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**CITY OF CARSON  
INTEROFFICE MEMORANDUM**

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TO: MAYOR AND CITY COUNCIL  
FROM: JACKIE ACOSTA, ACTING CITY MANAGER *JA*  
SUBJECT: SHELL OIL – CAROUSEL TRACT  
DATE: MARCH 11, 2014

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Attached please find a copy of Shell Oil's "Petition for Review and Hearing" filed with the State Water Resources Control Board regarding the Carousel Tract Remedial Action Plan (RAP). This is the document that Sam Unger talked about at the City Council meeting last week.

JA/dg

cc: Donesia Gause, City Clerk  
Bill Wynder, City Attorney

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CALIFORNIA REGIONAL WATER  
QUALITY CONTROL BOARD  
LOS ANGELES REGION

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7 LLC dba SHELL OIL PRODUCTS US and  
8 SHELL OIL COMPANY

9 STATE WATER RESOURCES CONTROL BOARD

10 FOR THE STATE OF CALIFORNIA

11 In the Matter of the Petition of

Case No.

12 EQUILON ENTERPRISES LLC dba SHELL  
13 OIL PRODUCTS US and SHELL OIL  
14 COMPANY

**PETITION FOR REVIEW AND  
REQUEST FOR HEARING**

15 Cleanup and Abatement Order R4-2011-0046  
16 California Regional Water Quality Control  
17 Board, Los Angeles Region

California Water Code § 13304

18 Equilon Enterprises LLC dba Shell Oil Products US and Shell Oil Company (collectively  
19 "Shell") hereby file this Petition for Review ("Petition"), along with the supporting Declarations  
20 of Douglas J. Weimer and exhibits (attached hereto and referred to hereafter as "Weimer Decl.")  
21 and David Marx. Shell also requests that an order be issued staying certain requirements in the  
22 subject Directive and that a hearing regarding this Petition be granted. *See* Water Code § 13320,  
23 23 Cal. Code Reg. § 2053. Notwithstanding the technical issues raised in this protective Petition,  
24 which are the subject of ongoing discussions between Shell and the California Regional Water  
25 Quality Control Board, Los Angeles Region (the "Regional Board"), Shell intends to submit the  
26 Remedial Action Plan and the Human Health Risk Assessment Report, along with drafts of  
27 preliminary environmental documents, to the Regional Board by the March 10, 2014 deadline.

1 Shell alleges as follows:

2 1. Shell's mailing address is 20945 South Wilmington Avenue, Carson, California  
3 90810. (Weimer Decl., ¶ 2.) Shell requests that copies of all communications relating to this  
4 Petition should be sent to Mr. Weimer at the foregoing address with copies sent to the above-  
5 captioned counsel.

6 2. Since 2008, Shell has been conducting an environmental investigation of the  
7 former Kast Property located southeast of the intersection of Marbella Avenue and E. 244th  
8 Street in Carson, California ("Site"). (Weimer Decl., ¶ 3.) On March 11, 2011, the Regional  
9 Board issued Cleanup and Abatement Order No. R4-2011-0046 (the "CAO") which, *inter alia*,  
10 directed Shell to "submit site-specific cleanup goals for residential (i.e., unrestricted) land use"  
11 that "shall include detailed technical rationale and assumptions underlying each goal." (Exh. 1,  
12 p. 13.)<sup>1</sup> On February 22, 2013, Shell timely submitted its initial Site-Specific Cleanup Goal  
13 Report ("Initial SSCG Report"). On August 21, 2013, the Regional Board issued a response to  
14 the Initial SSCG Report and directed Shell to revise the Site-Specific Cleanup Goals ("SSCGs")  
15 for the Site in accordance with certain comments and directives. On October 21, 2013, Shell  
16 timely submitted a Revised Site-Specific Cleanup Goal Report ("Revised SSCG Report") that  
17 addressed and incorporated the Regional Board's comments and directives.<sup>2</sup>

18 3. On January 23, 2014, the Regional Board issued its Review of Revised Site-  
19 Specific Cleanup Goal Report and Directive to Submit the Remedial Action Plan, Human Health  
20 Risk Analysis, and Environmental Analysis for Cleanup of the Carousel Tract Pursuant to  
21 California Water Code Section 13304 ("Directive").<sup>3</sup> In the Directive, the Regional Board

22  
23 <sup>1</sup> All exhibits referenced herein are attached to the Weimer Declaration.

24 <sup>2</sup> Copies of Shell's Initial SSCG Report, the Regional Board's August 21, 2013 response, and  
25 Shell's Revised SSCG Report are submitted as Exhibits 2 to 4, respectively. The text, tables and  
26 figures for the Initial and Revised SSCG Reports are attached to the Weimer Declaration, and  
copies of the full reports (with the appendices) are included on CDs that are included with the  
hard copy of the Petition.

27 <sup>3</sup> A copy of the Regional Board's Directive is submitted as Exhibit 5.

1 approved the SSCGs proposed in the Revised SSCG Report with certain modifications, and  
2 required Shell to submit a Remedial Action Plan for the Site ("RAP") by March 10, 2014, along  
3 with a Human Health Risk Assessment Report ("HHRA Report"), and "draft environmental  
4 documents consistent with the California Environmental Quality Act (CEQA) analyzing the  
5 potential environmental impacts associated with remediation alternatives considered in the  
6 RAP." (Exh. 5, p. 9.)

7 4. Shell submits this Petition for Review to request review by the State Water  
8 Resources Control Board ("State Board") of certain requirements in the Regional Board's  
9 Directive. Shell is diligently working to prepare and finalize the RAP, HHRA Report, and a draft  
10 CEQA Initial Study and proposed Notice of Preparation ("NOP"), and intends to submit these  
11 documents by March 10, 2014, the date specified in the Directive. However, Shell believes that  
12 certain requirements and statements in the Directive lack evidentiary, legal and/or technical  
13 support and should be revised as described below. Shell therefore files this protective Petition in  
14 order to protect its rights and requests that the Petition be held in abeyance while Shell and the  
15 Regional Board discuss these issues. If Shell and the Regional Board are unable to resolve the  
16 issues raised herein, Shell will request that the State Board proceed with its review of Shell's  
17 Petition and the relevant requirements in the Regional Board's Directive.

18 5. This Petition for Review is made on the following grounds:

19 a. *First*, in its Directive, the Regional Board erroneously states that the  
20 remedial action objective ("RAO") for methane in the Revised SSCG Report provides that  
21 methane will not exceed two percent of the lower explosive limit ("LEL") and "will be removed  
22 to less than two percent of the LEL and to the greatest extent technologically and economically  
23 feasible." (Exh. 5, pp. 2-3.) This is inaccurate. The actual RAO for methane proposed in the  
24 Revised SSCG Report is to "[p]revent fire/explosion risks in indoor air and/or enclosed spaces"  
25 due to methane accumulation caused by degradation of petroleum hydrocarbons in the soil, and  
26 to "[e]liminate methane in the subsurface to the extent technologically and economically  
27 feasible." (Exh. 4, p. 34.) Shell assumes that the language on pages 2 and 3 is a clerical error.  
28 However, to avoid any confusion regarding the RAO for methane, the relevant language in the

1 Directive should be rescinded and revised to reflect the actual RAO for methane contained in the  
2 Revised SSCG Report. The Directive also states that “[t]he SSCG for methane should be the  
3 more stringent of the lower explosive limit or the level that is technically and economically  
4 feasible.” (Exh. 5, p. 6.) This statement misapplies State Water Board Resolution No. 92-49 and  
5 23 Code of Regulations § 2550.4, which authorize the establishment of a cleanup goal that is  
6 greater than background and that is technologically and economically achievable. Thus, the  
7 SSCG for methane should be Shell’s stated RAO or the level that is technologically and  
8 economically feasible to achieve, and not whichever is “the more stringent” of the two.

9           b.       *Second*, while the Regional Board has approved the application of depth-  
10 based soil cleanup levels, the Regional Board selected intervals of 0-5 feet below ground surface  
11 (“bgs”) for increased exposures and 5-10 feet bgs for less frequent exposures. (Exh. 5, p. 4.) In  
12 selecting these intervals, the Regional Board concluded that “institutional controls are already in  
13 place throughout Los Angeles County” because the Los Angeles County Building Code requires  
14 that residents obtain an excavation permit before excavating below five feet. (*Id.*) Shell agrees  
15 with this principle, but the actual ordinance applicable to the Site, the City of Carson Building  
16 Code § 8105, requires that residents obtain a permit for excavations deeper than 3 feet bgs. In  
17 addition, guidance from the Environmental Protection Agency (“US EPA”) regarding exposure  
18 assumptions and soil cleanup depths, and comments by the independent Expert Panel that is  
19 advising the Regional Board, all support the use of depth intervals for risk-based soil cleanup  
20 goals of 0-2 feet bgs and greater than 2-10 feet bgs. Given this, and in order to align the depth  
21 intervals with the applicable ordinance, Shell requests that the risk-based soil cleanup goals in  
22 the Directive be revised to incorporate and reflect depth intervals of 0-3 feet bgs and 3-10 feet  
23 bgs, which is more conservative than what US EPA guidance and Expert Panel comments  
24 support.

25           c.       *Third*, in its Directive, the Regional Board directs Shell to “develop odor-  
26 based screening levels for indoor air based on 50 percent odor-recognition thresholds as  
27 published in the ATSDR Toxicological Profiles. For soil gas, follow the ESL for odor and other  
28 nuisance to calculate a ceiling level for residential land use.” (Exh. 5, p. 4, fn. 3.) In fact, Shell

1 proposed screening values for soil gas in the Revised SSCG Report that followed the ESL, but  
2 the Regional Board reduced the TPH nuisance value by half without any explanation. Shell  
3 believes the Regional Board's revised screening value is not supported and, in fact, contradicts  
4 the Regional Board's express direction in footnote 3 of the Directive to "follow the ESL."  
5 Accordingly, Shell requests that the TPH nuisance screening value in the Directive be rescinded  
6 and revised to include the value submitted by Shell, which is consistent with the Regional  
7 Board's direction in footnote 3 of the Directive.

8           d.       *Fourth*, the Regional Board revised the soil cleanup levels based on  
9 leaching to groundwater proposed by Shell in its Revised SSCG Report, but in so doing it relied  
10 on improper assumptions and an inapplicable regulation, and its methodology generated  
11 erroneous values, especially with respect to the revised value for total petroleum hydrocarbons as  
12 motor oil ("TPH motor oil"). In particular, the Regional Board failed to apply a dilution  
13 attenuation factor when it derived its soil cleanup levels based on leaching to groundwater. (Exh.  
14 5, p. 5.) Accordingly, Shell requests that the leaching to groundwater soil cleanup levels in the  
15 Directive be rescinded and replaced with those proposed in the Revised SSCG Report.

16           d.       *Fifth*, while the Revised SSCG Report proposed an attenuation factor of  
17 0.001 to apply to sub-slab soil vapor concentrations based on analysis of actual Site data, the  
18 Regional Board directs Shell to use an attenuation factor of 0.002 to calculate SSCGs for soil  
19 vapor that it bases on default numbers it states are recommended in recent agency guidance  
20 documents. (Exh. 5, pp. 5-6.) However, these default attenuation factor values are provided to  
21 calculate soil vapor cleanup values in the absence of Site data, and in this instance, the Regional  
22 Board has correctly described the Site data collected by Shell as "reliable, comprehensive, and  
23 high-quality." (Exh. 3, p. 2.) Given the existence of such a robust and comprehensive data set  
24 for the Site, the use of default values is not warranted. The requirement in the Directive to use an  
25 attenuation factor of 0.002 should therefore be rescinded and revised to approve the attenuation  
26 factor proposed by Shell based on Site data, which is 0.001.

27           e.       *Sixth*, while the Regional Board appears to agree that chlorinated  
28 hydrocarbons detected at the Site are not related to Shell's historical use of the Site for storage of

1 crude oil and bunker oil, and therefore most such compounds are not Site-related Chemicals of  
2 Concern (“COCs”), the Regional Board states in the Directive that tetrachloroethylene (“PCE”)  
3 and trichloroethylene (“TCE”) in soil and soil vapor cannot be excluded from the list of COCs  
4 for the Site. (Exh. 5, p. 7.) In making this determination, the Regional Board concedes the  
5 existence of off-Site sources for these compounds, and it does not point to any evidence that  
6 Shell in fact used PCE or TCE at the Site (and Shell has been unable to find any such evidence).  
7 Instead, the only “evidence” the Regional Board identifies is the inclusion of chlorinated solvents  
8 in a description for large industrial processes in the EPA’s Toxic Release Inventory for the  
9 Petroleum Industry. (*Id.*) Shell does not believe this general agency inventory is a proper or  
10 sufficient basis for inclusion of PCE and TCE in the list of COCs for this specific Site, especially  
11 in light of the documented off-site sources for these compounds and the absence of evidence that  
12 such compounds were used during Shell’s ownership of the Site. For these reasons, Shell  
13 requests that the inclusion of PCE and TCE as Site-related COCs be rescinded and the Directive  
14 be revised to include only petroleum-related hydrocarbons as Site-related COCs. In addition, to  
15 the extent that the Directive requires Shell to include other chlorinated compounds, such as  
16 trihalomethanes (“THMs”), as Site-related COCs—despite the absence of evidence connecting  
17 the presence of these compounds with Shell’s historical use of the Site and the fact that such  
18 chemicals are recognized to result from the use of municipal water in and around the home—  
19 Shell further requests that the State Board confirm that such compounds should not be listed as  
20 Site-related COCs.

21 f. *Seventh*, the Directive includes a requirement that Shell submit by March  
22 10, 2014 “draft environmental documents consistent with the California Environmental Quality  
23 Act (CEQA) analyzing the potential environmental impacts associated with remediation  
24 alternatives considered in the RAP.” (Exh. 5, p. 9.) This requirement is vague and could be  
25 construed to require submission of a Draft Environmental Impact Report along with the RAP,  
26 which would not comply with the sequencing of environmental review actions required by  
27 CEQA and its implementing regulations. Preparation of the Draft Environmental Impact Report  
28 by March 10, 2014 would also be infeasible. It also fails to recognize that the Regional Board is

1 the lead agency for both the RAP and CEQA process, not Shell. Shell is supporting the Regional  
2 Board's environmental review process by, *e.g.*, paying for an experienced and qualified  
3 contractor to assist the Regional Board in complying with CEQA, and preparing to submit  
4 preliminary environmental documents with the RAP and HHRA Report, including a draft Initial  
5 Study, a draft Notice of Preparation, and a draft timeline for the environmental review process.  
6 Shell will continue to support the Regional Board's environmental review process as the agency  
7 and the CEQA consultant move forward. For all of the above reasons, however, the above-  
8 quoted requirement in the Directive is erroneous, infeasible and improper and should be clarified  
9 or rescinded.

10         6.       This Petition is filed pursuant to Section 13320, which authorizes any aggrieved  
11 person to petition the State Board to review any action (or failure to act) by a regional board. *See*  
12 Water Code § 13223 (actions of the regional board shall include actions by its executive officer  
13 pursuant to powers and duties delegated to him by the regional board). Shell is an aggrieved  
14 party in this instance because the requirements and statements in the Directive that are the subject  
15 of this Petition are vague and/or lack evidentiary, legal and/or technical support, or are otherwise  
16 erroneous, and should be revised as described below.

17         7.       Shell respectfully requests that the State Board grant the relief set forth in the  
18 Request for Relief. Shell herewith submits a Request for Stay and asks the State Board to order  
19 that the challenged portions of the Directive be stayed pending review of this Petition.

20         8.       Shell requests a hearing regarding this Petition. The arguments that Shell wishes  
21 to make at the hearing are summarized in this Petition, as is the testimony and evidence that Shell  
22 would introduce at the hearing, which also are contained in the administrative record for this  
23 matter. Shell reserves its right to supplement the testimony and evidence both prior to, and at,  
24 the hearing on this Petition.

25         9.       Shell's Statement of Points and Authorities in support of the issues raised by this  
26 Petition commences below. Shell previously raised the issues discussed herein with the Regional  
27 Board. (Weimer Decl., ¶ 26.)

1           10.     Shell reserves the right to modify and supplement this Petition, and also requests  
2 an opportunity to present additional evidence, including any evidence that comes to light  
3 following the filing of this Petition. *See* 23 Cal. Code Regs. § 2050.6.

4           11.     Copies of this Petition and Shell's Request for Stay are being sent on this day by  
5 personal delivery to the Regional Board to the attention of Mr. Samuel Unger, Executive Officer.

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1 STATEMENT OF POINTS AND AUTHORITIES

2 I. BACKGROUND

3 Shell's Investigation of the Site

4 12. The Site is an approximately 44-acre residential housing tract located southeast of  
5 Marbella Avenue and E. 244th Street in Carson, California. (Weimer Decl., ¶ 3.) Historical  
6 records have established the following background regarding the Site. In 1923, Shell Company  
7 of California, a corporation, purchased the Site for use as an oil storage facility at a time when  
8 the surrounding area was largely undeveloped. (*Id.*, ¶ 8.) It then constructed three large  
9 reservoirs on the property, which were lined with concrete and surrounded by 15-foot high  
10 levees. (*Id.*) The reservoirs were covered by frame roofs on wood posts. (*Id.*) The reservoirs  
11 were primarily used to store crude oil. (*Id.*)

12 13. Active use of the reservoirs generally ceased by the early 1960s. (*Id.*, ¶ 9.) In  
13 1965, after removing most of the oil from the concrete reservoirs, Shell Oil Company sold the  
14 property to Richard Barclay of Barclay Hollander Curci and Lomita Development Company (the  
15 "Developers"). (*Id.*) Shell is informed and believes that Barclay Hollander Curci became  
16 Barclay Hollander Corporation, which is now an affiliate of Dole Food Company, Inc. (*Id.*) The  
17 Developers bought the property from Shell with knowledge of the property's former use and  
18 agreed to perform the site-clearing work, including removal of the remaining liquids, demolition  
19 of the reservoirs, and permitting and grading. (*Id.*) The Developers secured a zoning change for  
20 the property, decommissioned the reservoirs, graded the property, and constructed and sold the  
21 285 homes which now form the residential tract in Carson, California known as the Carousel  
22 neighborhood. (*Id.*) However, to date, the Developers have not participated in the  
23 environmental investigation or agreed to participate in any future cleanup. (*Id.*)

24 14. In 2008, Turco Products, Inc. ("Turco"), which was investigating contamination  
25 (primarily chlorinated compound impacts) at its facility adjacent to the northwest portion of the  
26 Site, performed step-out sampling which revealed petroleum hydrocarbon contamination at the  
27 Site. (*Id.*, ¶ 10.) The Department of Toxic Substances Control ("DTSC") notified the Regional  
28 Board regarding the petroleum contamination, which in turn notified Shell. (*Id.*) Based on

1 review of historical aerial maps of the area, the former oil storage reservoirs were identified as a  
2 potential source of contamination at the Site. (*Id.*)

3 15. Following notification from the Regional Board, Shell began an extensive and  
4 thorough investigation of the soil, soil vapor, groundwater, and indoor and outdoor air at and  
5 beneath the Site and adjacent areas, including both public and residential areas. (*Id.*, ¶ 11.) The  
6 sampling protocol proposed by Shell and approved by the Regional Board for the 285 residences  
7 at the Site requires the collection and analysis of the following samples: (1) soil at multiple  
8 locations and depths in the front- and backyards at each residence where exposed; (2) sub-slab  
9 soil vapor at three locations from beneath the slab of each resident at the Site where feasible; and  
10 (3) the indoor and outdoor air at the residence on two occasions at least 90 days apart. (*Id.*) In  
11 addition, an indoor air methane screening program is utilized early in the process to assess  
12 whether methane is an issue in any of the residences. (*Id.*) The results of the tests are submitted  
13 to the Regional Board, posted on the State Board's publicly accessible Geotracker website, and  
14 also are forwarded to the Carousel residents or their designated legal representatives. (*Id.*)

15 16. The testing program is ongoing as access is granted by the residents. (*Id.*, ¶ 12.).  
16 As of January 17, 2014, Shell has collected samples at 94% of the homes in the Carousel  
17 neighborhood, and has completed all required testing at 78% of the homes. (*Id.*) Shell has been  
18 conducting outreach to schedule the remaining houses and complete all residential testing. (*Id.*)

19 17. Shell has also conducted an extensive testing program in the public rights-of-way  
20 (*e.g.*, below the streets and sidewalks) in the Carousel neighborhood and surrounding  
21 communities that has included soil, soil vapor and groundwater sampling, and methane  
22 monitoring in utility vaults, stormwater drains and the like. (*Id.*, ¶ 13.) Shell continues to  
23 regularly conduct groundwater and sub-surface soil vapor sampling, and conduct methane  
24 monitoring on an ongoing basis. (*Id.*) All sampling results are submitted to the Regional Board  
25 and posted to the Geotracker website. (*Id.*)

26 18. The Regional Board has described Shell's investigation of the Site as "thorough"  
27 and "extensive" and stated that Shell's site investigation has "provided reliable, comprehensive,  
28 and high-quality data." (Exh. 3, p. 2.) As of December 31, 2013, Shell had collected 11,031 soil

1 samples, 2,695 soil vapor samples, and over 2,457 indoor and outdoor air samples, and the  
2 testing program is ongoing. (Weimer Decl., ¶ 14.)

3 *The Results of the Sampling at the Site*

4 19. While Shell is continuing to seek access to the remaining residences to complete  
5 its investigation of the Site, the investigation is nearly completed. (Weimer Decl., ¶ 15.) Based  
6 on the data obtained thus far (all of which has been submitted to the Regional Board and posted  
7 on the State Board's Geotracker website), the results can be summarized as follows.

8 20. *First*, the Regional Board and the Los Angeles County Department of Public  
9 Health have concluded that, while environmental impacts exist at the Site related to Shell's  
10 former use of the Site and the subsequent development of the Site by the Developers, the  
11 environmental conditions at the Site do not pose an imminent threat to the health and safety of  
12 the Carousel residents. (*Id.*, ¶ 16.) Shell has performed regular methane monitoring using field  
13 instruments at 69 locations in the public rights-of-way such as utility vaults, stormwater drains  
14 and similar locations, and methane has never been detected at levels of concern. (*Id.*) The Los  
15 Angeles County Fire Department has also performed methane monitoring in the public areas of  
16 the Site and has not detected methane at levels of concern. (*Id.*)

17 21. Methane has not been detected in laboratory analysis of any of the more than  
18 1,400 indoor air samples that have been collected from Carousel residences. (*Id.*, ¶ 17.) The  
19 residential methane screening program, which is conducted prior to indoor air sampling, has  
20 detected only isolated instances of elevated methane due to natural gas leaks from utility lines or  
21 appliances, and in those instances Shell has advised the residents to repair those leaks. (*Id.*)  
22 Subsequent testing, when performed, has not revealed any methane hazards. (*Id.*) In the single  
23 instance where elevated methane related to petroleum hydrocarbon degradation was detected in  
24 the sub-slab soil gas beneath a garage, Shell installed a methane mitigation system according to  
25 an engineering design and work plan approved by the Regional Board and Los Angeles County  
26 Department of Public Works Environmental Programs Division. (*Id.*) Multiple rounds of  
27 follow-up testing have not shown any methane hazard at that home. (*Id.*)

1           22. While elevated levels of methane presumably related to anaerobic biodegradation  
2 of petroleum hydrocarbons have been detected at depth, the lack of oxygen and any significant  
3 vapor pressure at depth mitigates any risk related to explosion or fire. (*Id.*, ¶ 18.) Site data  
4 indicate that methane generated by degradation of petroleum hydrocarbons at depth under  
5 anaerobic conditions is naturally controlled through biodegradation as it migrates through aerobic  
6 surface soil. (*Id.*)

7           23. *Second*, analysis of the indoor air, outdoor air and sub-slab soil vapor samples  
8 collected from the residences at the Site generally have shown indoor air concentrations to be  
9 consistent with background values and to be correlated with garage and outdoor air. (*Id.*, ¶ 19.)  
10 As the Regional Board has recognized, this data does not indicate that vapor intrusion is an issue  
11 at the Site. (*Id.*)

12           24. *Third*, there are widespread but uneven soil impacts at the Site that appear to be  
13 related to the grading of the Site. (*Id.*, ¶ 20.) The spatial distribution of the soil impacts is  
14 somewhat stochastic and does not appear as a plume. (*Id.*)

15           25. *Fourth*, the groundwater beneath the Site is impacted by a plume that is stable  
16 with downgradient concentrations quickly dropping to levels below analytical reporting limits.  
17 (*Id.*, ¶ 21.) There exist multiple documented upgradient impacts that likely contribute to the  
18 groundwater conditions beneath the Site. (*Id.*) Petroleum hydrocarbons in the form of light non-  
19 aqueous phase liquid (“LNAPL”) have been detected in two monitoring wells located in the  
20 western portion of the Site, and LNAPL removal from these wells is performed on a regular  
21 basis. (*Id.*) The groundwater at the Site is not used for municipal supply. (*Id.*) Carousel  
22 residents obtain their drinking water from municipal supply provided by California Water  
23 Service Company, which has confirmed that the Site’s water supply meets quality standards for  
24 drinking water. (*Id.*)

25           *Shell’s Actions in Response to the CAO*

26           26. On March 11, 2011, the Regional Board issued the CAO for the Site. (Exh. 1.)  
27 The CAO directed Shell to (1) complete delineation of on- and off-Site impacts in soil, soil vapor  
28 and groundwater related to Shell’s historical use of the Site; (2) continue groundwater monitoring

1 and reporting; (3) develop and conduct a pilot testing work plan to evaluate remedial options for  
2 the Site; and (4) conduct an assessment of any potential environmental impacts of residual  
3 concrete slabs that were left at the Site by the developers, and evaluate whether removal of the  
4 concrete is necessary and feasible. (Exh. 1, pp. 9-11.) Shell has completed (or, in the case of the  
5 residential sampling, nearly completed) the above actions and has submitted reports to the  
6 Regional Board that include analysis of the data. (Weimer Decl., ¶ 22.) The pilot test work  
7 conducted by Shell included pilot testing of different excavation methods, soil vapor extraction,  
8 bioventing, and chemical oxidation technologies. (*Id.*) Shell continues to perform quarterly  
9 groundwater monitoring. (*Id.*)

10 27. Per the Directive, the RAP required by the CAO and the HHRA Report are due on  
11 March 10, 2014. (Exh. 1, pp. 11-12; Exh. 5, p. 9.)

12 *The Regional Board's Directive*

13 28. The CAO also required Shell to prepare and “submit site-specific cleanup goals  
14 for residential (i.e., unrestricted) land use” that “shall include detailed technical rationale and  
15 assumptions underlying each goal.” (Exh. 1, p. 13.) On February 22, 2013, Shell timely  
16 submitted its Initial SSCG Report. (Exh. 2.) On August 21, 2013, the Regional Board issued a  
17 response to the Initial SSCG Report and directed Shell to revise the SSCGs for the Site in  
18 accordance with certain comments and directives. (Exh. 3.) On October 21, 2013, Shell timely  
19 submitted a Revised SSCG Report that addressed and incorporated the Regional Board’s  
20 comments and directives. (Exh. 4.)

21 29. On January 23, 2014, the Regional Board issued its Directive, which is the subject  
22 of this Petition. (Exh. 5.) In the Directive, the Regional Board approved the SSCGs proposed in  
23 the Revised SSCG Report with certain modifications, and required Shell to submit the RAP,  
24 HHRA Report, and “draft environmental documents consistent with the California  
25 Environmental Quality Act (CEQA) analyzing the potential environmental impacts associated  
26 with remediation alternatives considered in the RAP.” (Exh. 5, p. 9.)

27 30. Shell is in the process of preparing the RAP, HHRA Report and certain draft  
28 environmental documents. Notwithstanding the issues raised in this Petition, Shell intends to

1 submit the RAP and the HHRA Report, along with drafts of preliminary environmental  
2 documents, to the Regional Board by the March 10, 2014 deadline specified in the Directive.  
3 (Weimer Decl., ¶ 25.)

4 31. However, the Directive contains certain requirements and statements that are  
5 vague and/or lack evidentiary, legal and/or technical support or are otherwise erroneous, and  
6 should be revised as described below. To protect its rights in this regard, Shell files this  
7 protective Petition and seeks State Board review of these specific requirements and statements in  
8 the event it is not able to resolve these issues with the Regional Board.

9 **II. THE CHALLENGED SECTIONS OF THE DIRECTIVE SHOULD BE**  
10 **RESCINDED AND REVISED**

11 **A. *The Statement in the Directive Regarding the RAO for Methane Is Inaccurate***

12 32. In the Directive, the Regional Board acknowledges that Shell's "Revised Report  
13 addressed many of the comments in the Regional Board August 21, 2013 letter." (Exh. 5, p. 2.)  
14 However, the Regional Board then erroneously states that the Revised SSCG Report "revised the  
15 proposed remedial action objective (RAO) for methane such that methane will not exceed two  
16 percent of the lower explosive limit and will be removed to less than two percent of the lower  
17 explosive limit and to the greatest extent technologically and economically feasible." (*Id.*, pp. 2-  
18 3.) This is not an accurate statement. The actual RAO proposed for methane states as follows:

19 Prevent fire/explosion risks in indoor air and/or enclosed spaces  
20 (e.g., utility vaults) due to the accumulation of methane generated  
21 from the anaerobic biodegradation of petroleum hydrocarbons in  
22 soils. Eliminate methane in the subsurface to the extent  
23 technologically and economically feasible.

24 (Exh. 4, p. 34.)

25 33. Thus, the proposed RAO does not require the removal of methane to less than two  
26 percent of the LEL, but instead prioritizes the prevention of fire and explosion risks in homes and  
27 enclosed spaces, and also proposes to eliminate subsurface methane to the extent technologically  
28 and economically feasible. Elsewhere in the Directive, the Regional Board characterizes the

1 RAO for methane proposed in the Revised SSCG Report differently. (See Exh. 5, p. 6 (“In the  
2 Revised Report, the revised RAOs proposes prevention of fire/explosion risks in indoor air  
3 and/or enclosed spaces due to generation of methane by eliminating methane to the extent  
4 technologically and economically feasible.”).<sup>4</sup> Thus, it appears that the statement regarding the  
5 RAO for methane on page 2 of the Directive is a clerical error. However, to avoid any confusion,  
6 Shell requests that this language be rescinded and revised to properly reflect the RAO proposed  
7 in the Revised SSCG Report and quoted above.

8 34. The Directive also states that “[t]he SSCG for methane should be the more  
9 stringent of the lower explosive limit or the level that is technically and economically feasible.”  
10 (Exh. 5, p. 6.) This statement misapplies State Water Board Resolution No. 92-49 and 23 Code  
11 of Regulations § 2550.4, which authorize the establishment of a cleanup goal that is greater than  
12 background and that is technologically and economically achievable. Thus, the SSCG for  
13 methane should be Shell’s stated RAO or the level that is technologically and economically  
14 feasible to achieve, and not whichever is “the more stringent” of the two.

15 ***B. The Risk Exposure Assumptions in the Directive Rely on an Inapplicable***  
16 ***Municipal Code and Disregard Applicable US EPA Guidance***

17 35. The Revised SSCG Report proposed risk-based soil cleanup levels for 0-2 feet bgs  
18 based on more frequent typical residential exposures, and a second set of values for 2-10 feet bgs  
19 based on the very low likelihood of residents contacting soils at such depths. (Exh. 4, pp. 42,  
20 44.) In its Directive, the Regional Board approved the application of depth-based exposure  
21 scenarios in setting risk-based soil cleanup levels, but it selected depths of 0-5 feet bgs and 5-10

22 \_\_\_\_\_  
23 <sup>4</sup> Notably, the SSCGs for methane in the Revised SSCG Report propose certain responses based  
24 on the detection of specified methane levels (which are the same responses that the Regional  
25 Board approved in the Data Evaluation and Decision Matrix for the Site for deciding when  
26 interim measures are necessary). (Exh. 4, p. 58.) These SSCGs provide that when methane is  
27 detected between two and ten percent of the LEL and soil vapor pressure is above 2.8 in water,  
the response is to perform follow-up sampling and evaluate engineering controls. (*Id.*) Thus, the  
proposed SSCGs, which are consistent with DTSC’s guidance for addressing methane at school  
sites, do not require the removal of methane to less than two percent of the LEL. The Directive  
states that the Regional Board will review the response actions contained in the RAP. (Exh. 5, p.  
6.)

1 feet bgs. (Exh. 5, p. 4.) The Regional Board based these intervals on its conclusion that  
2 “institutional controls are already in place throughout Los Angeles County” because the Los  
3 Angeles County Building Code requires that residents obtain an excavation permit before  
4 excavating below five feet. (*Id.*)

5 36. Shell agrees that local permitting ordinances serve as an institutional control that  
6 help minimize residential contact with soils at depths where excavation to such depths trigger the  
7 need for obtaining an excavation and/or grading permits. However, the specific ordinance  
8 applicable to the Site requires that any excavation at the Site may only be conducted after  
9 obtaining a grading permit unless the excavation “(a) is less than three (3) feet in depth below  
10 natural grade, or (b) does not create a cut slope greater than three (3) feet in height and steeper  
11 than one and one-half (1-1/2) horizontal to one (1) vertical.” City of Carson Building Code §  
12 8105 (amending Los Angeles Cty. Building Code § 7003.1). Thus, application of the approach  
13 used in the Directive and the specific permitting ordinance applicable to the Site results in depth  
14 intervals for risk-based soil cleanup levels of 0-3 feet bgs and 3-10 bgs. Shell requests that this  
15 portion of the Directive be rescinded and revised to reflect these depth intervals.

16 37. The use of these risk-based soil depth intervals is consistent with comments from  
17 the independent advisory Expert Panel, which stated in a memorandum dated January 14, 2014  
18 that “[w]e agree that the 0-2 feet interval is appropriate for the typical residential exposure and  
19 expect, given the established nature of the neighborhood, the assumption that the resident is  
20 exposed 4 times per year to soils at depths greater than 2 feet *to be highly conservative.*” (Exh. 5,  
21 Memo. from UCLA Expert Panel, Gary Krieger, to Los Angeles Regional Water Quality Control  
22 Board, dated January 14, 2014, p. 2 (emphasis added).)

23 38. In reaching this conclusion, the Expert Panel cited US EPA guidance including  
24 *Soil Screening Guidance: User’s Guide*, Second Edition, Office of Solid Waste and Emergency  
25 Response (July 1996), and *Supplemental Guidance for Developing Soil Screening Levels for*  
26 *Superfund Sites*, Office of Solid Waste and Emergency Response (December 2002). The 1996  
27 US EPA guidance states that “the decision to sample soils below 2 centimeters depends on the  
28 likelihood of deeper soils being disturbed and brought to the surface (e.g., from gardening,

1 landscaping or construction activities.” (USEPA, 1996, p. 12.) In the 2002 supplemental  
2 guidance, the US EPA states that “residential activities (e.g., gardening) or commercial/industrial  
3 (e.g., outdoor maintenance or landscaping) or construction activities that may disturb soils to a  
4 depth of up to two feet, potentially exposing receptors to contaminants in a subsurface soil via  
5 direct contact pathways such as ingestion and dermal absorption.” (USEPA, 2002, pp. 2-8.) The  
6 Expert Panel also cited *Superfund Lead-Contaminated Residential Sites Handbook*, Office of  
7 Emergency and Remedial Response (August 2003), which recommends for remediation that “it  
8 is strongly recommended that a minimum of twelve (12) inches of clean soil be used to establish  
9 an adequate barrier from contaminated soil in a residential yard for the protection of human  
10 health. ... With the exception of gardening the typical activities of children and adults in  
11 residential properties do not extend below a 12-inch depth.” (USEPA, 2003, p. 37.) Moreover,  
12 “[t]wenty-four (24) inches of clean soil cover is generally considered to be adequate for  
13 gardening areas . . . .” (*Id.*)

14 39. Given the depths set forth in these guidance documents, and the Expert Panel  
15 memorandum supporting the proposal in the Directive to use risk-based soil depth intervals of 0-  
16 2 feet bgs and 2-10 feet bgs, the Regional Board’s reference to the precautionary principle to  
17 support the depth intervals included in the Directive is inapposite here. The precautionary  
18 principle provides that in the face of uncertainty or a lack of scientific consensus, regulatory  
19 controls should incorporate a margin of safety. (Stewart, R.B., “Environmental Regulatory  
20 Decision Making Under Uncertainty,” *Research in Law and Economics*, 20: 76 (2002).) Here,  
21 the US EPA guidance documents state that 1 foot of clean soil provides “an adequate barrier” for  
22 adults and children, and, in areas where gardening may take place, 2 feet of cover is adequate.  
23 Moreover, these guidance documents and the SSCGs for the site are conservative and already  
24 build in a margin of safety. The Regional Board has not provided any basis or evidence to  
25 support a conclusion that there is a lack of scientific consensus regarding the US EPA’s  
26 guidelines. Absent such uncertainty or scientific consensus, the precautionary principle does not  
27 operate, and there should not be a requirement to apply more stringent cleanup levels to soil  
28 depths (such as 4 and 5 feet), with which residents are highly unlikely to ever come into contact,

1 according to agency guidance. This conclusion is further bolstered by consideration of the  
2 permitting rules in the City of Carson Building Code, which, applying the Regional Board's  
3 principle, act as an institutional control for excavations greater than 3 feet bgs.

4 40. Thus, while Shell continues to believe that depth intervals of 0-2 feet bgs and  
5 greater than 2-10 feet bgs as proposed in the Revised SSCG Report are sufficient to protect  
6 residents against any potential risks from long term exposure to soil, Shell requests that the  
7 relevant portion of the Directive be rescinded and revised to require depth intervals for risk-based  
8 soil cleanup goals of 0-3 feet bgs and greater than 3-10 feet bgs to align with the applicable  
9 permitting ordinance.

10 *C. The Regional Board's Reduction of the TPH Nuisance Value for Soil Vapor Is*  
11 *Arbitrary and Contradicts Its Own Direction*

12 41. In the Revised SSCG Report, Shell developed screening levels for soil vapor  
13 based on the ESL to address potential odor and other nuisance concerns. (See San Francisco Bay  
14 Regional Water Quality Control Board (SFRWQCB), May 2013 ("SFRWQCB, 2013").) In its  
15 Directive, the Regional Board cut the TPH nuisance value by 50% without explanation or  
16 justification. (Exh. 5, Table 2 (listing TPH nuisance value of 50 ug/m3 instead of the  
17 SFRWQCB ESL value for nuisance of 100 ug/m3).) The Regional Board's revision of this  
18 value is not supported by reference to guidance and, in fact, its revision contradicts its own  
19 direction to Shell elsewhere in the Directive to "follow the ESL for odor and other nuisance to  
20 calculate a ceiling for residential land use" when calculating screening levels for soil gas. (Exh.  
21 5, p. 4, fn. 3.) Shell believes the Regional Board's TPH nuisance value in Table 2 of the  
22 Directive is not supported. Accordingly, Shell requests that the odor-based screening values in  
23 the Directive be rescinded and revised to include the values included in the Revised SSCG  
24 Report, which are consistent with the Regional Board's direction in footnote 3.

1           D.     *The Soil Cleanup Levels Based on Leaching to Groundwater in the Directive*  
2                     *Are Erroneous and Should Be Revised to Incorporate Use of an Attenuation*  
3                     *Factor*

4           42.     In its Revised SSCG Report, Shell calculated a second set of soil cleanup goals  
5 for the top 10 feet of soil based on the potential for Site-related COCs to leach to groundwater as  
6 a result of infiltration of rainwater in exposed areas of the Site. (Exh. 4, pp. 46-49, Table 6-2.)  
7 The methodology used in the Revised SSCG Report accounted for three transport components:  
8 (1) leaching between soil and soil moisture, (2) attenuation due to distance above the  
9 groundwater, and (3) a dilution-attenuation factor (“DAF”) that accounts for the infiltration rate  
10 of leachate through Site soils and mixing with groundwater flow. Consideration of the leaching  
11 and DAF in the calculation of soil cleanup goals is consistent with guidance documents that Shell  
12 was directed to apply in the development of Site cleanup goals. (Exh. 1, pp. 11-12; *see also*  
13 USEPA Regional Screening Levels Users Guide, November 2013 (“USEPA, 2013”); USEPA  
14 Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites, December  
15 2002 (“USEPA, 2002”); SFRWQCB, 2013; and Commonwealth of Massachusetts Department  
16 of Environmental Protection, Characterizing Risks Posed by Petroleum Contaminated Sites:  
17 Implementation of the MADEP VPH/EPH Approach, Policy #WSC-02-411  
18 Background/Support Documentation for the Development of Publication Guidelines & Rule of  
19 Thumb, October 2002 (“Commonwealth of Massachusetts DEP, 2002”).) Additionally, the  
20 1996 California Regional Water Quality Control Board’s *Interim Site Assessment & Cleanup*  
21 *Guidebook* (LARWQCB, 1996) (“LARWQCB Guidebook”) includes the following three  
22 transport components for the calculation of soil screening levels: (1) leaching between soil and  
23 soil moisture, (2) attenuation due to distance above the groundwater, and (3) attenuation due to  
24 soil type. The attenuation factors for soil types in the LARWQCB Guidebook account for  
25 varying infiltration rates of leachate for different soil types.

26           43.     In the Revised SSCG Report, the leaching step was modeled using the  
27 LARWQCB Guidebook for organic chemicals and the US EPA Regional Screening  
28 Methodology for metals. (Exh. 4, p. 47.) The leachate-groundwater mixing step was modeled

1 using the Soil Attenuation Model developed by J. A. Connor, et al. (*Id.*, pp. 47-48.) The cleanup  
2 values were then calculated using regulatory groundwater quality standards and the application of  
3 a DAF, as recommended in the Soil Attenuation Model. (*Id.*, p. 48.)

4 44. In its Directive, the Regional Board rejected the application of a DAF based on  
5 the fact that groundwater beneath the Site is already impacted. (Exh. 5, p. 5 and Memo. from  
6 Yue Rong, Ph.D., and Weixong Tong, Ph.D., PG, CHG to Samuel Unger, P.E., Executive  
7 Officer, dated December 10, 2013 (“Staff Memo”).) Instead, the Regional Board proposed soil  
8 SSCGs for the leaching pathway that neglect to apply the DAF, and then divided the values  
9 presented in the Revised SSCG Report by a factor of 6.24. (Exh. 5, Table 1.) By incorporating  
10 this modification, the Regional Board has neglected to account for the effect of infiltration rate  
11 on the calculations. It is inappropriate to neglect this component of the conceptual model in  
12 calculating soil cleanup goals. To the contrary, the infiltration rate is included in the LARWQCB  
13 Guidebook as well as other guidance documents that describe methodologies to calculate soil  
14 cleanup goals for the leaching pathway and that the Regional Board has directed Shell to consider  
15 in the development of cleanup goals, such as USEPA, 2013; USEPA, 2002; SFRWQCB, 2013;  
16 and Commonwealth of Massachusetts DEP, 2002. (*See* Exh. 1, pp. 11-12).

17 45. Additionally, the Regional Board erroneously applied a modification factor of  
18 6.24 for the soil SSCG for TPH motor oil. (Exh. 5, Table 1.) The SSCG for TPH motor oil in  
19 the Revised SSCG Report was based on the residual saturation concentration. (*See* Exh. 4, Table  
20 9.2.) The DAF was not used in the calculation of this cleanup goal and consequently it is  
21 inappropriate to include the modification proposed by the Regional Board.

22 46. Further, the statement by Regional Board staff that the use of a DAF “is against  
23 the State Anti-degradation Policy” is mistaken. (Exh. 5, Staff Memo, p. 2.) This policy, which is  
24 documented in State Water Board Resolution No. 68-16, was passed to regulate “the granting of  
25 permits and licenses for unappropriated waters and the disposal of wastes into the waters of the  
26 State.” Section 1 of Resolution 68-16 states:

27 Whenever the existing quality of water *is better than* the quality  
28 established in policies as of the date on which such policies

1           become effective, such existing high quality will be maintained  
2           until it has been demonstrated to the State that any change will be  
3           consistent with maximum benefit to the people of the State, will  
4           not unreasonably affect present and anticipated beneficial use of  
5           such water and will not result in water quality less than that  
6           prescribed in the policies.

7 (Emphasis added.) Section 2 of Resolution No. 68-16 states:

8           Any activity which produces or may produce a waste or increased  
9           volume or concentration of waste and which discharges or  
10          proposes to discharge *to existing high quality waters* will be  
11          required to meet waste discharge requirements which will result in  
12          the best practicable treatment or control of the discharge necessary  
13          to assure that (a) a pollution or nuisance will not occur and (b) the  
14          highest water quality consistent with maximum benefit to the  
15          people of the State will be maintained.

16 (Emphasis added.)

17          47.    Resolution No. 68-16 does not apply in this case for two reasons. *First*, nothing  
18          in the Revised SSCG Report proposes a *new* activity that would result in discharges to existing  
19          high quality waters, or requests the issuance of waste discharge permits. Instead, the Revised  
20          SSCG Report proposes cleanup levels for *existing* historical impacts.

21          48.    *Second*, it is highly unlikely that the water quality levels for the relevant  
22          constituents beneath the Site were *better* than the water quality levels set in the Basin Plan at the  
23          time the Basin Plan was adopted in 1994. By 1994, the environmental conditions at the Site had  
24          existed for at least twenty-five years and included impacts from upgradient sources including the  
25          Turco facility and the former Fletcher Oil Refinery. Thus, it is highly likely that the groundwater  
26          was already impacted in 1994. Indeed, groundwater sampling data indicates that the groundwater  
27          plume is stable or decreasing, which suggests that impacts have been present in the groundwater  
28          for a substantial period of time. Given this, Resolution No. 68-16—which, again, is aimed at

1 preserving better-than-established water quality levels—is inapplicable here. As one court  
2 explained:

3           When undertaking an antidegradation analysis, the Regional Board  
4           must compare the baseline water quality . . . to the water quality  
5           objectives. If the baseline water quality is equal to or less than the  
6           objectives, the objectives set forth the water quality that must be  
7           maintained or achieved. *In that case the antidegradation policy is*  
8           *not triggered.* However, if the baseline water quality is better than  
9           the water quality objectives, the baseline water quality must be  
10          maintained in the absence of findings required by the  
11          antidegradation policy.

12 *Asociacion de Gente Unida por el Agua v. Cent. Valley Reg'l Water Quality Control Bd.*, 210  
13 Cal.App.4th 1255, 1270 (2012) (emphasis added).

14          49. For the reasons stated above, Shell requests that the soil cleanup levels in the  
15 Directive based on leaching to groundwater be rescinded and revised to conform with the values  
16 proposed in the Revised SSCG Report.

17          ***E. The Regional Board's Doubling of the Soil Vapor Attenuation Factor Proposed***  
18          ***in the Revised SSCG Report Is Erroneous and Unsupported***

19          50. In the Revised SSCG Report, Shell analyzed soil vapor and indoor air data for the  
20 Site and calculated an attenuation factor for soil vapor of 0.001. (Exh. 4, App. B, pp. B-17 and  
21 B-18.) In its Directive, the Regional Board does not criticize Shell's analysis or methodology,  
22 but nevertheless directs Shell to use an attenuation factor of 0.002 to calculate SSCGs for soil  
23 vapor that the Regional Board based on default numbers it states are recommended in DTSC and  
24 US EPA agency guidance documents. (Exh. 5, pp. 5-6.) However, the *default* attenuation factor  
25 values in these guidance documents are intended to be used for preliminary screening  
26 evaluations. (DTSC Vapor Intrusion Guidance Document, October 2011, p. 16.) Here, extensive  
27 Site data have already been collected and analyzed, and the Regional Board has described this  
28 data set as "reliable, comprehensive, and high-quality." (Exh. 3, p. 2.) Given this, the Regional

1 Board's reliance on, and use of, default values is unnecessary and misplaced, and the requirement  
2 in the Directive to use an attenuation factor of 0.002 should be rescinded and revised to  
3 incorporate the attenuation factor of 0.001 presented in the Revised SSCG Report.

4 *F. The Directive's Inclusion of PCE and TCE as Site-Related COCs Lacks*  
5 *Evidentiary Support and Should Be Rescinded*

6 51. In the Revised SSCG Report, Shell explained that although chlorinated  
7 compounds have been detected at the Site, they are not considered Site-related COCs because no  
8 historical evidence exists that chlorinated solvents were used at the Site, and because off-Site  
9 sources for these compounds exist. (Exh. 4, pp. 10-13.) This includes PCE and TCE, as well as  
10 THMs such as bromomethane, chloroform and others.<sup>5</sup>

11 52. While the Regional Board has previously stated that Shell is not responsible for  
12 addressing compounds that are not associated with its historical use of the Site, the Regional  
13 Board states in the Directive that PCE and TCE in soil and soil vapor cannot be excluded from  
14 the list of COCs for the Site. (Exh. 5, p. 7.) In making this determination, the Regional Board  
15 concedes the existence of off-site sources for these compounds (which are well documented and  
16 described in detail in the Revised SSCG Report, *see* Exh. 4, pp. 11-12), and it does not point to  
17 any evidence that Shell in fact used PCE or TCE at the Site (and Shell has been unable to find  
18 any such evidence). Instead, the only "evidence" the Regional Board identifies is the inclusion of  
19 chlorinated solvents in a description for large industrial processes in the EPA's Toxic Release  
20 Inventory for the Petroleum Industry. Such a generalized industry "inventory" is not a proper or  
21 sufficient basis for inclusion of PCE and TCE in the list of COCs for this specific Site, especially  
22 in light of the absence of evidence that such compounds were used during Shell's ownership of  
23 the Site and the presence of documented off-Site sources for these compounds. It is well-

24 \_\_\_\_\_  
25 <sup>5</sup> The presence of THMs at the Site are most likely connected to the use of municipal water  
26 supply to irrigate yards and landscaping or leaking water lines and other household water use.  
27 (Exh. 4, p. 13.) THMs are byproducts of water treatment by chlorine or chloramines and have  
28 been found in the domestic water supplied to the Carousel by California Water Service  
Company. (*Id.*) Other chlorinated compounds detected at the Site are associated with common  
household products. (*Id.*, p. 14.)

1 established that a party can only be required to address the effects of the discharge it caused. *In*  
2 *re HR Texton, Inc.*, WQ 94-2, 1994 WL 86342, at \*3-4 (Cal.St.Wat.Res.Bd.) (substantial  
3 evidence must show both that the named party caused or permitted the discharge in question *and*  
4 that the discharge caused the contamination that is the subject of the order). Accordingly, Shell  
5 requests that the inclusion of PCE and TCE as Site-related COCs be rescinded and the Directive  
6 be revised to include only petroleum-related hydrocarbons as Site-related COCs.

7 53. Shell has previously explained why other chlorinated compounds, such as THMs,  
8 should not be included as Site-related COCs. To the extent that the Directive requires Shell to  
9 include other chlorinated compounds, including trihalomethanes THMs, as Site-related COCs  
10 despite the absence of evidence connecting the presence of these compounds with Shell's  
11 historical use of the Site, Shell further requests that the State Board confirm that such compounds  
12 should not be listed as Site-related COCs.

13 **G. *The Directive's Requirement that Shell Submit Draft Environmental***  
14 ***Documents Consistent with CEQA Is Vague, Unrealistic and Inconsistent with***  
15 ***the Mandated Order of Actions Under CEQA and Its Regulations***

16 54. In the Directive, the Regional Board directs Shell to submit, with the RAP and the  
17 HHRA Report, "draft environmental documents consistent with the California Environmental  
18 Quality Act (CEQA) analyzing the potential environmental impacts associated with remediation  
19 alternatives considered in the RAP." (Exh. 5, p. 9.) For numerous reasons, Shell believes this  
20 requirement should be rescinded.

21 55. *First*, the requirement is vague in that it does not specify *which* "draft  
22 environmental documents" are required to be submitted on March 10, 2014 with the RAP and the  
23 HHRA Report. For this reason, Shell cannot know what specifically is required of it and what it  
24 must do to comply.

25 56. *Second*, to the extent this is meant to require the submission of the Draft  
26 Environmental Impact Report ("EIR") or a similar document, such a requirement would not  
27 comply with CEQA. A Draft EIR cannot be prepared until after the project has been defined and  
28 the lead agency has sent a Notice of Preparation to the State clearinghouse and each responsible

1 agency. 14 Cal. Code Regs. § 15082(a). The Notice of Preparation must include “sufficient  
2 information describing the project and the potential environmental effects to enable the  
3 responsible agencies to make a meaningful response.” 14 Cal. Code Regs. § 15082(a)(1). While  
4 work on the draft EIR may begin immediately after the submission of the Notice of Preparation,  
5 the “lead agency shall not circulate a draft EIR for public review before the time period for  
6 responses to the notice of preparation has expired.” 14 Cal. Code Regs. § 15082(a)(4). Here, the  
7 Notice of Preparation had to await the Board’s approval of the SSCGs for the Site, which only  
8 occurred on January 23, 2014, as well as the development of the RAP, which is currently under  
9 way. Thus, the only “draft environmental documents” that could be submitted with the RAP and  
10 the HHRA Report on March 10, 2014 in compliance with CEQA would be a draft Initial Study  
11 and a draft Notice of Preparation. Anything further would not comply with CEQA’s  
12 implementing regulations.

13         57. *Third*, in addition to being premature, any requirement to submit a Draft EIR by  
14 March 10, 2014 would also be infeasible. For a project of this complexity, the preparation of a  
15 Draft EIR, including the identification of a range or reasonable alternatives to the project which  
16 would feasibly attain most of the basic objectives of the project but would avoid or substantially  
17 lessen any of the significant effects of the project (*see* 14 Cal. Code Reg. § 15126.6), typically  
18 requires at least 12 weeks *after* the project has been defined. (Declaration of David Marx, ¶ 3.)  
19 Prior to the Regional Board’s approval of the SSCGs for the Site on January 23, 2014, Shell  
20 lacked critical information that is directly relevant to the potential remedy for the Site. It is  
21 important to note here that the Regional Board did not approve the Initial SSCG Report and  
22 instead directed Shell to revise the SSCGs, and when the Regional Board ultimately approved  
23 SSCGs it directed Shell to include alternatives that had previously been screened out as part of  
24 the preliminary feasibility analysis that was included in the Revised SSCG Report. Thus,  
25 preparation of a Draft EIR was unquestionably premature prior to the approval of the SSCGs.  
26 Even assuming that the preparation of the Draft EIR could have commenced on the date the  
27 Regional Board approved the SSCGs, it would have been logistically infeasible to complete the  
28 preparation of the Draft EIR in six weeks. (*Id.*) Moreover, given that the RAP is currently being

1 prepared, Shell does not believe that it is feasible or legally permissible to begin to prepare the  
2 Draft EIR until the remedy has been proposed in the RAP; accordingly, it is even more infeasible  
3 that a Draft EIR could be submitted at the same time that the RAP is due.

4 58. *Fourth*, the requirement in the Directive for Shell to submit “draft environmental  
5 documents” is misplaced. Under CEQA, it is the Regional Board, as the lead agency, that is  
6 required to perform the environmental review, not Shell. *See* Public Res. Code § 21080.1 (“[t]he  
7 lead agency shall be responsible for determining whether an environmental impact report, a  
8 negative declaration, or a mitigated negative declaration shall be required for any project”);  
9 Public Res. Code § 21080.4 (“[i]f a lead agency determines that an environmental impact report  
10 is required for a project, the lead agency shall immediately send notice of that determination by  
11 certified mail or an equivalent procedure to each responsible agency, the Office of Planning and  
12 Research, and those public agencies having jurisdiction by law over natural resources affected by  
13 the project . . .”); 14 Cal. Code Regs. § 15082(a) (“the lead agency shall send . . . a notice of  
14 preparation”); 14 Cal. Code Regs. § 15082(a)(4) (“[t]he lead agency may begin work on the draft  
15 EIR”); *Planning and Conservation League v. Department of Water Resources*, 83 Cal.App.4th  
16 892, 903 (2000) (under CEQA lead agency is responsible “for preparing the EIR and including it  
17 in any report of the project”). Nothing in the Water Code authorizes the Regional Board to shift  
18 the CEQA requirements onto Shell, and indeed such a delegation is proscribed. *Planning and  
19 Conservation League*, 83 Cal.App.4th at 907 (“So significant is the role of the lead agency that  
20 CEQA proscribes delegation”). Nevertheless, it is not unusual for a responsible party to support  
21 the agency’s environmental review process, and Shell is doing this by, *e.g.*, paying for an  
22 experienced and qualified contractor to assist the Regional Board in complying with CEQA, and  
23 preparing to submit preliminary environmental documents with the RAP and HHRA Report,  
24 including a draft Initial Study, and a draft Notice of Preparation. Shell will continue to support  
25 the Regional Board’s environmental review process as the agency and the CEQA consultant  
26 move forward.

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REQUEST FOR RELIEF

For the reasons set forth above, Shell respectfully requests that the State Board grant Shell the following relief:

1. That the State Board grant Equilon's Request for Stay, filed concurrently herewith, and stay those requirements in the Regional Board's Directive that are the subject of this Petition pending the State Board's decision.
2. That the State Board hold a hearing on the CAO, and Shell be permitted to present evidence and testimony supporting the arguments contained herein.
3. That the challenged portions of the Directive be rescinded by the State Board and that the State Board direct the Regional Board to revise those portions as described above.
4. In the alternative, that the State Board grant Shell's Request for Stay and hold this Petition in abeyance pursuant to California Code of Regulations, Title 23 § 2020.5(d) to permit the Regional Board and Shell to engage in discussions in an attempt to informally resolve this matter.
5. Such other relief as the State Board may deem just and proper.

DATED: February 24, 2014

CALDWELL LESLIE & PROCTOR, PC  
MICHAEL R. LESLIE  
DAVID ZAFT

By   
\_\_\_\_\_  
DAVID ZAFT

Attorneys for Petitioners EQUILON ENTERPRISES  
LLC dba SHELL OIL PRODUCTS US and  
SHELL OIL COMPANY

PROOF OF SERVICE

STATE OF CALIFORNIA, COUNTY OF LOS ANGELES

At the time of service, I was over 18 years of age and **not a party to this action**. I am employed in the County of Los Angeles, State of California. My business address is 725 South Figueroa Street, 31<sup>st</sup> Floor, Los Angeles, California 90017-5524.

On February 24, 2014, I served true copies of the following document(s) described as **PETITION FOR REVIEW AND REQUEST FOR HEARING** on the interested parties in this action as follows:

State Water Resources Control Board  
Office of Chief Counsel  
Jeannette L. Bashaw, Legal Analyst  
1001 "I" Street, 22<sup>nd</sup> Floor  
Sacramento, CA 95814  
Telephone: (916) 341-5155  
Facsimile: (916) 341-5199  
E-Mail: jbashaw@waterboards.ca.gov

**BY E-MAIL OR ELECTRONIC TRANSMISSION:** I caused a copy of the document(s) to be sent from e-mail address odanaka@caldwell-leslie.com to the persons at the e-mail addresses listed in the Service List. I did not receive, within a reasonable time after the transmission, any electronic message or other indication that the transmission was unsuccessful.

**BY OVERNIGHT DELIVERY:** I enclosed said document(s) in an envelope or package provided by the overnight service carrier and addressed to the persons at the addresses listed in the Service List. I placed the envelope or package for collection and overnight delivery at an office or a regularly utilized drop box of the overnight service carrier or delivered such document(s) to a courier or driver authorized by the overnight service carrier to receive documents.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on February 24, 2014, at Los Angeles, California.

  
\_\_\_\_\_  
Margie Odanaka

1 PROOF OF SERVICE

2 STATE OF CALIFORNIA, COUNTY OF LOS ANGELES

3 At the time of service, I was over 18 years of age and **not a party to this action**. I am  
4 employed in the County of Los Angeles, State of California. My business address is Apex  
Attorney Services, 1055 West Seventh Street, Suite 250, Los Angeles, CA 90017.

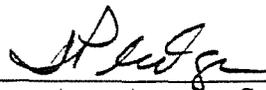
5 On February 24, 2014, I served true copies of the following document(s) described as  
6 **PETITION FOR REVIEW AND REQUEST FOR HEARING** on the interested parties in this  
action as follows:

7 Samuel Unger  
8 California Regional Water Quality Control  
Board - Los Angeles Region  
9 320 W. Fourth Street, Suite 200  
Los Angeles, CA 90013  
10 Tel.: (213) 576-6600  
E-Mail: sunger@waterboards.ca.gov

11 **BY PERSONAL SERVICE:** I personally delivered the document(s) to the person being at the  
12 addresses listed in the Service List. (1) For a party represented by an attorney, delivery was made  
13 to the attorney or at the attorney's office by leaving the documents in an envelope or package  
clearly labeled to identify the attorney being served with a receptionist or an individual in charge  
14 of the office. (2) For a party, delivery was made to the party or by leaving the documents at the  
party's residence with some person not less than 18 years of age between the hours of eight in the  
15 morning and six in the evening.

16 I declare under penalty of perjury under the laws of the State of California that the  
foregoing is true and correct.

17 Executed on February 24, 2014, at Los Angeles, California.

18  
19 

20 \_\_\_\_\_  
Apex Attorney Services

1 CALDWELL LESLIE & PROCTOR, PC  
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6 Attorneys for Petitioners EQUILON ENTERPRISES  
LLC dba SHELL OIL PRODUCTS US and  
7 SHELL OIL COMPANY

8  
9 **STATE WATER RESOURCES CONTROL BOARD**  
10 **FOR THE STATE OF CALIFORNIA**

11 In the Matter of the Petition of

Case No.

12 EQUILON ENTERPRISES LLC dba SHELL  
13 OIL PRODUCTS US and SHELL OIL  
COMPANY

**REQUEST FOR STAY**

14 Cleanup and Abatement Order R4-2011-0046  
15 California Regional Water Quality Control  
Board, Los Angeles Region

16 California Water Code § 13304  
17

18 **I. INTRODUCTION**

19 In accordance with Water Code section 13321(a) and section 2053 of Title 23 of the  
20 California Code of Regulations, Equilon Enterprises LLC dba Shell Oil Products US and Shell  
21 Oil Company (collectively "Shell") hereby request a stay of certain requirements in the January  
22 23, 2014 directive entitled "Review of Revised Site-Specific Cleanup Goal Report and Directive  
23 to Submit the Remedial Action Plan, Human Health Risk Analysis, and Environmental Analysis  
24 for Cleanup of the Carousel Tract Pursuant to California Water Code Section 13304"  
25 ("Directive") issued by the California Regional Water Quality Control Board, Los Angeles  
26 Region (the "Regional Board"). A copy of the Directive is attached as Exhibit 5 to Shell's  
27 Petition for Review and Request for Hearing ("Petition") filed herewith.

1 Notwithstanding the technical issues raised in Shell's protective Petition regarding certain  
2 requirements and statements in the Directive, which are the subject of ongoing discussions  
3 between Shell and the Regional Board, Shell intends to submit the Remedial Action Plan  
4 ("RAP") and the Human Health Risk Assessment Report ("HHRA Report"), along with drafts of  
5 preliminary environmental documents, to the Regional Board by the March 10, 2014 deadline.

6 The grounds for stay are set forth below and in the Petition and supporting Declarations  
7 of Douglas J. Weimer and David Marx filed herewith and incorporated herein by reference.  
8 Because of the March 10, 2014 deadline contained in the Directive, Shell requests that the State  
9 Water Resources Control Board ("State Board") issue the requested stay and conduct a hearing  
10 on this matter as soon as possible.

11 **II. A STAY OF THE EFFECT OF THE CHALLENGED PORTIONS OF**  
12 **DIRECTIVE IS WARRANTED IN THIS CASE**

13 Under Section 2053 of the State Board's regulations (23 Cal. Code Regs. § 2053), a stay  
14 of the effect of an order shall be granted if the petitioner shows:

- 15 (1) substantial harm to petitioner or to the public interest if a stay is not granted;
- 16 (2) a lack of substantial harm to other interested parties and to the public if a stay is  
17 granted; and
- 18 (3) substantial questions of fact or law regarding the disputed action exist.

19 Here, the requirements for issuance of a stay are clearly met.

20 **A. *Shell Will Suffer Substantial Harm If a Stay Is Not Granted***

21 Shell believes that certain requirements and statements in the Directive that are the  
22 subject of this Petition are the proper subject of review by the State Board and should be revised.

23 Specifically:

- 24 • The Directive erroneously states that the remedial action objective ("RAO") for  
25 for methane proposed in the Revised Site Specific Cleanup Goals Report  
26 ("Revised SSCG Report") provides that methane will not exceed two percent of  
27 the lower explosive limit ("LEL") and "will be removed to less than two percent

1 of the LEL and to the greatest extent technologically and economically feasible.”  
2 (Exh. 5, pp. 2-3.) This is inaccurate. The actual RAO for methane proposed in  
3 the Revised SSCG Report is to “[p]revent fire/explosion risks in indoor air and/or  
4 enclosed spaces” due to methane accumulation caused by degradation of  
5 petroleum hydrocarbons in the soil, and to “[e]liminate methane in the subsurface  
6 to the extent technologically and economically feasible.” (Exh. 4, p. 34.)

- 7 • The Directive also states that “[t]he SSCG for methane should be the more  
8 stringent of the lower explosive limit or the level that is technically and  
9 economically feasible.” (Exh. 5, p. 6.) This statement misapplies State Water  
10 Board Resolution No. 92-49 and 23 Code of Regulations § 2550.4, which  
11 authorize the establishment of a cleanup goal that is greater than background and  
12 that is technologically and economically achievable.
- 13 • While the Regional Board has approved the application of depth-based soil  
14 cleanup levels, it selected intervals of 0-5 feet below ground surface (“bgs”) for  
15 increased exposures and 5-10 feet bgs for less frequent exposures. (Exh. 5, p. 4.)  
16 In selecting these intervals, the Regional Board concluded that “institutional  
17 controls are already in place throughout Los Angeles County” because the Los  
18 Angeles County Building Code requires that residents obtain an excavation permit  
19 before excavating below five feet. (*Id.*) Shell agrees with this principle, but the  
20 actual ordinance applicable to the Site, the City of Carson Building Code § 8105,  
21 requires that residents obtain a permit for excavations deeper than 3 feet bgs. In  
22 addition, guidance from the Environmental Protection Agency (“US EPA”)  
23 regarding exposure assumptions and soil cleanup depths, and comments by the  
24 independent Expert Panel that is advising the Regional Board, all support the use  
25 of depth intervals for risk-based soil cleanup goals of 0-2 feet bgs and greater than  
26 2-10 feet bgs. Given this, and in order to align the depth intervals with the  
27 applicable ordinance, Shell requests that the risk-based soil cleanup goals in the  
28

1 Directive be revised to incorporate and reflect depth intervals of 0-3 feet bgs and  
2 3-10 feet bgs, which is more conservative than what US EPA guidance and Expert  
3 Panel comments support.

- 4 • In its Directive, the Regional Board directeds Shell to “develop odor-based  
5 screening levels for indoor air based on 50 percent odor-recognition thresholds as  
6 published in the ATSDR Toxicological Profiles. For soil gas, follow the ESL for  
7 odor and other nuisance to calculate a ceiling level for residential land use.” (Exh.  
8 5, p. 4, fn. 3.) In fact, Shell proposed a TPH nuisance screening values for soil  
9 gas in the Revised SSCG Report that followed the ESL, but the Regional Board  
10 reduced the value by half without any explanation. Shell believes the Regional  
11 Board’s revised screening value is not supported and, in fact, contradicts the  
12 Regional Board’s express direction in footnote 3 of the Directive to “follow the  
13 ESL.” Accordingly, Shell requests that the odor-based screening value in the  
14 Directive be rescinded and revised to include the value submitted by Shell, which  
15 is consistent with the Regional Board’s direction in footnote 3 of the Directive.
- 16 • The Regional Board revised the soil cleanup levels based on leaching to  
17 groundwater proposed by Shell in its Revised SSCG Report, but in so doing it  
18 relied on improper assumptions and an inapplicable regulation, and its  
19 methodology generated erroneous values, especially with respect to the revised  
20 value for total petroleum hydrocarbons as motor oil (“TPH motor oil”). In  
21 particular, the Regional Board failed to apply a dilution attenuation factor when it  
22 derived its soil cleanup levels based on leaching to groundwater. (Exh. 5, p. 5.)  
23 Accordingly, Shell requests that the leaching to groundwater soil cleanup levels in  
24 the Directive be rescinded and replaced with those proposed in the Revised SSCG  
25 Report.
- 26 • The Revised SSCG Report proposed an attenuation factor of 0.001 to apply to  
27 sub-slab soil vapor concentrations based on analysis of actual Site data. However,  
28

1 the Regional Board directed Shell to use an attenuation factor of 0.002 to calculate  
2 SSCGs for soil vapor that it based on default numbers it stated are recommended  
3 in recent agency guidance documents. (Exh. 5, pp. 5-6.) However, these default  
4 attenuation factor values are provided to calculate soil vapor cleanup values in the  
5 absence of Site data, and in this instance, a robust and comprehensive data set  
6 exists for the Site. Accordingly, the use of default values is not warranted. The  
7 requirement in the Directive to use an attenuation factor of 0.002 should therefore  
8 be rescinded and revised to approve the attenuation factor proposed by Shell  
9 based on Site data, which is 0.001.

- 10 • While the Regional Board appears to agree that chlorinated hydrocarbons detected  
11 at the Site are not related to Shell's historical use of the Site for storage of crude  
12 oil and bunker oil, and therefore most such compounds are not Site-related  
13 Chemicals of Concern ("COCs"), the Regional Board stated in the Directive that  
14 tetrachloroethylene ("PCE") and trichloroethylene ("TCE") in soil and soil vapor  
15 cannot be excluded from the list of COCs for the Site. (Exh. 5, p. 7.) In making  
16 this determination, the Regional Board conceded the existence of off-Site sources  
17 for these compounds and it did not point to any evidence that Shell in fact used  
18 PCE or TCE at the Site (and Shell has been unable to find any such evidence).  
19 Instead, the only "evidence" the Regional Board identified is the inclusion of  
20 chlorinated solvents in a description for large industrial processes in the EPA's  
21 Toxic Release Inventory for the Petroleum Industry. (*Id.*) Shell does not believe  
22 this general agency inventory is a proper or sufficient basis for inclusion of PCE  
23 and TCE in the list of COCs for this specific Site, especially in light of the  
24 documented off-site sources for these compounds and the absence of evidence that  
25 such compounds were used during Shell's ownership of the Site. For these  
26 reasons, Shell requests that the inclusion of PCE and TCE as Site-related COCs  
27

1 be rescinded and the Directive be revised to include only petroleum-related  
2 hydrocarbons as Site-related COCs.

- 3 • In addition, to the extent that the Directive requires Shell to include other  
4 chlorinated compounds, such as trihalomethanes (“THMs”), as Site-related  
5 COCs—despite the absence of evidence connecting the presence of these  
6 compounds with Shell’s historical use of the Site and the fact that such chemicals  
7 are recognized to result from the use of municipal water in and around the  
8 home—Shell further requests that the State Board confirm that such compounds  
9 should not be listed as Site-related COCs.

- 10 • Finally, the Directive includes a requirement that Shell submit “draft  
11 environmental documents consistent with the California Environmental Quality  
12 Act (CEQA) analyzing the potential environmental impacts associated with  
13 remediation alternatives considered in the RAP.” (Exh. 5, p. 9.) This requirement  
14 is vague and could be construed to require submission of a Draft Environmental  
15 Impact Report along with the RAP, which would not comply with the sequencing  
16 of environmental review actions required by CEQA and its implementing  
17 regulations, and is not feasible to prepare given the March 10, 2014 deadline. It  
18 also fails to recognize that the Regional Board is the lead agency for both the RAP  
19 and CEQA process, not Shell. Shell is supporting the Regional Board’s  
20 environmental review process by, *e.g.*, paying for an experienced and qualified  
21 contractor to assist the Regional Board in complying with CEQA, and preparing  
22 to submit preliminary environmental documents with the RAP and HHRA Report,  
23 including a draft Initial Study, a draft Notice of Preparation, and a draft timeline  
24 for the environmental review process. Shell will continue to support the Regional  
25 Board’s environmental review process as the agency and the CEQA consultant  
26 move forward. The above-quoted requirement in the Directive is erroneous and  
27 improper and should be clarified or rescinded.

1 As noted above, Shell intends to submit the RAP, the HHRA Report and certain draft  
2 environmental documents by March 10, 2014, the deadline set forth in the Directive. However,  
3 given the above issues, certain statements, proposals and assumptions contained in these  
4 documents may not comply with the requirements and statements in the Directive discussed  
5 above and in the Petition. Absent a stay, Shell may face the threat of administrative sanctions,  
6 which include substantial daily penalties. Such substantial harm can be avoided through a stay  
7 while the State Board considers the merits of Shell's petition. Also, an immediate stay of the  
8 relevant portions of the Directive will allow Shell and the Regional Board to continue discussing,  
9 and hopefully resolve, these issues in connection with the Regional Board's review of the RAP  
10 and the HHRA Report, and through the course of the environmental review process.

11 ***B. The Public Will Not Be Substantially Harmed If a Stay is Granted***

12 There is no known risk of substantial harm to the public or to water quality if the stay is  
13 granted. The request for a stay focuses only on certain requirements and statements in the  
14 Directive. Shell intends to submit the RAP, HHRA Report and draft environmental documents  
15 on March 10, 2014. Thus, review, approval and implementation of the proposed remedial  
16 strategy for the Site will not be slowed by a stay of the specific portions of the Directive that are  
17 challenged in the Petition.

18 ***C. The Petition Raises Substantial Questions of Law and Fact***

19 Shell's Petition raises substantial questions of law and fact, including, *inter alia*: (1)  
20 whether it is proper under State Water Board Resolution No. 92-40 for the Regional Board to  
21 establish a cleanup goal for methane that is the more stringent of the LEL or the level that is  
22 technologically and economically feasible; (2) whether the precautionary principle should be  
23 invoked in reviewing and setting soil cleanup goals in the absence of a scientific dispute  
24 regarding exposure assumptions; (3) whether the Regional Board may require a regulated party to  
25 consider and apply specified guidance documents and, after cleanup goals or other values are  
26 developed pursuant to those guidance documents, set its own goals or values that deviate from  
27 the guidance without explanation or justification; (4) whether the Regional Board can direct the  
28 regulated party to include compounds as Site-related COCs in the absence of evidence showing

1 that the compounds were ever used by the Regulated Party at the Site and despite established data  
2 showing off-Site sources for the compounds; (5) whether reliance on a generalized industry  
3 "inventory" is a proper basis for requiring the inclusion of certain compounds as Site-related  
4 COCs; and (6) whether the Regional Board may order the regulated party to prepare  
5 environmental documents under CEQA, require the preparation of such documents outside of the  
6 order mandated by CEQA and its implementing regulations, and require the preparation of such  
7 documents without allowing sufficient time to do so.

8 **III. CONCLUSION**

9 For the foregoing reasons, Shell respectfully requests that the State Board stay the  
10 relevant portions of the Directive pending a decision on the merits of the concurrently filed  
11 Petition. Shell requests that the State Board expeditiously issue a stay as soon as possible in  
12 order to avoid irrecoverable investment of resources in advance of a decision on the merits.

13  
14 DATED: February 24, 2014

CALDWELL LESLIE & PROCTOR, PC  
MICHAEL R. LESLIE  
DAVID ZAFT

16  
17 By   
DAVID ZAFT

18 Attorneys for Petitioners EQUILON ENTERPRISES  
19 LLC dba SHELL OIL PRODUCTS US and  
20 SHELL OIL COMPANY

**PROOF OF SERVICE**

1 STATE OF CALIFORNIA, COUNTY OF LOS ANGELES

2 At the time of service, I was over 18 years of age and **not a party to this action**. I am  
3 employed in the County of Los Angeles, State of California. My business address is 725 South  
4 Figueroa Street, 31<sup>st</sup> Floor, Los Angeles, California 90017-5524.

5 On February 24, 2014, I served true copies of the following document(s) described as  
**REQUEST FOR STAY** on the interested parties in this action as follows:

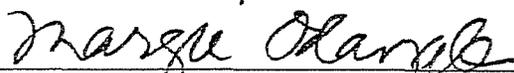
6 State Water Resources Control Board  
7 Office of Chief Counsel  
8 Jeannette L. Bashaw, Legal Analyst  
9 1001 "I" Street, 22<sup>nd</sup> Floor  
10 Sacramento, CA 95814  
Telephone: (916) 341-5155  
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20 documents.

21 I declare under penalty of perjury under the laws of the State of California that the  
22 foregoing is true and correct.

23 Executed on February 24, 2014, at Los Angeles, California.

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Margie Odanaka

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PROOF OF SERVICE

STATE OF CALIFORNIA, COUNTY OF LOS ANGELES

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Samuel Unger  
California Regional Water Quality Control  
Board - Los Angeles Region  
320 W. Fourth Street, Suite 200  
Los Angeles, CA 90013  
Tel.: (213) 576-6600  
E-Mail: [sunger@waterboards.ca.gov](mailto:sunger@waterboards.ca.gov)

**BY PERSONAL SERVICE:** I personally delivered the document(s) to the person being at the addresses listed in the Service List. (1) For a party represented by an attorney, delivery was made to the attorney or at the attorney's office by leaving the documents in an envelope or package clearly labeled to identify the attorney being served with a receptionist or an individual in charge of the office. (2) For a party, delivery was made to the party or by leaving the documents at the party's residence with some person not less than 18 years of age between the hours of eight in the morning and six in the evening.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on February 24, 2014, at Los Angeles, California.

  
Apex Attorney Services



1           6.       On October 21, 2013, Shell timely submitted a Revised Site-Specific Cleanup  
2 Goal Report (“Revised SSCG Report”) that addressed and incorporated the Regional Board’s  
3 comments and directives. A true and correct copy of the Revised SSCG Report is submitted  
4 herewith as Exhibit 4.

5           7.       On January 23, 2014, the Regional Board issued its Review of Revised Site-  
6 Specific Cleanup Goal Report and Directive to Submit the Remedial Action Plan, Human Health  
7 Risk Analysis, and Environmental Analysis for Cleanup of the Carousel Tract Pursuant to  
8 California Water Code Section 13304 (the “Directive”), which is the subject of this Petition. A  
9 true and correct copy of the Directive is attached hereto as Exhibit 5.

10                   *Shell’s Investigation of the Site*

11           8.       Historical records have established the following background regarding the Site.  
12 In 1923, Shell Company of California, a corporation, purchased the Site for use as an oil storage  
13 facility at a time when the surrounding area was largely undeveloped. It then constructed three  
14 large reservoirs on the property, which were lined with concrete and surrounded by 15-foot high  
15 levees. The reservoirs were covered by frame roofs on wood posts. The reservoirs were  
16 primarily used to store crude oil.

17           9.       Active use of the reservoirs generally ceased by the early 1960s. In 1965, after  
18 removing most of the oil from the concrete reservoirs, Shell Oil Company sold the property to  
19 Richard Barclay of Barclay Hollander Curci and Lomita Development Company (the  
20 “Developers”). Shell is informed and believes that Barclay Hollander Curci became Barclay  
21 Hollander Corporation, which is now an affiliate of Dole Food Company, Inc. The Developers  
22 bought the property from Shell with knowledge of the property’s former use and agreed to  
23 perform the site-clearing work, including removal of the remaining liquids, demolition of the  
24 reservoirs, and permitting and grading. The Developers secured a zoning change for the  
25 property, decommissioned the reservoirs, graded the property, and constructed and sold the 285  
26 homes which now form a residential tract in Carson, California known as the Carousel  
27 neighborhood. However, to date, the Developers have not participated in the environmental  
28 investigation or agreed to participate in any future cleanup.

1           10.     In 2008, Turco Products, Inc. (“Turco”), which was investigating contamination  
2 (primarily chlorinated compound impacts) at its facility adjacent to the northwest portion of the  
3 Site, performed step-out sampling which revealed petroleum hydrocarbon contamination at the  
4 Site. The Department of Toxic Substances Control (“DTSC”) notified the Regional Board  
5 regarding the petroleum contamination, which in turn notified Shell. Based on review of  
6 historical aerial maps of the area, the former oil storage reservoirs were identified as a potential  
7 source of contamination at the Site.

8           11.     Following notification from the Regional Board, Shell began an extensive and  
9 thorough investigation of the soil, soil vapor, groundwater, and indoor and outdoor air at and  
10 beneath the Site and adjacent areas, including both public and residential areas. The sampling  
11 protocol proposed by Shell and approved by the Regional Board for the 285 residences at the Site  
12 requires the collection and analysis of the following samples: (1) soil at multiple locations and  
13 depths in the front- and backyards at each residence where exposed; (2) sub-slab soil vapor at  
14 three locations from beneath the slabs of each residence at the Site where feasible; and (3) the  
15 indoor and outdoor air at the residence on two occasions at least 90 days apart. In addition, an  
16 indoor air methane screening program is utilized early in the process to assess whether methane  
17 is an issue in any of the residences. The results of the tests are submitted to the Regional Board,  
18 posted on the State Board’s publicly accessible Geotracker website, and also are forwarded to the  
19 Carousel residents or their designated legal representatives.

20           12.     The testing program is ongoing as access is granted by the residents. As of  
21 January 17, 2014, Shell has collected samples at 94% of the homes in the Carousel  
22 neighborhood, and has completed all required testing at 78% of the homes. Shell has been  
23 conducting outreach to schedule the remaining houses and complete all residential testing.

24           13.     Shell has also conducted an extensive testing program in the public rights-of-way  
25 (*e.g.*, below the streets and sidewalks) in the Carousel neighborhood and surrounding  
26 communities that has included soil, soil vapor and groundwater sampling, and methane  
27 monitoring in utility vaults, stormwater drains and the like. Shell continues to regularly conduct  
28 groundwater and sub-surface soil vapor sampling, and conduct methane monitoring on an

1 ongoing basis. All sampling results are submitted to the Regional Board and posted to the  
2 Geotracker website.

3 14. The Regional Board has described Shell's investigation of the Site as "thorough"  
4 and "extensive" and stated that Shell's site investigation has "provided reliable, comprehensive,  
5 and high-quality data." (Exh. 3, p. 2.) As of December 31, 2013, Shell had collected 11,031 soil  
6 samples, 2,695 soil vapor samples, and over 2,457 indoor and outdoor air samples. The testing  
7 program is ongoing.

8 *The Results of the Sampling at the Site*

9 15. While Shell is continuing to seek access to the remaining residences to complete  
10 its investigation of the Site, the investigation is nearly completed. Based on the data obtained  
11 thus far (all of which has been submitted to the Regional Board and posted on the State Board's  
12 Geotracker website), the results can be summarized as follows.

13 16. *First*, the Regional Board and the Los Angeles County Department of Public  
14 Health have concluded that, while environmental impacts exist at the Site related to Shell's  
15 former use of the Site and the subsequent development of the Site by the Developers, the  
16 environmental conditions at the Site do not pose an imminent threat to the health and safety of  
17 the Carousel residents. Shell has performed regular methane monitoring using field instruments  
18 at 69 locations in the public rights-of-way such as utility vaults, stormwater drains and similar  
19 locations, and methane has never been detected at levels of concern. The Los Angeles County  
20 Fire Department has also performed methane monitoring in the public areas of the Site and has  
21 not detected methane at levels of concern.

22 17. Methane has not been detected in laboratory analysis of any of the more than  
23 1,400 indoor air samples that have been collected from Carousel residences. The residential  
24 methane screening program, which is conducted prior to indoor air sampling, has detected only  
25 isolated instances of elevated methane due to natural gas leaks from utility lines or appliances,  
26 and in those instances Shell has advised the residents to repair those leaks. Subsequent testing,  
27 when performed, has not revealed any methane hazards. In the single instance where elevated  
28 methane related to petroleum hydrocarbon degradation was detected in the sub-slab soil gas

1 beneath a garage, Shell installed a methane mitigation system according to an engineering design  
2 and work plan approved by the Regional Board and Los Angeles County Department of Public  
3 Works Environmental Programs Division. Multiple rounds of follow-up testing have not shown  
4 any methane hazard at that home.

5 18. While elevated levels of methane presumably related to anaerobic biodegradation  
6 of petroleum hydrocarbons have been detected at depth, the lack of oxygen and any significant  
7 vapor pressure at depth mitigate any risk related to explosion or fire. Site data indicate that  
8 methane generated by degradation of petroleum hydrocarbons at depth under anaerobic  
9 conditions is naturally controlled through biodegradation as it migrates through aerobic surface  
10 soil.

11 19. *Second*, analysis of the indoor air, outdoor air and sub-slab soil vapor samples  
12 collected from the residences at the Site generally have shown indoor air concentrations to be  
13 consistent with background values and to be correlated with garage and outdoor air. As the  
14 Regional Board has recognized, this data does not indicate that vapor intrusion is an issue at the  
15 Site.

16 20. *Third*, there are widespread but uneven soil impacts at the Site that appear to be  
17 related to the grading of the Site. The spatial distribution of the soil impacts is somewhat  
18 stochastic and does not appear as a plume.

19 21. *Fourth*, the groundwater beneath the Site is impacted by a plume that is stable  
20 with downgradient concentrations quickly dropping to levels below analytical reporting limits.  
21 There exist multiple documented upgradient impacts that likely contribute to the groundwater  
22 conditions beneath the Site. Petroleum hydrocarbons in the form of light non-aqueous phase  
23 liquid ("LNAPL") has been detected in two monitoring wells located in the western portion of  
24 the Site, and LNAPL removal from these wells is performed on a regular basis. The groundwater  
25 at the Site is not used for municipal supply. Carousel residents obtain their drinking water from  
26 municipal supply provided by California Water Service Company, which has confirmed that the  
27 Site's water supply meets quality standards for drinking water.

1                    *Shell's Actions in Response to the CAO*

2                    22.        On March 11, 2011, the Regional Board issued the CAO for the Site. (Exh. 1.)  
3                    The CAO directed Shell to (1) complete delineation of on- and off-Site impacts in soil, soil vapor  
4                    and groundwater related to Shell's historical use of the Site; (2) continue groundwater monitoring  
5                    and reporting; (3) develop and conduct a pilot testing work plan to evaluate remedial options for  
6                    the Site; and (4) conduct an assessment of any potential environmental impacts of residual  
7                    concrete slabs that were left at the Site by the developers, and evaluate whether removal of the  
8                    concrete is necessary and feasible. (Exh. 1, pp. 9-11.) Shell has completed (or, in the case of the  
9                    residential sampling, nearly completed) the above actions and has submitted reports to the  
10                    Regional Board that include analysis of the data. The pilot test work conducted by Shell  
11                    included pilot testing of different excavation methods, soil vapor extraction, bioventing, and  
12                    chemical oxidation technologies. Shell continues to perform quarterly groundwater monitoring.

13                    23.        Per the Directive, the RAP required by the CAO and the HHRA Report are due on  
14                    March 10, 2014. (Exh. 1, pp. 11-12; Exh. 5, p. 9.)

15                    *The Regional Board's Directive*

16                    24.        On January 23, 2014, the Regional Board issued the Directive, which is the  
17                    subject of this Petition. (Exh. 5.) In the Directive, the Regional Board approved the SSCGs  
18                    proposed in the Revised SSCG Report with certain modifications, and required Shell to submit  
19                    the RAP, HHRA Report, and "draft environmental documents consistent with the California  
20                    Environmental Quality Act (CEQA) analyzing the potential environmental impacts associated  
21                    with remediation alternatives considered in the RAP." (Exh. 5, p. 9.)

22                    25.        Shell is in the process of preparing the RAP, HHRA Report and certain draft  
23                    environmental documents. Notwithstanding the issues raised in this Petition, Shell intends to  
24                    submit the RAP and the HHRA Report, along with drafts of preliminary environmental  
25                    documents, to the Regional Board by the March 10, 2014 deadline specified in the Directive.

26                    26.        However, the Directive contains certain requirements and statements that are  
27                    vague, arbitrary, erroneous, unsupported by the evidence and the relevant guidance, do not  
28                    comply with the applicable laws and regulations and accepted guidance documents, and/or rely

1 on inapplicable laws and regulations. Shell previously raised these issues with the Regional  
2 Board, and Shell and the Regional Board have engaged in discussions to resolve these issues.  
3 However, to protect its rights in this regard, Shell files this protective Petition and seeks State  
4 Board review of these specific requirements and statements in the event it is not able to resolve  
5 these issues with the Regional Board.

6 I declare under penalty of perjury under the laws of the State of California that the  
7 foregoing is true and correct, and that this Declaration was executed on February 24, 2014 in Los  
8 Angeles, California.

9 

10 \_\_\_\_\_  
11 DOUGLAS J. WEIMER