	ND 0.063	ND 0.10	ND 0.10	0.18	660	5500
	TPH as Motor Oil	I	MG/KG	36.0%	ND 12.5	ND 12.5	ND 12.5	3500	11000	21000
		II	MG/KG	74.7%	ND 12.5	ND 12.5	205	930	8900	41000
Soil Vapor	Methane	I	%	55.1%	ND 0.39	ND 0.42	1.35	12.6	50.3	62.6
		II	%	4.1%	ND 0.00011	ND 0.00012	ND 0.00012	ND 0.00012	ND 0.00024	78
	Benzene	I	UG/L	85.1%	ND 0.0016	0.028	0.10	3.3	150	3800
		II	UG/L	27.6%	ND 0.0018	ND 0.0018	ND 0.0019	0.0038	0.013	6.5
	Naphthalene	I	UG/L	3.4%	ND 0.016	ND 0.12	ND 1.1	ND 8.5	ND 46	1.2
		II	UG/L	26.7%	ND 0.0031	ND 0.0115	ND 0.012	0.0125	0.017	0.18

Shaded cells indicate not-detected result, 1/2 Detection limit reported
Phase II investigation reports submitted to Regional Board as of July 19, 2010



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		II	%	4.1%	ND 0.00011	ND 0.00012	ND 0.00012	ND 0.00012	ND 0.00024	78
	Benzene	I	UG/L	85.1%	ND 0.0016	0.028	0.10	3.3	150	3800
		II	UG/L	27.6%	ND 0.0018	ND 0.0018	ND 0.0019	0.0038	0.013	6.5
	Naphthalene	I	UG/L	3.4%	ND 0.016	ND 0.12	ND 1.1	ND 8.5	ND 46	1.2
		II	UG/L	26.7%	ND 0.0031	ND 0.0115	ND 0.012	0.0125	0.017	0.18

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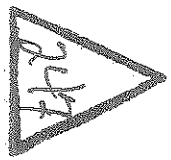

TABLE 1A

Summary of Soil Sample Analytical Results- VOCs, SVOCs, and TPH
Addendum to the IRAP- Further Site Characterization Report
Former Kast Property

LOCATION NAME			244SV05A7	244SV05A7	244SV05A7
SAMPLE DATE			2/2/2010	2/2/2010	2/2/2010
SAMPLE DEPTH, ft bgs			2.5	6	10
SAMPLE NAME			244SV05A7-2.5	244SV05A7-6	244SV05A7-10
SAMPLE DELIVERY GROUP (SDG)	Method	Unit	10-02-0133	10-02-0133	10-02-0133
1,2,4-Trimethylbenzene	SW8260B	µg/kg	14,000	9,700	33,000
1,3,5-Trimethylbenzene			3,300	300	12,000
Acetone			< 4000	< 4200	< 11000
Benzene			11,000	9,600	3,900
Chlorobenzene			< 80	< 85	< 220
cis-1,2-Dichloroethene			< 80	< 85	< 220
Cumene (Isopropylbenzene)			4,000	4,500	6,300
Ethylbenzene			12,000	12,000	19,000
Methyl-tert-Butyl Ether			< 160	< 170	< 440
Naphthalene			7,300	7,200	9,800
n-Butylbenzene			2,800	2,400	5,100
p-Isopropyltoluene			2,500	1,800	5,000
Propylbenzene			6,200	6,800	9,800
sec-Butylbenzene			2,100	2,500	3,500
tert-Butylbenzene			94	120	< 220
Toluene			< 80	< 85	< 220
Vinyl Acetate			< 800	< 850	< 2200
Xylenes, Total			7,300	2,500	56,000
1-Methylnaphthalene	SW8270C	mg/kg	19	9.9	13
2-Methylnaphthalene			28	16	21
Fluorene			< 5.0	< 5.0	< 5.0
Naphthalene			11	7.8	10
Phenanthrene			7.4	< 5.0	< 5.0
Pyrene			< 5.0	< 5.0	< 5.0
TPH as Gasoline	M8015	mg/kg	2,500	2,500	5,000
TPH as Motor Oil	M8015	mg/kg	8,100	6,200	6,700
TPH as Diesel	SW8015B	mg/kg	85,000	6,500	6,600

Notes:

Bold text indicates results above laboratory reporting limit.

µg/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

ft bgs = feet below ground surface

TABLE 2D
Summary of Soil Vapor Analytical Results - VOCs and Fixed Gases
IRAP Further Site Characterization
Former Kast Property

LOCATION NAME			244-SV-05A5	244-SV-05A6	244-SV-05A7
SAMPLE DATE			2/4/2010	2/4/2010	2/4/2010
SAMPLE DEPTH, FT BGS			2.5	5	10
SAMPLE NAME			244-SV05A5-2.5	244-SV05A6-5	244-SV05A7-10
SAMPLE DELIVERY GROUP (SDG)	Method	Unit	1002129A/B	1002129A/B	1002129A/B
1,2,4-Trimethylbenzene			18000	< 2800	31000
1,3,5-Trimethylbenzene			< 6200	< 2800	8800
4-Ethyltoluene			17000	< 2800	29000
Benzene			390000 j	430000 j	630000
Cumene (isopropylbenzene)			7600	8200	14000
Cyclohexane			1800000 j	470000 j	2700000 E
Ethylbenzene	TO15	UG/M3	50000	44000	85000
Heptane			1000000 j	< 2400	120000
Hexane			1900000 j	3300 j	250000
Naphthalene			590 J b	760 J b	1300 J b
o-Xylene			20000	< 2500	< 4900
p/m-Xylene			110000	< 2500	120000
Propylbenzene			8400	9300	15000
Toluene			33000	< 2200	< 4200
Carbon Dioxide			5.2	0.89	11
Methane	D1946	%	23	0.086	25
Oxygen			4.5	20	7.3

Notes:

Bold text indicates results above laboratory reporting limit.

$\mu g/m^3$ = micrograms per cubic meter

% = percent

B = Compound detected in associated laboratory method blank (laboratory qualified)

J = Estimated value (laboratory qualified)

b = Compound detected in associated laboratory method blank (qualified during validation)

j = Estimated value (qualified during validation as the result is possibly biased high)

E = Estimated value. Result exceeded instrument calibration range during analysis

FT BGS = Feet below ground surface

Table 3

Maximum Concentrations of Aliphatic and Aromatic Hydrocarbons by Hydrocarbon Fractionation at Individual Properties

Street Name	House No	Units	Aliphatics (C5 - C8)	Aromatics (C5 - C8)	Aliphatics (C9 - C18)	Aromatics (C9 - C16)	Aliphatics (C19 - C32)	Aromatics (C17 - C32)
244TH ST	351	MG/KG	ND	ND	ND	ND	46	26
244TH ST	361	MG/KG	ND	ND	ND	ND	30	28
249TH ST	345	MG/KG	0.84	ND	140	300	220	240
249TH ST	352	MG/KG	ND	ND	ND	17	48	59
249TH ST	412	MG/KG	ND	0.014	ND	39	80	71
MARBELLA AVE	24412	MG/KG	2300	2	4100	2400	3100	4400
MARBELLA AVE	24426	MG/KG	2.2	0.1	220	240	340	210
MARBELLA AVE	24433	MG/KG	ND	ND	1300	6600	7200	8000
MARBELLA AVE	24517	MG/KG	ND	ND	ND	15	17	27
MARBELLA AVE	24532	MG/KG	350	54	1000	1200	1900	1600
MARBELLA AVE	24603	MG/KG	2	0.058	980	2400	1300	2000
NEPTUNE AVE	24422	MG/KG	1.4	ND	79	170	190	180
NEPTUNE AVE	24426	MG/KG	ND	ND	37	63	99	92
NEPTUNE AVE	24502	MG/KG	0.84	ND	32	72	94	110
NEPTUNE AVE	24632	MG/KG	ND	ND	51	220	300	420
NEPTUNE AVE	24703	MG/KG	68	2.5	1100	2500	2000	2300
NEPTUNE AVE	24725	MG/KG	ND	ND	ND	ND	ND	ND
NEPTUNE AVE	24729	MG/KG	ND	ND	ND	ND	37	35
NEPTUNE AVE	24738	MG/KG	710	130	2100	2000	1900	1300
NEPTUNE AVE	24815	MG/KG	ND	ND	ND	ND	100	54
NEPTUNE AVE	24825	MG/KG	ND	ND	ND	22	84	160
NEPTUNE AVE	24912	MG/KG	ND	ND	ND	ND	12	10
PANAMA AVE	24406	MG/KG	ND	ND	ND	56	260	250
PANAMA AVE	24430	MG/KG	ND	ND	ND	ND	ND	ND
PANAMA AVE	24502	MG/KG	ND	ND	ND	ND	ND	ND
PANAMA AVE	24518	MG/KG	ND	ND	17	48	110	130
PANAMA AVE	24709	MG/KG	2.8	1.1	1100	6100	5100	7200
PANAMA AVE	24739	MG/KG	5.8	0.25	14	240	96	250
PANAMA AVE	24809	MG/KG	53	3.8	220	520	440	570
PANAMA AVE	24823	MG/KG	210	ND	610	540	560	1000
PANAMA AVE	24838	MG/KG	ND	ND	ND	22	96	130
RAVENNA AVE	24402	MG/KG	680	60	680	630	920	730
RAVENNA AVE	24416	MG/KG	3.8	0.32	640	1500	2000	1900
RAVENNA AVE	24419	MG/KG	1.2	0.07	280	510	790	890
RAVENNA AVE	24423	MG/KG	780	23	820	830	700	600
RAVENNA AVE	24523	MG/KG	2.4	0.16	100	250	210	290
RAVENNA AVE	24605	MG/KG	ND	ND	ND	ND	15	ND
RAVENNA AVE	24613	MG/KG	76	ND	500	340	590	760
RAVENNA AVE	24700	MG/KG	ND	ND	15	67	340	410
RAVENNA AVE	24712	MG/KG	1.1	0.013	140	130	240	360

Note: The concentrations shown are the maximum concentration detected at each property.

The maximum concentration of aliphatic or aromatic hydrocarbons in a particular carbon-chain range may not occur in the same sample as the maximum concentrations in a different carbon-chain range.

Table 4: Target Schedule

Task	Estimated Start Date	Target Completion Date	Schedule (on, ahead or behind)	Comments
Pilot Testing Work Plan	03/11/11	05/10/11		Within 60 days of the issuance of the CAO
Regional Board review of Pilot Testing Work Plan	05/11/11	07/11/11		Regional Board reviews Report and issues Response and approval
Pilot Test Report	07/12/11	11/07/11		Final Report due within 120 days with a bi monthly progress reporting
Environmental Impact Assessment (EIA) Report	NA	12/07/11		Within 30 days of the completion of the Pilot Testing Report
Regional Board Review of Pilot Test and EIA Reports	11/08/11	01/09/12		Review of Piolot Test & EIA Reports and Response
Site- Specific Cleanup Goals (SSCG)	NA	11/07/11		Due date is concurrent with the Pilot Test Report due date.
30 day Public Review of SSCG	11/08/11	12/08/11		
Remedial Action Plan (RAP)	01/11/12	03/11/12		Within 30 days of the completion of the Pilot Testing Report
30 day Public Review of RAP	03/12/12	04/12/12		
Regional Board Review of Remedial Action Plan	04/13/12	06/13/12		
Implementation of RAP	06/20/12			
Groundwater Monitoring and Reporting	On going			Quarterly Monitoring Program

Notes: (1) Dates are considered estimates and subject to revision in response to evolving field conditions and potential weather-related delays.
(2) Project schedule reconciled/updated at the end of each calendar month.

Exhibit 1

Office of Environmental Health Hazard Assessment

Joan E. Denton, Ph.D., Director
Headquarters • 1001 I Street • Sacramento, California 95814
Mailing Address: P.O. Box 4010 • Sacramento, California 95812-4010
Oakland Office • Mailing Address: 1515 Clay Street, 16th Floor • Oakland, California 94612

Linda S. Adams
Secretary for Environmental Protection

Arnold Schwarzenegger
Governor

MEMORANDUM

TO: Dr. Teklewold Ayalew
Engineering Geologist
Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013

FROM: James C. Carlisle, D.V.M., M.Sc.,
Lead Staff Toxicologist
Integrated Risk Assessment Branch

DATE: May 19, 2010

SUBJECT: TPH DATA FOR 41 HOMES AT THE FORMER KAST SITE IN CARSON, CA (R4-09-17) OEHHA # 880212-01

Document reviewed

- Memo: "Kast TPH Data for 41 homes" dated April 6, 2010.

Site characterization

- Analytical data for TPH in soils data are supplied for 41 homes. Sample depths are not always stated but those that are provided are either 0.5 or 5 feet.

Hazard Assessment

Based on the data in the memo, I estimated maximum exposures for a child and compared the resulting exposure estimates to DTSC reference dosages (RfDs).

- In the table below, columns 3-8 show the maximum TPH concentrations detected at each property.
- Columns 9-14 show the corresponding TPH ingestion by a 15 kg child ingesting 200 mg soil per day.
- Columns 15-20 show the corresponding hazard quotients for a 15 kg child, obtained by dividing the daily ingestion by the reference dose. Hazard quotients exceeding unity are in bold font.

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Street Name	House No	Aliphatics (C5 - C8)	Aromatics (C6 - C8)	Aliphatics (C9 – C18)	Aromatics (C9 - C16)	Aliphatics (C19 - C32)	Aromatics (C17 - C32)	Aliphatics (C5 - C8)	Aromatics (C6 - C8)	Aliphatics (C9 - C18)	Aromatics (C9 - C16)	Aliphatics (C19 - C32)	Aromatics (C17 - C32)	Aliphatics (C5 - C8)	Aromatics (C6 - C8)	Aliphatics (C9 - C18)	Aromatics (C9 - C16)	Aliphatics (C19 - C32)	Aromatics (C17 - C32)
		Detected concentrations (mg/kg)						Estimated child dose (mg/kg/day)						Hazard ratio (child)					
244TH ST	351	ND	ND	ND	ND	46	26					6.1E-4	3.5E-4	0.0E+0	*	0.0E+0	0.0E+0	3.1E-4	1.2E-2
244TH ST	361	ND	ND	ND	ND	30	29					4.0E-4	3.9E-4	0.0E+0	*	0.0E+0	0.0E+0	2.0E-4	1.3E-2
249TH ST	345	0.84	ND	140	300	220	240	1.1E-5		1.9E-3	4.0E-3	2.9E-3	3.2E-3	2.8E-4	*	1.9E-2	1.3E-1	1.5E-3	1.1E-1
249TH ST	352	ND	ND	ND	17	48	59				2.3E-4	6.4E-4	7.9E-4	0.0E+0	*	0.0E+0	7.6E-3	3.2E-4	2.6E-2
249TH ST	412	ND	0.014	ND	39	80	71				5.2E-4	1.1E-3	9.5E-4	0.0E+0	*	0.0E+0	1.7E-2	5.3E-4	3.2E-2
MARBELLA AVE	24412	2300	2	4100	2400	3100	4400	3.1E-2	2.7E-5	5.5E-2	3.2E-2	4.1E-2	5.9E-2	7.7E-1	*	5.5E-1	1.1	2.1E-2	2.0
MARBELLA AVE	24426	2.2	0.1	220	240	340	210	2.9E-5	1.3E-6	2.9E-3	3.2E-3	4.5E-3	2.8E-3	7.3E-4	*	2.9E-2	1.1E-1	2.3E-3	9.3E-2
MARBELLA AVE	24433	ND	ND	1300	6800	7200	6000			1.7E-2	9.1E-2	9.6E-2	8.0E-2	0.0E+0	*	1.7E-1	3.0	4.8E-2	2.7
MARBELLA AVE	24517	ND	ND	ND	15	12	27				2.0E-4	1.6E-4	3.6E-4	0.0E+0	*	0.0E+0	6.7E-3	8.0E-5	1.2E-2
MARBELLA AVE	24532	350	54	1000	1200	1900	1600	4.7E-3	7.2E-4	1.3E-2	1.6E-2	2.5E-2	2.1E-2	1.2E-1	*	1.3E-1	5.3E-1	1.3E-2	7.1E-1
MARBELLA AVE	24603	2	0.058	980	2400	1300	2000	2.7E-5	7.7E-7	1.3E-2	3.2E-2	1.7E-2	2.7E-2	6.7E-4	*	1.3E-1	1.1	8.7E-3	8.9E-1
NEPTUNE AVE	24422	1.4	ND	79	170	190	180	1.9E-5		1.1E-3	2.3E-3	2.5E-3	2.4E-3	4.7E-4	*	1.1E-2	7.6E-2	1.3E-3	8.0E-2
NEPTUNE AVE	24426	ND	ND	37	63	99	92			4.9E-4	8.4E-4	1.3E-3	1.2E-3	0.0E+0	*	4.9E-3	2.8E-2	6.6E-4	4.1E-2
NEPTUNE AVE	24502	0.64	ND	32	72	94	110	8.5E-6		4.3E-4	9.6E-4	1.3E-3	1.5E-3	2.1E-4	*	4.3E-3	3.2E-2	6.3E-4	4.9E-2
NEPTUNE AVE	24632	ND	ND	51	220	300	420			6.8E-4	2.9E-3	4.0E-3	5.6E-3	0.0E+0	*	6.8E-3	9.8E-2	2.0E-3	1.9E-1
NEPTUNE AVE	24703	68	2.5	1100	2500	2000	2300	9.1E-4	3.3E-5	1.5E-2	3.3E-2	2.7E-2	3.1E-2	2.3E-2	*	1.5E-1	1.1	1.3E-2	1.02
NEPTUNE AVE	24725	ND	ND	ND	ND	ND	ND							0.0E+0	*	0.0E+0	0.0E+0	0.0E+0	0.0E+0
NEPTUNE AVE	24729	ND	ND	ND	ND	37	35					4.9E-4	4.7E-4	0.0E+0	*	0.0E+0	0.0E+0	2.5E-4	1.6E-2
NEPTUNE AVE	24738	710	130	2100	2000	1900	1300	9.5E-3	1.7E-3	2.8E-2	2.7E-2	2.5E-2	1.7E-2	2.4E-1	*	2.8E-1	8.9E-1	1.3E-2	5.8E-1
NEPTUNE AVE	24815	ND	ND	ND	ND	100	54					1.3E-3	7.2E-4	0.0E+0	*	0.0E+0	0.0E+0	6.7E-4	2.4E-2
NEPTUNE AVE	24825	ND	ND	ND	22	84	160				2.9E-4	1.1E-3	2.1E-3	0.0E+0	*	0.0E+0	9.8E-3	5.6E-4	7.1E-2
NEPTUNE AVE	24912	ND	ND	ND	ND	12	10					1.6E-4	1.3E-4	0.0E+0	*	0.0E+0	0.0E+0	8.0E-5	4.4E-3
PANAMA AVE	24406	ND	ND	ND	56	260	250				7.5E-4	3.5E-3	3.3E-3	0.0E+0	*	0.0E+0	2.5E-2	1.7E-3	1.1E-1
PANAMA AVE	24430	ND	ND	ND	ND	ND	ND							0.0E+0	*	0.0E+0	0.0E+0	0.0E+0	0.0E+0
PANAMA AVE	24502	ND	ND	ND	ND	ND	ND							0.0E+0	*	0.0E+0	0.0E+0	0.0E+0	0.0E+0
PANAMA AVE	24518	ND	ND	17	48	110	130			2.3E-4	6.4E-4	1.5E-3	1.7E-3	0.0E+0	*	2.3E-3	2.1E-2	7.3E-4	5.8E-2
PANAMA AVE	24709	2.8	1.1	1100	6100	5100	7200	3.7E-5	1.5E-5	1.5E-2	8.1E-2	6.8E-2	9.6E-2	9.3E-4	*	1.5E-1	2.7	3.4E-2	3.2
PANAMA AVE	24739	5.9	0.25	14	240	96	250	7.9E-5	3.3E-6	1.9E-4	3.2E-3	1.3E-3	3.3E-3	2.0E-3	*	1.9E-3	1.1E-1	6.4E-4	1.1E-1
PANAMA AVE	24809	53	3.8	220	520	440	570	7.1E-4	5.1E-5	2.9E-3	6.9E-3	5.9E-3	7.6E-3	1.8E-2	*	2.9E-2	2.3E-1	2.9E-3	2.5E-1

PANAMA AVE	24823	210	ND	610	540	560	1000	2.8E-3		8.1E-3	7.2E-3	7.5E-3	1.3E-2	7.0E-2	*	8.1E-2	2.4E-1	3.7E-3	4.4E-1
PANAMA AVE	24838	ND	ND	ND	22	96	130				2.9E-4	1.3E-3	1.7E-3	0.0E+0	*	0.0E+0	9.8E-3	6.4E-4	5.8E-2
RAVENNA AVE	24402	680	60	680	630	920	730	9.1E-3	8.0E-4	9.1E-3	8.4E-3	1.2E-2	9.7E-3	2.3E-1	*	9.1E-2	2.8E-1	6.1E-3	3.2E-1
RAVENNA AVE	24416	3.8	0.32	640	1500	2000	1900	5.1E-5	4.3E-6	8.5E-3	2.0E-2	2.7E-2	2.5E-2	1.3E-3	*	8.5E-2	6.7E-1	1.3E-2	8.4E-1
RAVENNA AVE	24419	1.2	0.07	280	510	790	890	1.6E-5	9.3E-7	3.7E-3	6.8E-3	1.1E-2	1.2E-2	4.0E-4	*	3.7E-2	2.3E-1	5.3E-3	4.0E-1
RAVENNA AVE	24423	780	23	820	830	700	600	1.0E-2	3.1E-4	1.1E-2	1.1E-2	9.3E-3	8.0E-3	2.6E-1	*	1.1E-1	3.7E-1	4.7E-3	2.7E-1
RAVENNA AVE	24523	2.4	0.16	100	250	210	290	3.2E-5	2.1E-6	1.3E-3	3.3E-3	2.8E-3	3.9E-3	8.0E-4	*	1.3E-2	1.1E-1	1.4E-3	1.3E-1
RAVENNA AVE	24603	ND	ND	ND	ND	15	ND					2.0E-4		0.0E+0	*	0.0E+0	0.0E+0	1.0E-4	0.0E+0
RAVENNA AVE	24613	76	ND	500	340	590	760	1.0E-3		6.7E-3	4.5E-3	7.9E-3	1.0E-2	2.5E-2	*	6.7E-2	1.5E-1	3.9E-3	3.4E-1
RAVENNA AVE	24700	ND	ND	15	67	340	410			2.0E-4	8.9E-4	4.5E-3	5.5E-3	0.0E+0	*	2.0E-3	3.0E-2	2.3E-3	1.8E-1
RAVENNA AVE	24712	1.1	0.013	140	130	240	360	1.5E-5	1.7E-7	1.9E-3	1.7E-3	3.2E-3	4.8E-3	3.7E-4	*	1.9E-2	5.8E-2	1.6E-3	1.6E-1
RfD								0.04		0.1	0.03	2	0.03	* = No RfD					

- Aromatic hydrocarbons in the C-9 to C-32 range at 24412, 24433, and 24603 Marbella Avenue, 24709 Panama Avenue, and 24703 Panama Neptune exceed their reference values for children (i.e. the hazard quotient is ≥ 1.
- While a hazard quotient ≥ 1does not indicate that there will be definite toxic effects, it does indicate that the concentration exceeds the level that we can say is definitely safe.

Conclusions

- Aromatic hydrocarbons in the C-9 to C-32 range at five properties exceed their reference values for children (i.e. the hazard quotient is ≥ 1).

If you have any questions, do not hesitate to call or e-mail me at 916-323-2635 or JCarlisle@OEHHA.CA.gov, respectively.

Memo reviewed by:

Ned Butler, PhD
Staff Toxicologist
Integrated Risk Assessment Branch

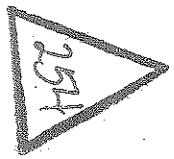

Exhibit 2

Shell Oil Company
One Shell Plaza
910 Louisiana Street
Houston, TX 77002
Tel (713) 241 5126
Email: ed.platt@shell.com
Internet http://www.shell.com

May 5, 2010

Ms. Tracy Egoscue
Executive Officer
California Regional Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Reference: Former Kast Property, Carson, California
Site Cleanup No. 1230; Site ID 2040330

Dear Ms Egoscue:

As you know, during the past several months, Shell Oil Company employees and contractors have worked tirelessly to investigate and address the environmental issues at the former Kast Property. To date, we have sampled at approximately one-third of the homes in the Carousel neighborhood, and we will continue our work in conjunction with the RWQCB, based upon applicable and appropriate scientific and regulatory standards that are protective of human health and the environment. Like the RWQCB, our goal is to protect the residents of the Carousel neighborhood and address the environmental issues, while minimizing disruption to residents and preserving the integrity of the community.

Although elevated levels of compounds of concern (COCs) have been found beneath the streets and at certain residential properties, based on the data collected so far, there is no imminent risk to residents or the public in the Carousel neighborhood. Also, while Shell's investigation is not yet complete, it does not appear at this time that there is any significant off-site migration of soil impacts or soil vapor impacts from the former Kast Property.

Our approach, which is to develop a coherent conceptual framework for the mitigation and remediation of the Carousel neighborhood, is consistent with the RWQCB's guidelines providing for a principled, phased approach to investigating and remediating environmental impacts Specifically, this approach follows the guidance set out in the State Water Resources Control Board's Resolution 92-49. In accordance with these guidelines, it includes "an evaluation of cleanup alternatives that are feasible at the site" and consistent with the maximum benefit to the people of the State. Because the soil and groundwater assessment is ongoing, a full evaluation of cleanup alternatives is premature at this time.

Nevertheless, we are considering a variety of potential alternatives that can be applied at specific properties and in the public streets in order to address environmental impacts and avoid any significant risk to human health in the Carousel neighborhood. For example, Shell has submitted a work plan for the soil vapor extraction pilot test. While evaluating alternatives, we place a priority on keeping the community intact and minimizing any disruption to residents of the Carousel community If it becomes necessary for residents to relocate temporarily to perform this work, Shell will take appropriate steps to minimize any inconvenience and compensate them for any resulting expenses. We are also sensitive to the residents' concerns about their property values and are open to a dialogue with the RWQCB regarding these issues.

In addition, Shell is continuing to monitor the groundwater to ensure that there are no significant impacts emanating from the former Kast Property. In this regard, it is essential that groundwater conditions both up-gradient and down-gradient be evaluated. To date, our investigation suggests that groundwater up-gradient of the former Kast property is significantly contaminated. One potential source of this contamination appears to be the former Fletcher Oil Refinery, which we understand the County Sanitation District is remediating.

We look forward to further dialogue with the RWQCB regarding the draft Feasibility Study outline, recently submitted, as well as the Site Conceptual Model, to be submitted later this month. The Site Conceptual Model will provide: (1) an overview of our investigation efforts to date; (2) additional information regarding potential on and off-site sources for the COCs; and (3) a review of the available options for remediation of the former Kast property.

We appreciate your leadership on this project.

Sincerely,

William E. Platt
Manager, Environmental Claims
Shell Oil Company

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EXHIBIT D

ATTACHMENT 1
DRAFT TENTATIVE REVISED CAO

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

CLEANUP AND ABATEMENT ORDER NO. R4-2011-0046
REQUIRING

SHELL OIL COMPANY
AND
BARCLAY HOLLANDER CORPORATION

TO CLEANUP AND ABATE WASTE
DISCHARGED TO WATERS OF THE STATE
PURSUANT TO CALIFORNIA WATER CODE SECTION 13304[1]
AT THE FORMER KAST PROPERTY TANK FARM,
CARSON, CALIFORNIA
REVISED
[DATE]
(FILE NO. 97-043)

Cleanup and Abatement Order No. R4-2011-0046 (Order) requires Shell Oil Company and Barclay Hollander Corporation, (hereinafter "Discharger") to assess, monitor, and cleanup and abate the effects of petroleum hydrocarbon compounds and other contaminants of concern discharged to soil and groundwater at the former Kast Property Tank Farm facility (hereinafter, the "Site") located southeast of the intersection of Marbella Avenue and East 244th Street, in Carson, California.

On March 11, 2011, the Regional Water Quality Control Board, Los Angeles Region (Regional Board) issued the Order requiring Shell Oil Company (Shell) to investigate and cleanup the Site. On July 28, 2010 in comments on the draft Order, the law firm of Morgan Lewis on behalf of Shell, requested that the Regional Board name Dole Food Company, Inc. (Dole) and its wholly-owned subsidiary Barclay Hollander Corporation (BHC) as responsible parties in the Order ("Morgan Lewis 2010 Letter"). At that time, the Regional Board declined to add Dole and BHC to the draft Order and issued the Order to Shell only. Subsequently, on April 22, 2011 the Regional Board issued an order pursuant to California Water Code section 13267 (13267 Order) requiring Dole to provide technical information about the Site. On September 15, 2011, the law firm of Gibson Dunn on behalf of Dole provided a detailed letter and attachments in response to the 13267 Order disputing that it and/or BHC should be named as responsible parties in the Order ("Gibson Dunn 2011 Letter"). On October 31, 2013, the Regional Board's Assistant Executive Officer proposed adding BHC as a responsible party to the Order and provided

[1] Water Code section 13304 (a) states, in part: Any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts.

opportunities to submit comments on October 31, 2013 and June 3, 2014. Gibson Dunn and Morgan Lewis submitted comments. For the reasons discussed below, the Order is hereby revised to add BHC, a wholly-owned subsidiary of Dole, as a responsible party in the Order based on information provided by Shell and Dole and in the files of the Regional Board.

As of the date of this revised Order, Shell has completed many of the tasks required by the Order since its issuance on March 11, 2011. This Order is not being revised to delete tasks already completed by Shell but is being revised to add BHC as a responsible party and to make appropriate findings based on the information provided by Dole and Shell since issuance of the Order and to clarify that the Discharger is responsible for preparing draft environmental documentation. The Regional Board's files include records documenting the activities associated with this Order.

The Regional Board herein finds:

BACKGROUND

1. **Discharger:** ~~Shell Oil Company~~ Shell, previously Shell Company of California, is a Responsible Party due to its: (a) ownership of the former Kast Property Tank Farm, and (b) former operation of a petroleum hydrocarbon tank farm at the Site resulting in discharges of waste at the Site. Barclay Hollander Corporation (BHC) is a responsible party due to its (a) past ownership and/or as a successor to past owners of the Site, and (b) development of the property resulting in discharges of waste at the Site. Shell and BHC are hereafter referred to collectively as "Discharger". The actions of the Discharger have caused or permitted waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and have created a condition of pollution or nuisance.

2. **Location:** The Site is located southeast of the intersection of Marbella Avenue and East 244th Street in the City of Carson, California. The Site occupies approximately 44 acres of land and is bordered by the Los Angeles County Metropolitan Transportation Authority railroad right-of-way on the north, Lomita Boulevard on the south, Marbella Avenue on the west, and Panama Avenue on the east (Figure 1). The Site was previously owned by ~~the Discharger~~ Shell, who operated three oil storage reservoirs from the 1920s to the mid-1960s. The central and southern reservoirs each had a capacity of 750,000 barrels of oil and the northernmost reservoir had a capacity of 2,000,000 barrels of oil. The Site presently consists of the Carousel residential neighborhood and city streets.

3. **Groundwater Basin:** The Site is located on the Torrance Plain of the West Coast Groundwater Basin (Basin), in the southwestern part of the Coastal Plain of Los Angeles County. Beneath the Site, the first encountered groundwater is estimated at 54 feet below ground surface (bgs). The Basin is underlain by a series of aquifers, the deeper of which are used for drinking water production. These aquifers are with increasing depth, the Gage aquifer, Lynwood aquifer, and Silverado aquifer. The nearest municipal water supply well is located approximately 400 feet west of the Site. As set forth in the *Water Quality Control Plan for the Los Angeles Region* (the Basin Plan), adopted on June 13, 1994, the Regional Board has designated beneficial uses for groundwater (among which include municipal and domestic drinking water supplies) in the West Coast Basin and has established water quality objectives for the protection of these beneficial uses.

4. As detailed in the findings below, the Discharger's activities at the Site have caused or permitted the discharge of waste resulting in soil, soil vapor, and groundwater pollution, including discharges of waste to the waters of the state, and nuisance.

SITE HISTORY

5. **Property Ownership and Leasehold Information:** Based on information submitted to the Regional Board by the Discharger, the Site has the following property ownership and leasehold history:

   a. According to the Sanborn maps dated 1924 and 1925, the Site was owned and operated by "Shell Company of California (Kast Property)" beginning in approximately 1924 until the mid-1960s. The Site was used as a tank farm, which included three crude oil storage reservoirs, Reservoir Nos. 5, 6 and 7. Reservoir No.5, the center reservoir, had a capacity of 750,000 barrels of oil and was under lease to General Petroleum Corporation. Reservoir No. 6, the southernmost reservoir, had a capacity of 750,000 barrels of oil; and Reservoir No. 7, the northernmost reservoir, had a capacity of 2,000,000 barrels of oil. According to Sanborn map notations, the reservoirs had concrete-lined earth-slopes with frame roofs on wood posts, surrounded by earth levees averaging 20 feet in height with 7 foot wide walks on top. One oil pump house was depicted on the 1925 Sanborn map within the southern portion of the Site. Since construction, the Site was used as a crude oil storage reservoir.

   ~~b. In 1966, SOC sold the Site to Lomita Development Company, an affiliate of Richard Barclay and Barclay Hollander Curci (BHC), with the reservoirs in place. The Pacific Soils Engineering Reports dated January 7, 1966; March 11, 1966; July 31, 1967; and June 11, 1968 documented that: 1) Lomita Development Company emptied and demolished the reservoirs, and graded the Site prior to it developing the Site as residential housing; 2) part of the concrete floor of the central reservoir was removed by Lomita Development Company from the Site; and 3) where the reservoir bottoms were left in place, Lomita Development Company made 8 inch wide circular trenches in concentric circles approximately 15 feet apart to permit water drainage to allow the percolation of water and sludge present in the reservoirs into the subsurface.~~

   ~~c. In phases between 1967 and 1969, Lomita Development Company developed the Site into one and two story single family residential parcels and sold the developed lots to individual homeowners.~~

   d. In 1965, Richard Barclay and Shell executed a Purchase Option Agreement, wherein Richard Barclay (or his nominee) agreed to purchase the Property, subject to a favorable engineering report and other restrictions. Richard Barclay was a principal in an entity known as Barclay-Hollander-Curei. In 1966, Lomita Development Company (Lomita), a California partnership, was designated as Mr. Barclay's "nominee" and purchased the Property from Shell with the reservoirs in place. Lomita explicitly agreed in writing to complete decommissioning of the reservoirs. In phases between 1967 and

1969, Lomita developed the Site into one- and two-story single family residential parcels and sold the developed lots to individual homeowners. In 1969, a group of companies, including Lomita, merged into a company known as Barclay Hollander Curci, Inc., which was then acquired by Castle & Cooke, Inc. and it became a wholly-owned subsidiary of Castle & Cooke, Inc. Barclay Hollander Curci, Inc. continued to sell parcels to residential owners. Barclay Hollander Curci, Inc. was later renamed Barclay Hollander Corporation, Inc. (BHC). Castle & Cooke, Inc. merged with Flexi-Van Corporation in 1985, which in 1991, changed its name to Dole Food Company, Inc. BHC agreed to be responsible for the liabilities of Lomita and the other entities. BHC is currently a wholly-owned subsidiary of Dole, ~~but has no assets.~~[2]

6. **Site Description and Activities:** According to information in the Regional Board's file on this Site, oil related operations at the Site began in 1923 and ended by the early 1960s. The Site was previously owned and operated by Shell Company of California, which was subsequently renamed Shell Oil Company, as a crude oil storage facility. The facility included equipment that pumped the oil to the nearby ~~SOC's~~ Shell refinery for processing from three concrete-lined oil storage reservoirs with a total capacity of 3.5 million barrels. In 1966, ~~SOC~~ Shell closed the Site and ~~SOC~~ sold the Site to Lomita ~~Development Company~~, an affiliate of Richard Barclay and Barclay-Hollander-Curci. Subsequently, Lomita ~~Development Company~~ developed the Site into the Carousel residential neighborhood, which contains 285 single-family homes.

In 1965, prior to the purchase of the property from Shell, Richard Barclay and/or Barclay Hollander Curci requested permission from Shell to remove the liquid waste and petroleum residue from the property and to begin to grade the property for development. Shell agreed to allow the activities with some conditions, including that "all work done by or for [Barclay Hollander Curci] be done in a good, lawful and workmanlike manner." After purchasing the property in 1966, Lomita, as the owner of the property, actively participated in the decommissioning and grading activities. Lomita conducted the waste removal and grading activities and obtained the required permits from the County. Available information indicates that by August 15, 1966 all three reservoirs had been fully cleaned out. The Pacific Soils Engineering Reports dated January 7, 1966; March 11, 1966; July 31, 1967; and June 11, 1968[3] documented that: (1) Lomita emptied and demolished the reservoirs, and graded the Site prior to it developing the Site as residential housing; (2) part of the concrete floor of the central reservoir was removed by Lomita from the Site; and (3) where the reservoir bottoms were left in place, Lomita made 8-inch wide circular trenches in concentric circles approximately 15 feet apart to permit water drainage to allow the percolation of water and sludge present in the reservoirs into the subsurface. Various documents from the soil engineer describe the process of removing water and sludge in the reservoirs, burying concrete and compacting the concrete and soil, and drilling holes in the concrete to allow for percolation into the groundwater. The County's grading permit required that concrete fill must be at least seven feet below grade. Boring logs indicated that soils beneath the concrete slab in Reservoir 7 were "highly oil stained" and that soils in the borings had a

[2] See Exhibit 76 to Gibson Dunn 2011 Letter.
[3] See Exhibits 31, 78, 36, and 42 to Gibson Dunn 2011 Letter.

"petroleum odor, however the amount of actual oil contained in the soil is unknown." [4] One of the soil engineering reports also indicated that soil used to fill in the reservoirs and return the Property to its natural grade came from the berms surrounding each reservoir and surrounding the perimeter of the Property.[5] In 1967, Lomita began transferring title of individual parcels. In 1969, title to remaining parcels was granted by grant deed from Lomita to BHC. Then BHC began transferring title to the rest of the parcels.

6. **Chemical Usage:** Based on the Phase I Environmental Site Assessment (ESA) dated July 14, 2008 conducted by Shell Oil Products[6] (SOPUS) consultant, URS Corporation, the Site was used for the storage of crude oil in all three reservoirs on the property from at least 1924 to 1966. Subsequent records indicate that in the 1960s the reservoirs may also have been used for storage of bunker oil. Ongoing investigations indicate petroleum hydrocarbon compounds including volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) are impacted in the subsurface soil, soil vapor, and groundwater underlying the Site.

EVIDENCE OF DISCHARGES OF WASTE AND BASIS FOR ORDER

7. **Waste Discharges:** The following summarizes assessment activities associated with the Site:

    a. In 2007, under the regulatory oversight of the California Department of Toxic Substances Control (DTSC), an environmental investigation was initiated at the former Turco Products Facility (TPF). Soil vapor and groundwater were investigated in areas directly west of the Site and at locations in the northwestern portion of the Site. The DTSC-required investigation detected petroleum hydrocarbons, benzene, toluene, and chlorinated solvents in soil and soil vapor. A multi-depth soil vapor survey, which included soil vapor sampling on the Site at locations coincident with the former Kast Site footprints, detected benzene at concentrations up to 150 micrograms per liter (µg/l). Benzene was detected at TPF groundwater monitoring well MW-8, which has a northeast flow direction, at a concentration of 1,800 µg/l. Therefore, groundwater monitoring well MW-8 is located upgradient of the Kast Site. Chlorinated solvents were also detected at the Kast Site groundwater monitoring well MW-5.

    b. The *Final Phase I Site Characterization Report* dated October 15, 2009, which was prepared by URS Corporation on behalf of SOPUS showed that soil impacts consisted primarily of petroleum hydrocarbons spanning a wide range of carbon chains and including Total Petroleum Hydrocarbons (TPH) as gasoline (g), TPH as diesel (TPHd), TPH as motor oil (TPHmo), benzene, and naphthalene (See Tables 1, 2A, 2B, and 3).

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[4] See Exhibit 78 to Gibson Dunn 2011 Letter, March 11, 1966 Report by Pacific Soils Engineering Inc.

[5] See Exhibit 31 and Declaration of Lee Volmer, attached to Gibson Dunn 2011 Letter.

[6] Shell Oil Products US is the d/b/a for Equilon Enterprises LLC, which is wholly owned by Shell Oil Company.

I. In June 2009, a subsurface investigation of public streets in the Carousel neighborhood consisting of ten cone penetrometer/rapid optical screening tools (CPT/ROST) was performed. The CPT/ROST logs indicated several locations within the Site with elevated hydrocarbon concentrations. The CPT/ROST logs also showed that the highest apparent soil impacts occurred at depths of 12 feet bgs, 36 feet bgs, and 40 feet bgs.

II. A total of 228 soil samples were collected during the Phase I Site Characterization. The analytical data for soil samples collected from soil borings advanced on public streets across the Site (Figure 2) were as follows:

i. The highest detected concentration of TPH was 22,000 milligrams per kilogram (mg/kg) and TPHg, TPHd, and TPHmo were 8,800, 22,000, and 21,000 mg/kg, respectively;

ii. Benzene, ethylbenzene, toluene, and xylenes were detected in concentrations as high as 21,000 micrograms per kilogram (µg/kg), 32,000 µg/kg, 12,000 µg/kg, and 140,000 µg/kg, respectively;

iii. SVOCs were detected in concentrations as high as 47 mg/kg of naphthalene, 38 mg/kg of 1-methylnaphthalene, 63 mg/kg of 2-methylnaphthalne, 12 mg/kg phenanthrene, and 9.0 mg/kg pyrene; and

iv. Arsenic and lead were detected in concentrations as high as 53.2 mg/kg and 52.5 mg/kg, respectively.

III. Soil vapor samples collected from a 5-foot depth and greater below the public streets in the Carousel neighborhood indicated elevated benzene and methane (Figures 3 and 4). Benzene was detected at a maximum concentration of 3,800µg/l, which exceeds the California Human Health Screening Level (CHHSL) value of 0.036 µg/l for benzene set for shallow soil vapor in a residential area. Methane was also detected in concentrations as high as 59.7 % (by volume) that significantly exceed its lower explosive limit of 5% (by volume), posing a potential safety hazard.

c. Between September 2009 and February 2010, residential soil and sub-slab soil vapor sampling was conducted at 41 parcels (Figure 5 a – f; Tables 1 and 2) and the results were as follows:

I. Surface and subsurface soil (0 to 10 feet bgs) detected concentrations of chemicals of concern that significantly exceeded soil screening levels as follows:

i. VOCs - Benzene (14,000 µg/kg), tetrachloroethylene (PCE) (22,000 µg/kg), 1,2,4-trimethylbenzene (34,000 µg/kg), and 1,3,5-trimethylbenzene (14,000 µg/kg);

ii. SVOCs - Naphthalene (18 mg/kg), Benzo(a)pyrene (2.9 mg/kg), benzo(a)anthracene (0.1 mg/kg), chrysene (0.27 mg/kg), phenanthrene (0.28 mg/kg), and pyrene (0.19 mg/kg); and

iii. Lead was also detected at a maximum concentration of 307 mg/kg.

II. The highest detected concentration of TPHg was 5,000 mg/kg, TPHd was 33,000 mg/kg, and TPHmo was 41,000 mg/kg;

III. As of September 27, 2010, sub-slab soil vapor samples have been collected from 172 homes in the Carousel neighborhood. Additional data continues to be collected as part of the Phase II Site Characterization. The validated data from the first 41 homes detected benzene, naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, ethylbenzene, p/m-xylenes, toluene, and acetone, at a maximum concentration of 4,500 micrograms per cubic meter ($\mu g/m^3$), 2,200 $\mu g/m^3$, 1,000 $\mu g/m^3$, 1,100 $\mu g/m^3$, 5,200 $\mu g/m^3$, 700 $\mu g/m^3$, 270 $\mu g/m^3$, respectively.

d. Between November 19, 2009 and February 15, 2010, additional step-out soil and soil vapor sampling at the elevated soil vapor sampling locations were conducted in selected locations beneath the public streets at the Site. The measured concentrations for petroleum hydrocarbons in soil were as follows:

I. The highest detected concentrations of TPHg was 9,800 mg/kg, TPHd was 22,000 mg/kg, and TPHmo was 21,100 mg/kg;

II. The highest detected concentrations of benzene was 33,000 µg/kg, Ethylbenzene was 42,000 µg/kg, toluene was 11,000 µg/kg, and xylenes were 140,000 µg/kg, respectively;

III. SVOCs were detected in concentrations as high as 47 mg/kg of naphthalene, 33 mg/kg of 1-methylnaphthalene, 53 mg/kg of 2-methylnaphthalne, 6.1 mg/kg phenanthrene, and 3.9 mg/kg pyrene; and

IV. Arsenic and lead were detected in concentrations as high as 28.2 mg/kg and 13.6 mg/kg, respectively.

e. In July 2009, the installation of six on-site groundwater monitoring wells (Figure 6) were completed and quarterly groundwater monitoring was initiated. Groundwater was encountered at 53 feet bgs. Groundwater samples from five of the six wells contained concentrations of benzene at a maximum concentration of 140 µg/L and trichloroethylene (TCE) at a maximum concentration of 290 µg/L. One of the monitoring wells (MW-3) contains a free product or a light non-aqueous phase liquid (LNAPL) with a maximum measured thickness of 9.01 foot as of May 27, 2010.

8. **Source Elimination and Remediation Status at the Site**

a. The results of the initial soil and soil vapor investigation indicate the presence of elevated methane and benzene at concentrations exceeding the Lower Explosive Limit and the CHHSL for shallow soil vapor, at several locations beneath the public streets at the Site. On October 15, 2009, the Regional Board directed the Discharger to expeditiously design and implement an interim remedial action.

b. On May 12, 2010 the Regional Board approved SOPUS's proposed Soil Vapor Extraction (SVE) pilot test in order to evaluate the use of this technology as a remedial option for VOCs at the Site.

9. **Summary of Findings from Subsurface Investigations**

a. Regional Board staff have reviewed and evaluated numerous technical reports and records pertaining to the release, detection, and distribution of wastes on the Site and its vicinity. The Discharger has stored, used, and/or discharged petroleum hydrocarbon compounds at the Site. Elevated levels of TPH and other wastes have been detected in soil, soil vapor and groundwater beneath the Site.

b. The sources for the evidence summarized above include, but are not limited to:

I. Various technical reports and documents submitted by the Discharger or its representatives to Regional Board staff.

II. Site inspections conducted by Regional Board staff, as well as meetings, letters, electronic mails, and telephone communications between Regional Board staff and the Discharger and/or its representatives.

III. Subsurface drainage study for the Site reservoirs submitted by Girardi and Keese, the law firm retained by some of the residents of the Carousel neighborhood.

10. **Summary of Current Conditions Requiring Cleanup and Abatement**

a. Based on the Phase I ESA for the Site dated July 14, 2008 (prepared by URS Corporation) and the most recent information provided to the Regional Board by SOPUS: 1) SOC sold the Kast Site to Lomita ~~Development Company~~, an affiliate of Richard Barclay and Barclay-Hollander-Curci, in 1966 with the reservoirs in place; 2) the Pacific Soils Engineering Reports from 1966 to 1968 indicate that Lomita ~~Development Company~~ emptied and demolished the reservoirs, and constructed residential housing; 3) part of the concrete floor of the central reservoir was removed by Lomita ~~Development Company~~ from the Site; and 4) where the reservoir bottoms were left in place, Lomita ~~Development Company~~ made 8-inch wide circular trenches in concentric circles approximately 15 feet apart to permit water drainage to allow percolation of water and sludge present in the reservoirs into the subsurface.

b. There is no consistent trend in the vertical distribution of detected concentrations of petroleum hydrocarbon compounds that can be discerned from soil boring data to date. Although, the majority of the aforementioned highest detected TPH concentrations were obtained from the 2.5-foot depth samples, there were

multiple locations where the highest concentrations were in the 5-foot or 10-foot samples. This may be due to the nature of previous development activities by Lomita ~~Development Company~~ at the Site (i.e., the construction and demolition of the former reservoirs and site grading in preparation for development of the residential tract).

c. On May 11, 2010, Environmental Engineering and Contracting, consultants hired by Girardi and Keese, conducted exploratory trenching in order to locate and identify the obstructions that have been frequently encountered during the advancement of shallow soil borings at many of the residential homes investigated to date. Regional Board staff observed the encountering of an approximately 8-inch thick concrete slab extending at the trench excavation termination depth of 9 feet, 2 inches. The Pacific Soils Engineering Report dated January 7, 1966 states that the reservoirs were lined with a "four inch blanket of reinforced concrete". These obstructions are presumed to be remnants of the concrete liners of the former reservoir.

d. Results from the 169 Interim Residential Sampling Reports submitted to the Regional Board through November 17, 2010 indicate that for surface and subsurface soil sampling (0 to 10 feet bgs), the cancer risk index estimate is between 0 and 10 for 107 residential parcels, between 10 and 100 for 60 parcels, and exceeded 100 for 2 parcels. In the area where the highest cancer index is documented, SVOCs (i.e. Benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene and chrysene), benzene, and ethylbenzene were the primary chemicals of potential concern (COPCs) contributing to the cancer risk index.

For the Carousel neighborhood investigation, the Regional Board is using the most protective cancer risk screening levels recommended by the State and federal governments, which is one in one million (1×10^{-6}) additional risks. For screening purposes, the Regional Board routinely uses the most conservative (health-protective assumptions) risk based screening levels of 1×10^{-6} for the target chemical. This screening level is based on a target risk level at the lower end of the US Environmental Protection Agency (USEPA) risk management range of one-in-a-million risk (1×10^{-6}) for cancer risk and a hazard quotient of 1.

The presence of a chemical at concentrations in excess of a CHHSL does not indicate that adverse impacts to human health are occurring or will occur, but suggests that further evaluation of potential human health concerns is warranted (Cal-EPA, 2005). It should also be noted that CHHSLs are not intended to "set … final cleanup or action levels to be applied at contaminated sites" (Cal-EPA, 2005).

e. Results from the 169 Interim Residential Sampling Reports submitted to the Regional Board through November 17, 2010 also indicate that for the sub-slab soil vapor data collected from the residential parcels, the cancer risk index estimate was between 0 and 10 for 147 parcels, between 10 and 100 for 20 parcels, and greater than 100 for 2 parcels. The two highest cancer risk index

were estimated as 550 and 120. In most cases, benzene was the primary contributor to the cancer risk index estimate.

f. The Office of Environmental Health Hazard Assessment (OEHHA) performed a quantitative risk evaluation of TPH using surface and subsurface (0 to 10 feet bgs) soil TPH fractionation data for the 41 residential parcels (Table 3). Based on the risk calculation, OEHHA estimated maximum exposures for a child and compared the resulting exposure estimates of reference dosages with that provided by DTSC interim guidance dated June 16, 2009. OEHHA concluded that aromatic hydrocarbons in the C-9 to C-32 range at five parcels exceeded their reference values for children (Exhibit 1).

g. The San Francisco Bay Regional Water Quality Control Board developed the Environmental Screening Level (ESL) as guidance for determining when concentration of TPH may present a nuisance and detectable odor. The ESL, based on calculated odor indexes, for residential land-use, is 100 mg/kg for TPHg and TPHd. The soil TPHg and TPHd data obtained from the Site were detected up to 9,800 mg/kg and 85,000 mg/kg, respectively, which exceed the ESL.

11. **Pollution of Waters of the State:** The Discharger has caused or permitted waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance. As described in this Order and the record of the Regional Board, the Discharger owned and/or operated the site in a manner that resulted in the discharges of waste. The constituents found at the site as described in Finding 8 constitute "waste" as defined in Water Code section 13050(d). The discharge of waste has resulted in pollution, as defined in Water Code section 13050(l). The concentration of waste constituents in soil and groundwater exceed water quality objectives contained in the Water Quality Control Plan for the Los Angeles Region (Basin Plan), including state-promulgated maximum contaminant levels. The presence of waste at the Site constitutes a "nuisance" as defined in Water Code section 13050(m). The waste is present at concentrations and locations that *"is injurious to health, or is indecent, or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property . . . and [a]ffects at the same time an entire community or neighborhood, or any considerable number of persons,although the extent of the annoyance or damage inflicted upon individuals may be unequal."*

12. **Need for Technical Reports:** This Order requires the submittal of technical or monitoring reports pursuant to Water Code section 13267[7]. The Discharger is required to submit the reports because, as described in the Findings in this Order, the Discharger is responsible for the discharge of waste that has caused pollution and nuisance. The reports are necessary to evaluate the extent of the impacts on water quality and public health and to determine the scope of the remedy.

[7] Water Code section 13267 authorizes the Regional Board to require any person who has discharged, discharges, or is suspect of having discharged or discharging, waste to submit technical or monitoring program reports.

13. ~~Although requested by the Discharger, the Regional Board is declining to name additional potentially responsible parties (PRPs) to this Order at this time.~~ Substantial evidence indicates that the Discharger caused or permitted waste to be discharged into waters of state and is therefore appropriately named as a responsible party in this Order. Shell owned and operated the Site, then sold the property to the developers, leaving in place three reservoirs and residual petroleum hydrocarbons in at least one tank and in soil underneath and surrounding the reservoir. The residual petroleum hydrocarbons are still present at the Site and continue to cause pollution and nuisance as documented in this Order and the Regional Board files. ~~However, the~~ The Regional Board ~~will continue to~~ has investigated ~~whether~~ additional potentially responsible parties (including, but not limited to, Lomita Development Company, Richard Barclay, Barclay-Hollander-Curci, Dole Foods, Inc., Barclay Hollander Corporation and/or any of its successors) and has determined that Barclay Hollander Corporation caused or permitted the discharge of waste at the Site ~~and whether these or other parties should be named as additional responsible parties to this Order or a separate Order. The Regional Board may amend this Order or issue a separate Order in the future as a result of this investigation. Although investigation concerning additional PRPs is ongoing, the Regional Board desires to issue this Order as waiting will only delay remediation of the Site.~~ BHC and/or its predecessor purchased the Site with explicit knowledge of the presence of the petroleum reservoirs and the presence of residual petroleum hydrocarbons and conducted various activities, including partially dismantling the concrete in the reservoirs and grading the onsite materials, thereby spreading the waste. The residual petroleum hydrocarbons are still present at the Site and continue to cause pollution and nuisance as documented in this Order and the Regional Board files. BHC is a wholly-owned subsidiary of Dole. Including BHC as a responsible party in this Order is consistent with orders of the State Water Resources Control Board construing Water Code section 13304 naming former owners who had knowledge of the activities that resulted in the discharge and the legal ability to control the continuing discharge.[8] Including BHC as a responsible party is consistent with Water Code section 13304(j) because BHC's actions that resulted in creating pollution and nuisance were unlawful since at least 1949.[9] If the Regional Board becomes aware of any other responsible parties it will consider naming such persons in this Order.

14. ~~The Discharger~~ Shell, in a letter to the Regional Board dated May 5, 2010 (Exhibit 2), stated that it is considering a variety of potential alternatives that can be applied at specific

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[8] See, e.g., State Water Board Order No. WQ 92-13 (Wenwest, Inc.); State Water Board Order WQ 89-8 (Arthur Spitzer); State Water Board Order WQ 86-16 (Stinnes-Western Chemical Corporation); and State Water Board Order WQ 86-2 (Zoecon Corporation). See also State Water Board Order No. WQ 89-13 (The BOC Group, Inc.)(holding prior owner responsible for discharges associated with an abandoned underground storage tank). Also see State Water Board Order No. WQ 96-2 (County of San Diego, City of National City, and City of National City Community Development Commission) (holding County of San Diego responsible for pollution caused by landfill it operated, holding City of National City responsible for actions that contributed to the pollution, and holding City of National City Community Development Commission responsible even though it owned the property for a relatively short period of time).

[9] See Health and Saf. Code § 5411. In *Newhall Land & Farming Co. v. Superior Court*, 19 Cal.App.4th 334 (1993), the court interpreted the term "nuisance" quoting *Mangini v. Aerojet-General Corp.*, 230 Cal.App.3d 1125 (1991). (the court rejected the argument that one cannot be guilty of a nuisance unless one is in the position to abate it. The court held "Nor is it material that defendant allegedly created the nuisance at some time in the past but does not currently have a possessory interest in the property. '[N]ot only is the party who maintains the nuisance liable but also the party or parties who create or assist in its creation are responsible for the ensuing damage.' " 230 Cal.App.3d at p. 1137.

parcels and in the public streets in order to avoid environmental impacts and avoid any significant risks to human health at this Site. ~~The Discharger~~ Shell also indicated that if it becomes necessary for residents to relocate temporarily to perform this work, ~~the Discharger~~ Shell will take appropriate steps to minimize any inconvenience and compensate them for any resulting expenses.

15. Issuance of this Order is being taken for the protection of the environment and as such is exempt from provisions of the California Environmental Quality Act (CEQA) (Pubic Resources Code section 21000 et seq.) in accordance with California Code of Regulations, title 14, sections 15061(b)(3), 15306, 15307, 15308, and 15321. This Order generally requires the Discharger to submit plans for approval prior to implementation of cleanup activities at the Site. Mere submittal of plans is exempt from CEQA as submittal will not cause a direct or indirect physical change in the environment and/or is an activity that cannot possibly have a significant effect on the environment. CEQA review at this time would be premature and speculative, as there is simply not enough information concerning the Discharger's proposed remedial activities and possible associated environmental impacts. If the Regional Board determines that implementation of any plan required by this Order will have a significant effect on the environment, the Regional Board will conduct the necessary and appropriate environmental review prior to Executive Officer approval of the applicable plan.

16. Shell submitted a proposed Remedial Action Plan (RAP) on June 30, 2014. After review of the proposed RAP, the Regional Board determined that implementation of the RAP could have a significant impact on the environment and that preparation of an environmental impact report is necessary.

17. Pursuant to section 13304 of the California Water Code, the Regional Board may seek reimbursement for all reasonable costs to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action.

THEREFORE, IT IS HEREBY ORDERED, pursuant to California Water Code section 13304 and 13267, that the Discharger shall cleanup the waste and abate the effects of the discharge, including, but not limited to, total petroleum hydrocarbons (TPH) and other TPH-related wastes discharged to soil and groundwater at the Site in accordance with the following requirements:

1. **Complete Delineation of On- and Off-Site Waste Discharges:** Completely delineate the extent of waste in soil, soil vapor, and groundwater caused by the discharge of wastes including, but not limited to, TPH and other TPH-related waste constituents at the Site into the saturated and unsaturated zones. Assessment has been ongoing under Regional Board oversight, but assessment is not yet complete. If ongoing reinterpretation of new data derived from the tasks performed suggests that modification or expansion of the tasks approved by the Regional Board is necessary for complete assessment, the Discharger is required to submit a work plan addendum(a).

2. **Continue to Conduct Groundwater Monitoring and Reporting:**

   a. Continue the existing quarterly groundwater monitoring and reporting program previously required by the Regional Board, and

b. As new wells are installed, they are to be incorporated into the existing groundwater monitoring and reporting program

3. **Conduct Remedial Action:** Initiate a phased cleanup and abatement program for the cleanup of waste in soil, soil vapor, and groundwater and abatement of the effects of the discharges, but not limited to, petroleum and petroleum-related contaminated shallow soils and pollution sources as highest priority.

Shallow soils in this Order are defined as soils found to a nominal depth of 10 feet, where potential exposure for residents and/or construction and utility maintenance workers is considered likely (Ref. Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste Sites and Permitted Facilities – CalEPA 1996).

Specifically, the Discharger shall:

a. Develop a pilot testing work plan, which includes 1) evaluation of the feasibility of removing impacted soils to 10 feet and removal of contaminated shallow soils and reservoir concrete slabs encountered within the uppermost 10 feet, including areas beneath residential houses; and 2) remedial options that can be carried out where site characterization (including indoor air testing) is completed; 3) plans for relocation of residents during soil removal activities, plans for management of excavated soil on-site, and plans to minimize odors and noise during soil removal. The Discharger is required to submit this Pilot Test Work Plan to the Regional Board for review and approval by the Executive Officer no later than 60 days after the date of issuance of this Order. Upon approval of the Pilot Test Work Plan by the Executive Officer, the Discharger shall implement the Pilot Test Work Plan submit the Pilot Test Report that includes the findings, conclusions, and recommendations within 120 days of the issuance of the approval of the Pilot Test Work Plan.

b. Conduct an assessment of any potential environmental impacts of the residual concrete slabs of the former reservoir that includes: (1) the impact of the remaining concrete floors on waste migration where the concrete floors might still be present; (2) whether there is a need for the removal of the concrete; and (3) the feasibility of removing the concrete floors beneath (i) unpaved areas at the Site, (ii) paved areas at the Site, and (iii) homes at the Site. The Discharger is required to submit this environmental impact assessment of the residual concrete slabs to the Regional Board no later than 30 days after the completion of the Pilot Test.

c. Prepare a full-scale impacted soil Remedial Action Plan (RAP) for the Site. The Discharger is required to submit the RAP to the Regional Board for review and approval by the Executive Officer no later than 60 days after the date of the Executive Officer's approval of the Pilot Test Report.

i. The RAP shall include, at a minimum, but is not limited to:

i. A detailed plan for remediation of wastes in shallow soil that will incorporate the results from the Soil Vapor Extraction Pilot Test currently being performed.

ii. A plan to address any impacted area beneath any existing paved areas and concrete foundations of the homes, if warranted;

iii. A detailed surface containment and soil management plan;

iv. An evaluation of all available options including proposed selected methods for remediation of shallow soil and soil vapor; and

v. Continuation of interim measures for mitigation according to the Regional Board approved Interim Remediation Action Plan (IRAP).

vi. A schedule of actions to implement the RAP.

II. The RAP, at a minimum, shall apply the following guidelines and Policies to cleanup wastes in soil and groundwater. The cleanup goals shall include:

i. Soil cleanup goals set forth in the Regional Board's *Interim Site Assessment and Cleanup Guidebook, May 1996,* waste concentrations, depth to the water table, the nature of the chemicals, soil conditions and texture, and attenuation trends, human health protection levels set forth in *USEPA Regional Screening Levels (Formerly Preliminary Remediation Goals),* for evaluation of the potential intrusion of subsurface vapors (soil vapor) into buildings and subsequent impact to indoor air quality, California Environmental Protection Agency's *Use of Human Heath Screening Levels (CHHSLS) in Evaluation of Contaminated Properties*, dated January 2005, or its latest version, and Total Petroleum Hydrocarbon Criteria Working Group, Volumes 1 through 5, 1997, 1998, 1999; Commonwealth of Massachusetts, Department of Environmental Protection, *Characterizing Risks Posed by Petroleum Contaminated Sites: Implementation of MADEP VPH/EPH approach*; MADEP 2002; Commonwealth of Massachusetts, Department of Environmental Protection, *Updated Petroleum Hydrocarbon Fraction Toxicity Values for the VPH/EPH/APH Methodology*; MADEP 2003; Commonwealth of Massachusetts, Department of Environmental Protection, Method for the Determination of *Air-Phase Petroleum Hydrocarbons (APH) Final*, MADEP 2008, Soil vapor sampling requirements are stated in the *DTSC Interim Guidance* and the Regional Board's *Advisory*

– *Active Soil Gas Investigations*, dated January 28, 2003, or its latest version, DTSC's *Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air*, revised February 7, 2005, or its latest version, USEPA Risk Assessment Guidance for Superfund, Parts A through E; USEPA User's Guide for Evaluating Subsurface Vapor Intrusion into Buildings, 2003; USEPA Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites, 2002; USEPA Supplemental Guidance for Comparing Background and Chemical Concentrations in Soil for CERCLA Sites, 2002; CalEPA Selecting Inorganic Constituents as Chemicals of Potential Concern at Risk Assessments at Hazardous Waste Sites and Permitted Facilities, CalEPA DTSC, February 1997; CalEPA Use of the Northern and Southern California Polynuclear Aromatic Hydrocarbons (PAH) Studies in the Manufactured Gas Plant Site Cleanup Process, CalEPA DTSC, July 2009. Cleanup goals for all contaminant of concerns shall be based on residential (i.e., unrestricted) land use.

ii. Groundwater cleanup goals shall at a minimum achieve applicable Basin Plan water quality objectives, including California's Maximum Contaminant Levels or Action Levels for drinking water as established by the California Department of Public Health, and the State Water Resources Control Board's "Antidegradation Policy" (State Board Resolution No. 68-16), at a point of compliance approved by the Regional Board, and comply with other applicable implementation programs in the Basin Plan.

iii. The State Water Resources Control Board's "Antidegradation Policy",which requires attainment of background levels of water quality, or the highest level of water quality that is reasonable in the event that background levels cannot be restored. Cleanup levels other than background must be consistent with the maximum benefit to the people of the State, not unreasonably affect present and anticipated beneficial uses of water, and not result in exceedence of water quality objectives in the Regional Board's *Basin Plan*.

iv. The State Water Resources Control Board's "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304" (State Board Resolution No. 92-49), requires cleanup to background or the best water quality which is reasonable if background levels cannot be achieved and sets forth criteria to consider where cleanup to background water quality may not be reasonable.

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III. The Discharger shall submit site-specific cleanup goals for residential (i.e., unrestricted) land use for the Executive Officer's approval concurrent with the submittal date of the Pilot Test Report. The proposed site-specific cleanup goals shall include detailed technical rationale and assumptions underlying each goal.

IV. Upon approval of the RAP by the Executive Officer, the Discharger shall implement the RAP within 60 days of the issuance of the approval of the RAP.

d. Continue to conduct residential surface and subsurface soil and sub-slab soil vapor sampling under the current Regional Board approved work plan dated September 24, 2009. If the ongoing reinterpretation of new assessment data derived from the tasks described in the work plan suggests that modification or expansion of the tasks proposed in the RAP is necessary for complete cleanup, then the Discharger shall submit addenda to the September 24, 2009 work plan to the Regional Board for review and approval by the Executive Officer no later than 60 days of the date of issuance of this Order.

e. If the ongoing groundwater monitoring and investigation warrants, the Discharger shall:

I. Install new wells in order to complete the groundwater monitoring well network and to fully delineate the impacted groundwater plume, and

II. Prepare a detailed impacted groundwater RAP. The Regional Board will set forth the due date of the groundwater RAP at a later date.

4. **Public Review and Involvement:**

a. Cleanup proposals and RAP submitted to the Regional Board for approval in compliance with the terms of this Order shall be made available to the public for a minimum 30-day period to allow for public review and comment. The Regional Board will consider any comments received before taking final action on a cleanup proposal and RAP.

b. The Discharger shall encourage public participation. The Discharger is required to prepare and submit a Public Participation Plan for review and approval by the Executive Officer, with the goal of having the Regional Board provide the stakeholders and other interested persons with:

I. Information, appropriately targeted to the literacy and translational needs of the community, about the investigation and remedial activities concerning the discharges of waste at the Site; and

II. Periodic, meaningful opportunities to review, comment upon, and to influence investigation and cleanup activities at the Site.

c. Public participation activities shall coincide with key decision making points throughout the process as specified or as directed by the Executive Officer of the Regional Board.

d. The Discharger shall prepare draft environmental documentation evaluating the potential environmental impacts associated with the implementation of the RAP and submit to the Regional Board as directed by the Executive Officer.

5. **Time Schedule:** The Discharger shall submit all required technical work plans and reports by the deadlines stated in this Order, which are summarized in Table 4. As field activities at this Site are in progress, additional technical documents may be required and/or new or revised deadlines for the technical documents may be issued. Therefore, Table 4 may be updated as necessary. The Discharger shall continue any remediation or monitoring activities until such time as the Executive Officer determines that sufficient cleanup has been accomplished to fully comply with this Order..

6. The Regional Board's authorized representative(s) shall be allowed:

   a. Entry upon premises where a regulated facility or activity is located, conducted, or where records are stored, under the conditions of this Order;

   b. Access to copy any records that are stored under the conditions of this Order;

   c. Access to inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

   d. The right to photograph, sample, and monitor the Site for the purpose of ensuring compliance with this Order, or as otherwise authorized by the California Water Code.

7. **Contractor/Consultant Qualification:** A California licensed professional civil engineer or geologist, or a certified engineering geologist or hydrogeologist shall conduct or direct the subsurface investigation and cleanup program. All technical documents required by this Order shall be signed by and stamped with the seal of the above-mentioned qualified professionals.

8. This Order is not intended to permit or allow the Discharger to cease any work required by any other Order issued by this Regional Board, nor shall it be used as a reason to stop or redirect any investigation or cleanup or remediation programs ordered by this Regional Board or any other agency. Furthermore, this Order does not exempt the Discharger from compliance with any other laws, regulations, or ordinances which may be applicable, nor does it legalize these waste treatment and disposal facilities, and it leaves unaffected any further restrictions on those facilities which may be contained in other statues or required by other agencies.

9. The Discharger shall submit 30-day advance notice to the Regional Board of any planned changes in name, ownership, or control of the facility; and shall provide 30-

day advance notice of any planned physical changes to the Site that may affect compliance with this Order. In the event of a change in ownership or operator, the Discharger also shall provide 30-day advance notice, by letter, to the succeeding owner/operator of the existence of this Order, and shall submit a copy of this advance notice to the Regional Board.

10. Abandonment of any groundwater well(s) at the Site must be approved by and reported to the Executive Officer of the Regional Board at least 14 days in advance. Any groundwater wells removed must be replaced within a reasonable time, at a location approved by the Executive Officer. With written justification, the Executive Officer may approve of the abandonment of groundwater wells without replacement. When a well is removed, all work shall be completed in accordance with California Department of Water Resources Bulletin 74-90, "California Well Standards," Monitoring Well Standards Chapter, Part III, Sections 16-19.

11. The Regional Board, through its Executive Officer or other delegate, may revise this Order as additional information becomes available. Upon request by the Discharger, and for good cause shown, the Executive Officer may defer, delete or extend the date of compliance for any action required of the Discharger under this Order. The authority of the Regional Board, as contained in the California Water Code, to order investigation and cleanup, in addition to that described herein, is in no way limited by this Order.

12. Any person aggrieved by this action of the Regional Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:
    http://www.waterboards.ca.gov/public_notices/petitions/water_quality
or will be provided upon request.

13. Failure to comply with the terms or conditions of this Order may result in imposition of civil liabilities, imposed either administratively by the Regional Board or judicially by the Superior Court in accordance with Sections 13268, 13308, and/or 13350, of the California Water Code, and/or referral to the Attorney General of the State of California.

14. None of the obligations imposed by this Order on the Discharger are intended to constitute a debt, damage claim, penalty or other civil action which should be limited or discharged in a bankruptcy proceeding. All obligations are imposed pursuant to the police powers of the State of California intended to protect the public health, safety, welfare, and environment.

Ordered by: _____ Date: _____

Deborah Smith
Chief Deputy Executive Officer

ATTACHMENTS

FIGURES

Figure 1: Site Vicinity Map
Figure 2: Previous Exploration Location
Figure 3: Proposed Soil Vapor Sampling Locations
Figure 4: Benzene and Methane Concentrations in Soil Vapor
Figure 5a: Carousel Houses Tested as of March 15, 2010
Figure 5b: Residential Methane Screening Results as of March 15, 2010
Figure 5c: Summary of Results of Testing for Benzene Concentrations in Soil Vapor as of March 15, 2010
Figure 5d: Summary of Results of Testing for Non-Benzene Concentrations in Soil Vapor as of March 15, 2010
Figure 5e: Summary of Soil Sampling Results (0-10' Below Surface) as of March 15, 2010
Figure 5f: Methane Concentrations in Soil Vapor at 5 Feet Below Surface as of March 15, 2010
Figure 6: Proposed Groundwater Monitoring Well Locations

TABLES

Table 1: Data Summary from Phase I and Phase II Site Characterization for Soil and Soil Vapor
Table 2A: Summary of Soil Samples Analytical Results -VOCs, SVOCs, and TPH
Table 2B: Summary of Soil Vapor Analytical Results -VOCS and Fixed Gases
Table 3: Maximum Concentration of Aliphatic and Aromatic Hydrocarbons by Hydrocarbon Fractionations at Individual Properties
Table 4: Deadlines for Technical Work Plans and Reports

EXHIBITS

Exhibit 1: OEHHA's Memorandum dated May 19, 2010
Exhibit 2: Shell Oil Company Letter to the Regional Board dated May 5, 2010

Note: All Figures and Tables, except Table 4, were taken from technical reports prepared by SOPUS's consultant, URS Corporation

Carousel Tract Environmental Investigation Timeline

Date	Significant Actions/Reports	Notes
March 11, 2008	DTSC informed LARWQCB about former Shell Oil Company Tank Farm	
May 2008	LAWRQCB initiated an environmental investigation	
December 2008	LAWRQCB approved proposed work plan submitted by Shell to investigate contaminates of concern	
December 31, 2008	LARWQCB issued California Water Code § 13267 Investigative Order	
October 15, 2009	Shell submitted Final Phase I Site Characterization Report	
March 2011	LARWQCB issued Cleanup and Abatement Order No. R4-201100046	
February 22, 2013	Shell submitted *Site-Specific Cleanup Goal Report*	
May 2013	LAWRQCB issued a fact sheet providing information and advising of comment period for *Site-Specific Cleanup Goal Report*	30-day comment period ending June 24, 2013
June 24, 2013	City submitted comments to *Site-Specific Cleanup Goal Report*	Forwarded reports by Everett & Associates and Soil/Water/Air Protection Enterprise
July 18, 2013	City Council conducted workshop to allow presentation by Mr. Sam Unger, Executive Director of LARWQCB	Presentation by Dr. Lorene Everett and James T. Wells PhD raising concerns related to environmental conditions
July 29, 2013	City Council adopted Resolution No. 13-081 declaring the existence of an emergency in the Carousel Tract	
July 30, 2013	Letters sent to the Governor, Attorney General, Los Angeles County Board of Supervisors and Mr. Unger	Requested immediate assistance due to emergency conditions in Carousel Tract
July 31, 2013	City staff, Mr. Bob Bowcock, Dr. Everett and Mr. Wells met with representatives of Los Angeles County Fire Department and Los Angeles County Department of Public Health	City Council declaration of emergency conditions discussed and copies of Everett & Associates reports transmitted for review

EXHIBIT NO. 2

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Carousel Tract Environmental Investigation Timeline

Date	Significant Actions/Reports	Notes
August 21, 2013	LARWQCB sent detailed letter to Shell denying proposed site-specific cleanup goals and requiring revisions to be submitted by October 21, 2013	LARWQCB incorporated OEHHA Memorandum dated July 22, 2013 and UCLA Expert Panel Interim Report dated July 24, 2013
September 11, 2013	City letter to Mr. Sam Unger	Expressing appreciation from City Council and community for response to *Site-Specific Cleanup Goal Report*
September 24, 2013	LARWQCB community open house CEQA scoping meeting	Request for input from community and public agencies related to evaluation of environmental impacts; comment period ends on October 8, 2013
September 30 – October 10, 2013	LARWQCB Public Participation Specialist to conduct office hours at Carson City Hall	Opportunity for LARWQCB to meet with residents and community stakeholders
October 8, 2013	CEQA scoping comments due to LARWQCB from September 9 through October 8, 2013	Comment letters sent by City of Carson and Bob Bowcock/Barbara Post
October 10, 2013	City staff arranging for a meeting with LARWQCB, LACoFD, Los Angeles County Department of Public Health, OEHHA, Mr. Bowcock, Dr. Everett and Mr. Wells PhD	Review of technical reports and discussion of public agencies responses and actions
October 21, 2013	Shell submitted a *Revised Site-Specific Cleanup Goal Report* to LARWQCB	Shell proposed to evaluate options that provide excavation in specific areas and does not include any further evaluation associated with the removal of homes
October 24, 2013	Los Angeles County Department of Public Health Letter to City of Carson	Letter states there is not an immediate health threat from site conditions

Carousel Tract Environmental Investigation Timeline

Date	Significant Actions/Reports	Notes
October 30, 2013	LARWQCB letter to Shell for review of *Community Outdoor Air Sampling and Analysis Report*	Based on statistical tests, LARWQCB concludes that outdoor air concentrations do not differ between the site and surrounding area. Shell is required to address OEHHA comments and to develop a work plan for an additional soil-vapor survey by November 29, 2013.LARWQCB determined on January 13, 2014 that no further evaluation required
October 31, 2013	LARWQCB notice on *Proposed Draft Revised Cleanup and Abatement Order No. R4-2011-0046*	The proposed draft order names Dole Food Company, Inc. as an additional responsible party. Comments and evidence must be submitted by 12:00 p.m. on December 6, 2013. Dole Food Company has requested an extension to January 2014 to provide comments.LARWQCB approved extension to January 13, 2014. On January 7, 2014, Regional Board approved extension to January 21, 2014
November 12, 2013	Letter to Carousel Tract Owners and Occupants advising of November 19, 2013 City Council Workshop	
November 19, 2013	City Council conducted workshop with Los Angeles County Department of Public Health and Los Angeles County Fire Department	
January 8, 2014	LARWQCB response to *Assessment of Environmental Impact and Feasibility of Removal of Residual Concrete Reservoir Slabs*	Directs Shell to either remove the residential concrete slabs as appropriate or isolate the residual concrete slabs beneath the foundation of the homes and paved areas using engineering techniques to the extent necessary to address long term health risks or nuisance concerns

Carousel Tract Environmental Investigation Timeline

Date	Significant Actions/Reports	Notes
January 13, 2014	LARWQCB response to *Revised Community Outdoor Air Sampling and Analysis Report*	LARWQCB concludes that outdoor air concentrations do not differ between the site and surrounding area. No further evaluation required
January 21, 2014	Dole response to *Proposed Draft Revised Cleanup and Abatement Order No. R4-2011-0046*	Dole requested to not be included in the Draft Order since their subsidiary, Barclay Hollander Corporation, did not discharge any of the contaminants of concern
January 23, 2014	Community meeting organized by Congresswoman Hahn	Meeting to hear from residents and discuss options for obtaining improved levels of response from the Regional Board
January 23, 2014	LARWQCB response to *Revised Site-Specific Cleanup Goal Report*	LARWQCB identified deficiencies in the Shell Revised Report and directed a remedial action plan, Human Health Risk Assessment and other environmental documents be submitted by March 10, 2014
February 10, 2014	LARWQCB clarification and revision to their January 8, 2014 letter (effective date of January 13, 2014) regarding the Residential Concrete Slab Report	LARWQCB removed reference to regulations for underground storage tanks
February 23, 2014	Shell submitted a Petition for Review and Request for Hearing to the State Water Resources Control Board in the matter of Cleanup and Abatement Order R4-2011-0046 (CAO)	The State Water Resources Control Board has not responded to Shell's petition
March 10, 2014	Shell submitted Remedial Action Plan (RAP), Human Health Risk Assessment (HHRA), and draft environmental documents to LARWQCB	LARWQCB set a tentative period of 30 day to review the documents and provide opportunity for public viewing
March 19, 2014	LARWQCB filed Notice of Preparation (NOP)	Preparation of a draft Environmental Impact Report in accordance to the California Environmental Quality Act (CEQA)
March 25, 2014	LARWQCB and PCR Service Corporation met with City's staff	As part of the draft Environmental Impact Report, staff discussed transportation, noise, and odor concerns with LARWQCB and PCR

Carousel Tract Environmental Investigation Timeline

April 18, 2014	LARWQCB received comments from LAUSD regarding the NOP	LARWQCB is reviewing LAUSD comments and will provide response
April 30. 2014	LARWQCB responded to Shell's RAP, FS, and HHRA	LARWQCB rejected Shell's proposed cleanup plan and revised RAP to be submitted by Shell by June 16, 2014 by 5 p.m.
April 30, 2014	LARWQCB issued notice of violation (NOV) to Shell for failure to submit a RAP based on approved site-specific cleanup goals	LARWQCB directed Shell to comply by June 16, 2014
May 23, 2014	LARWQCB met with Shell regarding the RAP	LARWQCB discussed deficiencies and revisions with Shell
June 3, 2014	LARWQCB issued notice of opportunity for additional public comment	The deadline to submit public comments is 5 p.m. on June 16,2014
June 4, 2014	LARWQCB granted Shell a two-week extension to submit the revised RAP, FS, and HHRA	The revised documents are due on June 30, 2014
June 16, 2014	Shell submitted additional comments regarding the Proposed Revised Draft Cleanup and Abatement Order No. RB4-2011-0046	The Regional Board is reviewing Shell's comments
June 30, 2014	Shell submitted the revised RAP, FS, and HHRA to the Regional Board	The Regional Board is reviewing the revised documents
July 7, 2014	The City of Carson sent a letter notifying the Carousel Tract residents of the availability of the RAP, FS, and HHRA via the Regional Board	The documents are part of the draft EIR process

	website	
July 22, 2014	The Regional Board is reviewing the RAP, FS, HHRA and preparing the draft EIR. Testing of property in the Carousel Tract is ongoing	Testing result and the Regional Board latest activities are available at: http://geotracker.waterboards.ca.gov/
August 25, 2014	The Regional Board is reviewing the RAP, FS, HHRA and preparing the draft EIR.	No new dates set for meeting with the Carousel Tract residents
August 27, 2014	The Regional Board released August 2014 community update for the Carousel Tract	Tentative release of proposed RAP and Draft EIR in mid October 2014
September 19, 2014	Shell submitted the RAP Relocation Plan to the Regional Board	Tentative release of proposed RAP and Draft EIR at end of October 2014, and meeting with the Carousel Tract resident is projected to begin on November 2014
October 8, 2014	The Regional Board continues preparation of Draft EIR and review of the RAP	The Regional Board required the RAP addendums to be submitted by Shell on October 20, 2014. Meeting with the Carousel Tract residents is projected to occur in the middle of November 2014
October 15, 2014	The Regional Board scheduled community meetings	The Regional Board mailed invitations of community meetings to the Carousel Tract residents
October 15, 2014	Shell submitted addendums to the RAP, FS, and HHRA	The documents are posted on the Regional Board website
November 5, 2014	The Regional Board released the draft EIR proposed RAP for public review and comment	The draft EIR, proposed RAP and support documents are available at the Carson Library, the Los Angeles Regional Board Office and website

Carousel Tract Environmental Investigation Timeline

November 12,15,18,20, 2014	The Regional Board held community group meetings with Carousel Tract residents	The discussion was centered on the draft EIR and proposed RAP
November 22, 2014	The Regional Board hosted a public meeting at the Carson Community Center	The discussion centered on the draft EIR and proposed RAP
December 3, 2014	City of Carson Environmental Commission received the draft EIR and proposed RAP for review	City staff will submit the Commission's comments to the Regional Board
December 8, 2014	The Regional Board notified Dole Food Company Inc. (Dole) of its intention to revise the Cleanup and Abatement Order No. R4-2011-0046 CAO)	Barclay Hollander Corporation (Barclay), a wholly-owned subsidiary of Dole, to be named as responsible parties to the Carousel Tract contamination
December 24, 2014	Barclay sent a written request to the Regional Board	Barclay submitted additional written evidence, and schedule a formal evidentiary hearing with the Regional Board
January 6, 2015	Barclay sent a follow up letter to its December 24, 2014 Letter to the Regional Board	Barclay submitted additional documentary evidence to the Regional Board
January 6, 2015	Shell sent a letter to the Regional Board	Shell is opposed to Barclay's requests to submit additional evidence and for a formal evidentiary hearing
January 7, 2015	Integrated Resource Management, Inc. (IRM) responded to Barclay's December 24, 2014 Letter	IRM requested appropriate notice and opportunity to be heard for Carousel Tract residents. IRM also commented on the substance of the revised CAO and attached documentary evidence
January 9, 2015	The Regional Board sent an electronic letter to all interest parties	The Regional Board will consider additional comments on pending procedural request by 5 p.m., January 16, 2015

Carousel Tract Environmental Investigation Timeline

January 15, 2015	Site Cleanup Program Staff (SCP Staff) of the regional Board sent a response letter objecting inclusion of additional evidence into the record as requested by Barclay Hollander Corporation (Barclay)	SPC Staff is requesting opportunity to respond if a hearing for additional evidence is granted by the Chief Deputy Executive Officer of the Regional Board
January 16, 2015	Barclay sent a letter to the Regional Board	Barclay clarified its scope to submit additional evidence, seek clarification from the Regional Board, and request timing of evidential hearing.
February 20, 2015	The Regional Board released a "Notification of Work" to the public	Land (public streets) and aerial photographic survey activities are tentatively scheduled from March 2, 2015 to March 20, 2015 for the Carousel Tract and surrounding area
February 27, 2015	The Regional Board replied to parties and interested persons	The Regional Board accepted Mr. George Bach deposition dated November 19, 2014 into administrative record
March 11, 2015	The SCP Staff provided explanations to assumptions and copies of graphic results	The explanation addressed the three assumptions in memo dated March 20, 2014 from Dr. C.P. Lai to SCP Staff
April 2, 2015	SCP Staff, Barclay, and Shell submitted comments to the Regional Board regarding the revised CAO	Barclay is requesting inclusion of Mr. George Bach deposition dated November 19, 2014 into administrative record. SCP Staff and Shell opposed its inclusion
April 17, 2015	The Regional Board sent letter to all parties and interested persons	Informing all parties and interest persons of the separation of functions between the Advising Team and SCP Staff. The Regional Board intends to issued final action regarding Tentative Revised CAO on or after April 24, 2015
April 22, 2015	Barclay sent a letter to the Regional Board	Barclay is requesting delay of final action regarding the Tentative Revised CAO until depositions of the SCP Staff are completed

Carousel Tract Environmental Investigation Timeline

April 30, 2015	Regional Board sent a letter to Dole and Barclay aka (BHC)	The Regional Board issued the Revised CAO adding Dole and Barclay as responsible parties
May 21, 2015	Barclay sent a letter to the Regional Board	Barclay requests stay and reconsideration of the Revised CAO
June 1, 2015	The Regional Board reported that Barclay filed a petition with State Water Board	Barclay is requesting the State Water Board to Review, petition for stay, and petition to submit supplemental evidence and to conduct a hearing
June 22, 2015	The Regional Board provided a copy of Barclay petition to the State Water Board	The Regional Board and Shell are proceeding with their work in the Carousel Tract regardless of the outcome of Barclay's petition