

1 QUINN EMANUEL URQUHART & SULLIVAN, LLP

2 Robert P. Feldman (Bar No. 69602)

3 bobfeldman@quinnemanuel.com

4 David Myre (Bar No. 304600)

5 davidmyre@quinnemanuel.com

6 Eliyahu Ness (Bar No. 311054)

7 eliness@quinnemanuel.com

8 555 Twin Dolphin Drive, 5th Floor

9 Redwood Shores, California 94065-2139

10 Telephone: (650) 801-5000

11 Facsimile: (650) 801-5100

12 QUINN EMANUEL URQUHART & SULLIVAN, LLP

13 Meredith M. Shaw (Bar No. 284089)

14 meredithshaw@quinnemanuel.com

15 50 California Street, 22nd Floor

16 San Francisco, CA 94111

17 Telephone: (415) 875-6600

18 Attorneys for Plaintiff

19 OAKLAND BULK & OVERSIZED TERMINAL, LLC

20 UNITED STATES DISTRICT COURT

21 NORTHERN DISTRICT OF CALIFORNIA

22 SAN FRANCISCO DIVISION

23 OAKLAND BULK & OVERSIZED
24 TERMINAL, LLC

25 Plaintiff,

26 vs.

27 CITY OF OAKLAND,

28 Defendant.

Case No. 3:16-cv-07014-VC

**PLAINTIFF OAKLAND BULK &
OVERSIZED TERMINAL, LLC'S
PROPOSED FINDINGS OF FACT**

Hearing Date: March 28, 2018

Time: 10:00 a.m.

Honorable Vince Chhabria

Trial Date: January 16, 2018

Pursuant to the Court’s Order Setting Post-Trial Briefing Schedule (D.E. 232) and Federal Rule of Civil Procedure 52, Plaintiff Oakland Bulk & Oversized Terminal, LLC (“OBOT”) submits the following Proposed Findings of Fact in support of its breach of contract claim against Defendant City of Oakland (the “City”).

PROPOSED FINDINGS OF FACT

The Court makes the following factual findings based upon the entirety of the evidence, including the testimony of witnesses that the Court finds to be credible:

The Oakland Army Base Redevelopment and the Parties’ Agreements.

OBOT Proposed Finding of Fact (“PFF”)	Supporting Evidence¹
1. Background of the Project.	
PFF 1. The former Oakland Army Base (“OAB”) was closed in 1999, and portions of its land were transferred to the City. In 2000, the City adopted the “Oakland Army Base Area Redevelopment Plan” (the “Redevelopment Plan”) for purposes of redeveloping that land.	TX0127.0002 (May 6, 2013 Agenda Report)
PFF 2. The Redevelopment Plan would “bring significant benefits to the City, including economic development, construction and permanent jobs, revenue from land sales, increased property tax revenue, rental income, funding for the West Oakland Community Fund and Jobs Center, increased public access to parks and open space, an improved visual environment, and remediation of environmental contamination.”	TX0128.0002 (June 24, 2013 Agenda Report)
PFF 3. In September 2008, a “Request for Proposals” process was initiated by the City, pursuant to which a predecessor-in-interest of OBOT was selected to develop certain portions of the former OAB, including the “West Gateway.”	TX0372.0001-02 (July 14, 2009 Agenda Report)
2. The LDDA and DA.	
PFF 4. In 2009, the City and a predecessor-in-interest to OBOT entered into an “Exclusive Negotiating Agreement” for the purpose of permitting the parties to “explore and agree upon the final development and phasing plans, and all terms and conditions consistent with City . . . goals and priorities prior to the execution of a Lease Disposition and Development Agreement.”	TX0372.0001-02 (July 14, 2009 Agenda Report)

¹ “Tr.” refers to the trial transcript for this action. “TX” refers to Trial Exhibits. “Dep.” refers to transcripts of video deposition designations played during trial, appended to OBOT’s Submission of Transcripts for Videos Played During Trial, filed contemporaneously herewith.

1	PFF 5. Prologis CCIG Oakland Global, LLC and the City of Oakland (“City”) entered into a Lease Disposition and Development Agreement dated December 4, 2012 (the “LDDA”). The LDDA is a binding, valid contract.	TX0065.0001 (LDDA); Tr. 32:20-24 (Cashman)
2		
3		
4	PFF 6. Following the execution of the LDDA, the parties negotiated a related “Development Agreement” which, among other things, was intended to provide OBOT “long-term certainty . . . concerning the project so that the project is successfully implemented and the benefits in the LDDA intended for [OBOT] and the City are realized.”	TX0128.0002 (June 24, 2013 Agenda Report)
5		
6		
7	PFF 7. The parties executed a Development Agreement Regarding the Property and Project Known As The Gateway Development / Oakland Global, dated July 16, 2013 (the “DA”). The DA is a binding, valid contract.	TX0584.0001 (DA)
8		
9		
10	PFF 8. OBOT has succeeded to the rights and obligations of Prologis/CCIG under the LDDA and DA with respect to the “West Gateway” site of the OAB.	D.E. 199, at 3.
11		
12	PFF 9. OBOT has performed its obligations under the DA.	TX0141.0001 (Aug. 21, 2017 letter from City to OBOT); Tr. 39:25-40:3, 40:10-19 (Cashman)
13		
14		
15	3. OBOT’s vested rights under the DA.	
16		
17	PFF 10. Pursuant to the LDDA and DA, OBOT was granted the right to develop, use and operate a “Bulk Oversized Terminal” at the West Gateway, defined as a “ship-to-rail terminal designed for the export of non-containerized bulk goods and import of oversized or overweight cargo” (hereinafter, the “Terminal”).	TX0584.0008 (Recital H), .0017-0019 (§§ 2.1, 2.2), .0107 (Ex. D-2-2) (DA)
18		
19		
20	PFF 11. It was always contemplated that the Terminal would be a multi-commodity marine terminal.	Tr. 68:4-11 (Tagami)
21		
22	PFF 12. The City never proposed placing limits on the types of bulk goods that could be shipped through the Terminal during negotiations of the DA.	Tr. 33:3-6 (Cashman)
23		
24	PFF 13. There were no discussions between the parties regarding what commodities might be shipped from the Terminal under the DA during negotiations.	Tr. 44:19-21 (Ranelletti)
25		
26	PFF 14. There were no discussions of a commodity-by-commodity review by the City of the bulk goods OBOT may or may not ship through the Terminal during negotiations of the DA.	Tr. 282:11-21 (McClure)
27		
28	PFF 15. Prior to the execution of the DA, OBOT shared with the City materials indicating that coal was one of the commodities that	Tr. 39:9-19 (Cashman);

1	might be shipped through the Terminal.	Tr. 70:16-22, 71:4-13 (Tagami);
2		TX1229.0007 (Oct. 2011 Kinder Morgan Presentation)
3		
4	PFF 16. No specific restriction or prohibition on coal or any other commodity was made part of the DA.	TX0031.0002 (Feb. 3, 2016 Agenda Report); TX0584.0001 (DA)
5		
6	PFF 17. To provide OBOT “long-term certainty” concerning the project, Section 3.4.1 of the DA provides as follows with respect to “Future City Regulations”:	TX0128.0002 (June 24, 2013 Agenda Report); TX0584.0022-23, § 3.4.1 (DA)
7	Except as otherwise specifically provided in this Agreement, including, without limitation, the provisions relating to (a)	
8	regulations for health and safety reasons under Section 3.4.2 below . . . City shall not impose or apply any City Regulations on	
9	the development of the Project Site that are adopted or modified	
10	by City after the Adoption Date [of July 16, 2013] (whether by	
11	action of the Planning Commission or the City Council, or by	
12	local initiative, local referendum, ordinance, resolution, rule,	
13	regulation, standard, directive, condition, moratorium that would:	
14	(i) be inconsistent or in conflict with the intent, purposes, terms, standards or conditions of this Agreement; (ii) materially change, modify or reduce the permitted uses of the Project Site . . .	
15		
16	PFF 18. Section 3.4.1 of the DA provided OBOT the right to “challenge in any court any City Regulation that would conflict with [the DA] or reduce the development rights provided by [the DA].”	TX0584.0023, § 3.4.1 (DA)
17		
18	PFF 19. DA Section 3.4.2 establishes an “exception” to Section 3.4.1’s prohibition on the application of new City Regulations to OBOT.	TX0213.0003 (Sept. 10, 2015 Agenda Report); TX0031.0002 (Feb. 3, 2016 Agenda Report)
19		
20	PFF 20. The “health and safety” exception in Section 3.4.2 of the DA permits the City to apply a new regulation to OBOT if, and only if, the “City determines based on substantial evidence and after a public hearing that a failure to [apply the new regulation] would place existing or future occupants or users of the Project, adjacent neighbors, or any portion thereof, or all of them, in a condition substantially dangerous to their health or safety.”	TX0584.0023, § 3.4.2 (DA)
21		
22		
23		
24		
25	PFF 21. There were no discussions between the parties regarding the meaning or interpretation of Section 3.4.2 during negotiations of the DA.	Tr. 43:22-25, 44:3-8 (Ranelletti)
26		
27	PFF 22. For the City, the people involved in drafting and negotiating the DA were Darin Ranelletti, Deputy Director for the Oakland Planning and Building Department, and Mark Wald, an	Tr. 43:8-16 (Ranelletti)
28		

1	attorney in the City Attorney's Office.	
2	PFF 23. Mr. Wald was also responsible for drafting a section of a	Tr. 468:8-18 (Cappio)
3	September 10, 2015 Agenda Report describing Section 3.4.2 of the DA, and for reviewing Agenda Reports regarding the Terminal generally.	
4	PFF 24. In the section of the September 10, 2015 Agenda Report	TX0213.0003 (Sept. 10, 2015 Agenda Report)
5	drafted by Mr. Wald, Section 3.4.2 was described as a "narrow exception for certain later-enacted health and/or safety regulations," and as a "limited" exception to the "vested rights to CCIG."	
6	PFF 25. Section 3.4.2 was also described as a "limited" and a	TX0031.0002 (Feb. 3, 2016 Agenda Report)
7	"narrow exception related to health and/or safety" in a February 3, 2016 Agenda Report sent to the City Council.	
8	PFF 26. Section 3.5 of the DA limited the City's ability with respect to discretionary subsequent approvals, including air quality and fire safety plans.	Tr. 46:10-47:4 (Raneletti); TX0584.0025-26, § 3.5 (DA)
9	PFF 27. Specifically, DA Section 3.5.1 provides as follows:	TX0584.0025-26, § 3.5.1 (DA)
10	It is agreed that, in acting on any discretionary Subsequent	
11	Approvals for the Project, City will rely on the EIR to satisfy the	
12	requirements of CEQA to the fullest extent permissible by CEQA	
13	and City will not require a new initial study, negative declaration	
14	or subsequent or supplemental EIR unless required by CEQA, as determined by City in its capacity as the Lead Agency, and will not impose on the Project any mitigation measures or other conditions of approval other than those specifically imposed by the City Approvals, specifically required by the Existing City Regulations or by subsequent CEQA review.	

15
16
17
18
19
20
The Preliminary Nature of the Plans for the Terminal.

21	OBOT Proposed Finding of Fact ("PFF")	Supporting Evidence
22	PFF 28. Terminal Logistic Solutions ("TLS") had an option to secure a sublease from OBOT pursuant to an exclusive negotiation agreement executed in April, 2014.	Wolff Dep. 27:17-22; D.E. 199, at 3.
23	PFF 29. As a subleasee, TLS would be the operator of the Terminal, and OBOT would be the landlord.	Tr. 58:18-20 (Tagami); Wolff Dep. 26:14-27:4, 31:20-22
24	PFF 30. TLS is a wholly-owned subsidiary of Bowie Resource Partners ("Bowie"). Bowie could supply western bituminous coal to go through the Terminal, if constructed.	Wolff Dep. 26:14-20, 27:3-4
25	PFF 31. In or around July 2015, OBOT prepared a draft Basis of	TX1238 – TX1261

1	Design (“BoD”) for the Terminal, in consultation with TLS and third-party consultants.	(BoD);
2	PFF 32. The purpose of the BoD was to seek peer review and comment, take the BoD on a “road show,” and then visit various regulatory agencies from whom permits are required to find out what else was needed so that the “design team” could revise the BoD accordingly.	Tr. 59:9-19 (Tagami)
3		
4		
5	PFF 33. The BoD was only a draft and represented just 8-10% of the anticipated final design of the Terminal.	TX1237.0005 (BoD);
6		Tr. 58:21-25, 61:16-21,
7		77:12-17 (Tagami);
8		Tr. 275:3-8, 286:9-15
9		(McClure)
10	PFF 34. The HDR simulation prepared in 2015 regarding rail operations, which is part of the BoD, was a “dartboard” for various parties to comment on.	Tr. 278:3-15 (McClure)
11		
12	PFF 35. In 2015 and 2016, OBOT repeatedly described the preliminary state of the Terminal design to the City. For example, in the October 6, 2015 written responses to a series of questions posed by the City, OBOT stated the BoD “marks the beginning of a process” and that “much lies ahead in terms of commodity selection, terminal design, and commodity-specific utility.”	TX0149.0009 (Oct. 6, 2015 OBOT Response to City Questions);
13		TX0216.0004-06 (Oct. 9, 2015 Agenda Report)
14		
15		
16	PFF 36. Likewise, in its October 6 response OBOT stated that this process would involve “Design Development and Construction Documents phases, the project operations manual, air quality plan, and [the] MMRP compliance plan,” which “will be completed concurrent with the submittal of approximately 76 required permits” that must be approved before the Terminal may be operated.	TX0149.0009 (Oct. 6, 2015 OBOT Response to City Questions);
17		Tr. 59:9-19 (Tagami)
18		
19		
20	PFF 37. ESA cited OBOT’s October 6, 2015 letter to the City in the ESA Report, but mistakenly referred to it as having been sent on September 6, 2015.	TX0596.0020 (ESA Report)
21		
22	PFF 38. In March 2016, OBOT representatives met with Oakland Fire Department (“OFD”) officials to discuss the types of information that OFD would eventually require for the permitting process. At that time, OFD stated it was “way too early” and “premature” for OFD to evaluate the Terminal with respect to fire safety issues.	Tr. 470:3-25 (Cappio);
23		Tr. 278:16-279:7
24		(McClure)
25		
26	PFF 39. At the March 2016 meeting, OFD told OBOT that the fire safety plan should only be submitted after design and construction documents for the Terminal are completed.	Tr. 279:12-280:2
27		(McClure);
28		Tr. 61:4-10 (Tagami)
	PFF 40. On May 16, 2016, OBOT responded to two written	TX0166.0001-03 (May

1	questions from ESA transmitted by the City regarding the proposed Terminal. In that response, OBOT again described the preliminary state of the BoD.	16, 2016 Letter from Tagami to Cappio); Tr. 88:7-20 (Tagami)
2		
3	PFF 41. Nevertheless, the City and ESA continued with their review of the Terminal.	TX0596.0001 (ESA Report)
4		
5	PFF 42. ESA conceded that the BoD and other information provided by the City to ESA permitted ESA to perform only a preliminary review based on limited information.	Tr. 109:22-24 (Evans [ESA])
6		
7	PFF 43. There were fundamental uncertainties in the material ESA reviewed.	Tr. 558:20-23 (Sahu [City expert])
8		
9	PFF 44. ESA did not have “detailed information about the facility” or the “potential pollution control technologies” or any other particulars about this proposed Terminal.	Tr. 110:3-7 (Evans [ESA])
10		
11	PFF 45. ESA did not have a sufficiently “detailed project description to use to even make revisions to” emissions estimates regarding the Terminal.	TX0047.0001 (May 24, 2016 internal ESA email); Tr. 130:2-11 (Evans [ESA])
12		
13		
14	PFF 46. The ESA Report stated that it was a “screening level review of the preliminary BoD for the Terminal. It is anticipated that the OBOT will submit detailed design plans beyond this initial design stage when it has confirmed a particular operator ...and commodity.”	TX0596.0023-24 (ESA Report)
15		
16		
17	PFF 47. There will be design changes in the operation for the rail line at the West Gateway which could not have been considered by ESA.	Tr. 278:3-15 (McClure)
18		
19	PFF 48. To date, no air quality monitoring or fire safety plan has been submitted to the City or BAAQMD. As discussed below, these plans are required to be reviewed and approved by the City before operations at the Terminal may begin.	Tr. 60:17-61:3 (Tagami); TX0138.0006-07 (SCA/MMRPs); Tr. 52:20-53:3 (Ranelletti); Tr. 32:6-11 (Cashman)
20		
21		
22		
23	PFF 49. The work ESA did was not sufficiently detailed to serve as the basis for a CEQA analysis, or to support air quality or other permit applications including to BAAQMD.	Tr. 109:25-110:2 (Evans [ESA]); Tr. 59:9-60:4 (Tagami); Tr. 558:20-23 (Sahu [City expert])
24		
25		
26		
27		
28		

Regulations and Restrictions Applicable to the Terminal.

OBOT Proposed Finding of Fact (“PFF”)	Supporting Evidence
PFF 50. Prior to the execution of the DA, the City researched comparable bulk goods terminals in Richmond and Stockton, California.	Tr. 38:2-9, 38:20-39:3 (Cashman)
PFF 51. The planned facility will be superior to the terminals currently shipping coal in Long Beach, Richmond, and Stockton, California, all of which are much older.	Tr. 76:1-10 (Tagami); Wolff Dep. 236:5-8; Tr. 38:20-39:3 (Cashman)
PFF 52. Those facilities handling coal in Richmond and Stockton, California stores stockpiles of coal in the open air.	TX0844.0001 (Photo of Richmond); TX0845.0001 (Photo of Stockton); Tr. 38:2-19 (Cashman)
PFF 53. Because those terminals are “grandfathered” in, they are subject to “lesser regulations” than the OBOT Terminal would be.	Tr. 38:20-39:3 (Cashman)
PFF 54. An analysis of PM2.5 emissions or resulting PM2.5 air quality concentrations from the OBOT Terminal would differ from an analysis of another facility shipping coal based to differences in design and operation of the facilities.	Tr. 568:4-569:7 (Sahu [City expert]) TX0596.0071 (ESA Report)
PFF 55. There are existing federal, state, regional and local laws and regulations applicable to the Terminal, including Bay Area Air Quality Management District (“BAAQMD”) regulations, Occupational Safety & Health Administration (“OSHA”) regulations, and regulations “specific to the Army Base Redevelopment efforts,” such as Standard Conditions of Approval / Mitigation Monitoring and Reporting Program (“SCA/MMRPs”).	TX0213.0005 (Sept. 10, 2015 Agenda Report)
PFF 56. There are approximately 76 permits that will be needed before the Terminal may operate.	TX0149.0009 (Oct. 6, 2015 OBOT Response to City Questions); Tr. 59:9-13 (Tagami)
PFF 57. There are existing regulations in place that ensure construction activities at the West Gateway do not exceed a certain level of PM emissions, and there are similarly existing regulations in place that, if the Terminal became operational, would require that PM2.5 emissions remain below a certain level.	Tr. 30:24-31:2, 31:17-32:5, 39:4-8 (Cashman)
1. Applicable regulations.	
PFF 58. In 2002, in connection with the Redevelopment Plan and in accordance with CEQA, the City prepared a “project level”	TX0972.0015 (2012 EIR Addendum)

1	Environmental Impact Report (“EIR”).	
2	PFF 59. The EIR analyzed the potential environmental impacts from all anticipated redevelopment activities at the OAB.	Tr. 30:9-12 (Cashman); TX0972.0015 (2012 EIR Addendum)
3		
4	PFF 60. Once it was decided to use the West Gateway for a bulk goods terminal, the 2012 Initial Study/Addendum to the 2002 EIR was prepared.	Tr. 63:12-15 (Tagami)
5		
6	PFF 61. Prior to the 2012 Initial Study/Addendum being completed, OBOT shared with the City materials indicating that coal was one of the commodities that might be shipped through the Terminal.	Tr. 39:9-19 (Cashman); Tr. 70:16-22, 71:4-13 (Tagami); TX1229.0007 (Oct. 2011 Kinder Morgan Presentation)
7		
8		
9		
10	PFF 62. The 2012 Initial Study/Addendum to the 2002 EIR is Trial Exhibit 972.	TX0972.0001 (2012 EIR Addendum); Tr. 51:4-6 (Ranelletti)
11		
12	PFF 63. The City interacted with BAAQMD in connection with the preparation of the 2012 Initial Study/Addendum.	Tr. 30:13-15 (Cashman)
13		
14	PFF 64. The 2012 Initial Study/Addendum took into account anticipated rail operations at the OAB site.	Tr. 81:6-15 (Tagami)
15		
16	PFF 65. As recognized in the 2012 Initial Study/Addendum, any operations at the Oakland Army Base site will cause some level of PM emissions.	Tr. 33:24-34:1, 34:11-22 (Cashman)
17		
18	PFF 66. Truck traffic, by definition, emits PM2.5.	Tr. 33:24-34:1 (Cashman)
19		
20	PFF 67. The development of an office park at the West Gateway, or a building where coffee is roasted, would increase PM2.5 emissions.	Tr. 34:15-22 (Cashman); Tr. 339:9-340:1, 341:12-343:14 (Chinkin [OBOT expert])
21		
22	PFF 68. To assess the potential levels of PM2.5 emissions from the project, the City used BAAQMD PM thresholds in the 2012 Initial Study/Addendum.	TX0972.0012, .0147 (2012 EIR Addendum); Tr. 50:11-19, 51:24-52:1 (Ranelletti)
23		
24	PFF 69. The City used the BAAQMD thresholds: 15 tons for PM10 per year and 10 tons for PM2.5 per year.	TX0972.0147 (2012 EIR Addendum); Tr. 51:15-20 (Ranelletti)
25		
26		
27	PFF 70. As discussed below, the BAAQMD thresholds used by the City in 2012 were the same (and only) thresholds the City cited in the June 23, 2016 Agenda Report recommending adoption of the	TX0976.0012, n. 9 (June 23, 2016 Agenda Report)
28		

1	Ordinance.	
2	PFF 71. These BAAQMD thresholds cited by the City “were established to help protect public health.”	TX0972.0159 (2012 EIR Addendum)
3	PFF 72. The 2012 Initial Study/Addendum found that construction of a bulk good facility “would not result in significant new air quality impacts or substantial increase in severity of previously identified air quality impacts compared to at 2002 EIR.”	TX1225.0180 (2012 Initial Study/Addendum § 3.3.7); Tr. 64:1-8 (Tagami)
4		
5		
6	PFF 73. The 2012 Initial Study/Addendum found that the construction of a bulk good facility would result in less PM2.5 emissions than anticipated in the 2002 EIR.	TX1225.0164 (2012 Initial Study/Addendum § 3.3.5); Tr. 64:9-17 (Tagami)
7		
8		
9	PFF 74. SCA/MMRPs for the project resulted from the EIR CEQA process in 2012.	TX0138.0001 (SCA/MMRPs)
10		
11	PFF 75. The SCA/MMRPs impose approximately 660 conditions that cover construction and operational aspects of the Terminal.	Tr. 60:7-16 (Tagami); TX0138.0001 (SCA/MMRPs)
12		
13	PFF 76. Prior to commencing operations, OBOT is obligated pursuant to SCA/MMRP 4.4-3b to submit a criteria pollutant reduction program to the City for review and approval. This would include a demonstration prior to operation that compliance with the CEQA standards would be achieved.	TX0138.0006-07 (SCA/MMRPs); Tr. 52:20-53:3 (Ranelletti); Tr. 31:10-32:11 (Cashman); TX0149.0007 (Oct. 6, 2015 OBOT Response to City Questions); Tr. 60:17-22 (Tagami)
14		
15		
16		
17		
18		
19	PFF 77. Prior to commencing operations, OBOT is obligated pursuant to SCA GCC-1 to submit a greenhouse gas reduction plan to the City for review and approval.	TX0138.0028 (SCA/MMRPs)
20		
21	PFF 78. Prior to commencing operations, OBOT is obligated pursuant to SCA PSU-2 to submit a fire safety plan to the City for review and approval. The City “may require changes to the plan or may reject the plan if it does not adequately address fire hazards” associated with the Terminal.	TX0138.0049 (SCA/MMRPs); Tr. 61:4-7 (Tagami)
22		
23		
24		
25	PFF 79. These requirements of the SCA/MMRPs are binding and legally enforceable by the City.	TX0128.0008 (June 23, 2013 Agenda Report); Tr. 45:23-46:5 (Ranelletti); Tr. 32:6-11, 39:4-8 (Cashman);
26		
27		
28		

1		Tr. 60:7-16, 62:18-63:4 (Tagami)
2	PFF 80. For workers at the Terminal, the project will be subject to	TX0149.0007 (Oct. 6,
3	California Occupational Safety and Health Administration	2015 OBOT Response to
4	(Cal/OSHA) and Federal OSHA regulations.	City Questions);
5		TX0976.0013 (June 23,
6	PFF 81. In terms of air quality for adjacent neighbors to the	2016 Agenda Report)
7	Terminal, the project will be subject to BAAQMD regulations.	TX0149.0007 (Oct. 6,
8		2015 OBOT Response to
9		City Questions);
10		Tr. 30:16-32:1
11		(Cashman);
12		Tr. 51:24-52:12
13		(Ranelletti)
14	PFF 82. If OBOT or its subleasee failed to meet or comply with the	Tr. 60:17-61:7, 62:18-
15	SCA/MMRPs requirements, or other applicable regulations,	63:4 (Tagami);
16	operations would not be permitted at the West Gateway.	Tr. 336:8-337:8, 341:6-
17		344:2 (Chinkin [OBOT
18		expert])
19	2. Other restrictions OBOT stated it would contractually agree to.	
20	PFF 83. Attachment 15 to the LDDA requires OBOT to fund an air	Tr. 33:7-13 (Cashman);
21	quality monitoring program at the Terminal for the life of the 66-	TX1267.0006-07
22	year ground lease.	(LDDA)
23	PFF 84. BAAQMD will receive that air monitoring data in real time	Tr. 33:14-16 (Cashman);
24	pursuant to the air quality monitoring program.	Tr. 81:16-82:8 (Tagami)
25	PFF 85. The air quality rules for the South Coast Air Quality	Tr. 111:18-22 (Evans
26	District (“SCAQD”), which covers portions of southern California,	[ESA])
27	are very strict. The SCAQD maintains some of the most stringent	
28	rules in the state, the United States, and the world.	
	PFF 86. The SCAQD has adopted Rule 1158, which regulates the	TX0453.0001 (SCAQD
	storage and handling of coal, coke and sulfur.	Rule 1158);
		Tr. 111:23-25 (Evans
		[ESA]);
		Tr. 65:13-18 (Tagami)
	PFF 87. In their October 6, 2015 response to questions from the	TX0149.0008 (Oct. 6,
	City, OBOT and TLS stated they would agree to be contractually	2015 OBOT Response to
	bound by SCAQD Rule 1158. Specifically, in response to the	City Questions);
	question “would TLS through CCIG/OBOT contractually agree to	Tr. 64:25-65:10
	(a) following the SC Rule 1158 restrictions?,” OBOT and TLS	(Tagami);
	responded as follows:	Tr. 277:21-278:2

<p>1 Yes. If acceptable to the City, TLS will agree to comply with the 2 SCAQMD Rule 1158. Per an October 2, 2015 conversation 3 between Jerry Bridges, President of TLS and Jack Broadbent, 4 Executive Officer/Air Pollution Control Officer of BAAQMD, 5 the current understanding is that BAAQMD is preparing their 6 own "Rule 1158" and the process could take a year before 7 adoption. Concurrently, TLS will be developing their bulk 8 terminal plans and specifications, a final operation manual, and 9 an air quality plan, which will be submitted for City approval as a 10 condition precedent to issuance of a building permit pursuant to 11 Ordinance No. 13183 C.M.S. These could include the applicable 12 provisions / requirements of Rule 1158.</p>	(McClure)
<p>8 PFF 88. In their October 6, 2015 response to questions from the 9 City, OBOT and TLS stated they would agree to be contractually 10 bound to handle only western bituminous coal, which will originate 11 from Utah.</p>	<p>TX0149.0008 (Oct. 6, 2015 OBOT Response to City Questions); Tr. 65:19-23 (Tagami); Tr. 276:15-16 (McClure); Wolff Dep. 16:12-17, 59:2-5, 59:8-12, 104:1-2, 104:5-8</p>
<p>14 PFF 89. Powder River Basin coal is "much dustier" than the 15 Western bituminous coal that would be handled at the Terminal.</p>	<p>Tr. 179:20-180:5, 251:16-252:3 (Evans [ESA]); Tr. 374:2-19 (Chinkin [OBOT expert])</p>
<p>18 PFF 90. The western bituminous coal that will be handled at the 19 Terminal is high BTU and low sulfur compared to other types of 20 coal, and will burn more cleanly than other types of coal.</p>	<p>Wolff Dep. 195:6-8, 195:11-16, 237:20-23, 238:2-6</p>
<p>20 PFF 91. In their October 6, 2015 response to questions from the 21 City, OBOT and TLS and TLS stated they would agree to be 22 contractually bound to only accept covered rail cars carrying coal at the Terminal.</p>	<p>TX0149.0008 (Oct. 6, 2015 OBOT Response to City Questions); Tr. 65:24-66:12 (Tagami)</p>
<p>23 PFF 92. OBOT and TLS have stated they would agree to be 24 contractually bound to install a surfactant spray station in the port railyard at the OAB for use during "Staging."</p>	<p>Tr. 277:21-278:2 (McClure)</p>
<p>25 PFF 93. Bowie is willing to apply surfactant to the rail cars it uses 26 to ship coal to the Terminal.</p>	<p>Wolff Tr. 247:13-18</p>

The City's Decision to Ban Coal

OBOT Proposed Finding of Fact ("PFF")	Supporting Evidence
1. The City disregarded mitigation measures to seek a coal and coke ban.	
PFF 94. On June 17, 2014, the Oakland City Council adopted a Resolution opposing the transportation of fossil fuel materials through Oakland, including coal.	TX0004.0001 (Ordinance); TX1205.0001 (2014 Resolution No. 85054)
PFF 95. Prior to the passage of the June, 2016 Ordinance banning coal, measures to mitigate potential PM emissions at the Terminal were discussed amongst the City (including then-OAB City project manager Patrick Cashman), OBOT, and representatives of BAAQMD. The City acknowledged that new technologies to mitigate emissions existed, but lacked the "political will" to permit mitigation.	Tr. 27:18-22, 34:23-35:4, 35:20-36:3, 36:13-24 (Cashman)
PFF 96. Rather than considering mitigation measures, the City made a "political decision" to do a health and safety analysis pursuant to DA Section 3.4.2.	Tr. 36:21-24 (Cashman)
PFF 97. The City held a public hearing on coal in September, 2015. At the September 2015 hearing Henry Hill, a director of planning at BAAQMD, spoke to the City Council. Mr. Hill "did not take a support or oppose position" on a coal ban, but instead relayed BAAQMD's "neutral position."	TX0640, AR0038 at OAK0033447 lines 3-9
PFF 98. Mr. Hill "encourage[d]" the City to "implement all feasible mitigations," including "cover the cars, cover all conveyors, cover the storage, cover everything from cradle to grave" at the Terminal.	TX0640, AR0038 at OAK0033448, lines 3-10
2. ESA is retained to pursue the City's "out" in the DA.	
PFF 99. Following the September 2015 hearing, the City decided to retain outside assistance with respect to its "health and safety" review of the Terminal.	TX0216.0001 (Oct. 9, 2015 Agenda Report); TX0217.0001 (Feb. 4, 2016 Agenda Report)
PFF 100. In connection with the proposed retention of ESA, the City acknowledged that it did not have the expertise to evaluate the information submitted to the City concerning the health and safety impacts of shipping coal and petcoke through the Terminal, and accordingly needed ESA to prepare a report summarizing that information for it.	Tr. 472:3-473:10 (Cappio); TX.0647.0002 (May 3, 2016 Resolution No. 86162)
PFF 101. ESA had a 30 year relationship with the City.	Tr. 93:11-14 (Brown [ESA])
PFF 102. In the last five years, ESA had performed approximately	Tr. 93:1-4 (Brown

1	25 to 30 CEQA consulting assignments for the City.	[ESA]
2	PFF 103. Darin Ranelletti, the Deputy Directory of the Oakland Planning Department, made the initial contact with Crescentia Brown of ESA.	Tr. 53:21-23 (Ranelletti); Tr. 93:15-17 (Brown [ESA]).
3		
4	PFF 104. As a result of her conversation with Mr. Ranelletti, Ms. Brown informed her colleagues at ESA that the only “out” the City had with respect to the anticipated coal Terminal was the “health and safety clause” of the DA.	Tr. 93:18-94:1, 95:6-11 (Brown [ESA]); Tr. 54:2-23 (Ranelletti)
5		
6	3. The City rejects work proposed by ESA.	
7		
8	PFF 105. On or about January 8, 2016, ESA submitted its first formal proposed Scope of Work (“SOW”) to the City.	TX0025.0002 (Jan. 8, 2016 Proposed SOW); Tr. 95:12-19 (Brown [ESA])
9		
10	PFF 106. Within the January 8, 2016 proposed SOW were the following activities:	TX0025.0002-09 (Jan. 8, 2016 Proposed SOW)
11	<ul style="list-style-type: none"> • Conduct a technical evaluation to assess the health and safety effects of the project. TX0025.0002. • Ensure focus is on the extent to which the transportation of Coal-by-Rail and related handling is different than the transportation and handling of the other commodities analyzed in prior official documents. TX0025.0004. • Develop a matrix indicating jurisdictional authority for regulation of operational activity covered in the Project or for relevant health and safety aspects. TX0025.0007. • Identify coal dust mitigation requirements of relevant entities, potentially including BAAQMD, EPA, and other regulatory agencies. TX0025.0007. 	
12		
13		
14		
15		
16		
17		
18		
19	PFF 107. None of the foregoing activities were contained in the SOW agreed upon and signed by the City and ESA on or about May 4, 2016.	TX0062.0027 (May 4, 2016 Contract and Final SOW)
20		
21	PFF 108. The January 8, 2016 ESA SOW proposed “two phases of work” for ESA’s assessment of the Terminal.	Tr. 108:22-109:4 (Evans [ESA]); TX0025.0002-03 (Jan. 8, 2016 Proposed SOW)
22		
23		
24	PFF 109. Phase One would have involved a review of the public comments submitted to the City. Phase Two would have been an independent evaluation by ESA of the health and safety issues presented by the proposed terminal operations.	Tr. 108:22-109:4 (Evans [ESA]); TX0025.0002-03 (Jan. 8, 2016 Proposed SOW)
25		
26		
27	PFF 110. The City rejected Phase Two of the proposed SOW.	Tr. 109:10-11 (Evans [ESA])
28		

1	PFF 111. ESA proposed air quality “modeling” for the Terminal because it would have been “useful and important” to perform modeling.	Tr. 109:13-19 (Evans, [ESA])
2		
3	PFF 112. Air quality modeling is required to determine the potential “dose” of exposure to PM2.5 air concentration levels adjacent neighbors of the Terminal could be exposed to.	Tr. 322:19-323:6 (Chinkin [OBOT expert])
4		Tr. 210:10-211:11 (Evans [ESA])
5		
6	PFF 113. Air quality modeling is performed using a computer model that takes into account weather data and facility-specific emissions information, then mathematically estimates the air quality concentrations that will exist at a given location.	Tr. 323:7-15 (Chinkin [OBOT expert])
7		
8		
9	PFF 114. Air quality modeling takes a variety of factors into account, including particularly “how much wind” would be expected to determine how much dispersion there would be under those conditions.	Tr. 252:13-17 (Evans [ESA])
10		
11		
12	PFF 115. Air quality modeling adds estimated air concentration levels caused by a source to existing background pollution levels at a given location.	Tr. 210:10-211:5 (Evans [ESA])
13		
14	PFF 116. Those modeling outputs are then compared to National Ambient Air Quality Standards (“NAAQS”) established by EPA.	Tr. 324:9-14 (Chinkin [OBOT expert])
15		
16	PFF 117. The City rejected ESA’s proposal that air quality modeling be done.	Tr. 109:20-21 (Evans, [ESA])
17		
18	PFF 118. On or about February 4, 2016, then-Assistant City Administrator Claudia Cappio signed an Agenda Report regarding the retention of ESA. In this Report, Ms. Cappio stated: “Therefore, supplemental analysis and review <i>must</i> be undertaken to ascertain whether there is substantial evidence to base any new rule change governing the bulk commodities terminal.” (emphasis added).	TX0031.0002 (Feb. 4, 2016 Agenda Report)
19		
20		
21	PFF 119. Attached to the February 4, 2016 Agenda Report was a proposed SOW for ESA.	TX0031.0008-10 (Feb. 4, 2016 Proposed SOW)
22		
23	PFF 120. The February 4, 2016 proposed SOW stated as follows: “The <i>primary purpose</i> of the draft proposal is to assist the City in determining whether existing regulations are adequate to protect the public’s health and/or safety” (emphasis added)	TX0031.0008-10 (Feb. 4, 2016 Proposed SOW)
24		
25	PFF 121. This language does not appear in the final SOW that was attached to the terms of the City and ESA contract signed on May 4, 2016.	TX0062.0027 (May 4, 2016 Contract and Final SOW)
26		
27	PFF 122. The City Council rejected the proposed retention of ESA at a February 16, 2016 meeting.	TX0145.0001-02 (Apr. 21, 2016 Agenda
28		

1		Report);
2		TX0032.0001 (Feb. 18, 2017 internal ESA email)
3	PFF 123. After the February 16 City Council meeting, Ms. Brown wrote to her colleagues at ESA that “all parties” oppose the coal terminal, and there was a concern that ESA would conduct a “study, analysis, regulations, mitigation measures, etc., which all allow for the possibility that that project will proceed with some conditions or mitigations.”	TX0032.0001 (Feb. 18, 2017 internal ESA email)
4		
5		
6		
7	4. The City retains ESA to perform a “preliminary review based on limited information.”	
8	PFF 124. On or about May 4, 2016, the City Council approved ESA’s retention, a final contract was signed, and an SOW for ESA’s work was attached to the contract.	TX0062.0001 (May 4, 2016 Contract and Final SOW)
9		
10	PFF 125. Rather than the two-phased approach ESA proposed, which would have incorporated modeling, the City requested and ESA provided only a “preliminary review based on limited information.”	Tr. 109:22-24 (Evans, [ESA])
11		
12	PFF 126. Ms. Brown acknowledged that as of the day the ESA contract with the City was signed, she knew the City wanted a report that would support a coal ban, and she so informed her colleagues at ESA.	Tr. 99:22-100:11 (Brown [ESA]); TX0042.0001 (May 4, 2016 internal ESA email)
13		
14		
15	PFF 127. Victoria Evans was ESA’s Project manager for the OBOT matter, and like Ms. Brown, Ms. Evans understood the City wanted a report that would support a coal ban.	Tr. 110:8-111:9 (Evans [ESA])
16		
17	PFF 128. On May 3, 2016, BAAQMD wrote to the City and expressed that it was “very interested in being involved in [ESA’s] study.” BAAQMD further stated:	TX0136.0001 (May 3, 2016 email from BAAQMD to City); Tr. 476:9-14 (Cappio)
18		
19	The Air District continues to be interested in this study and offers our expertise to ensure potential air quality impacts are appropriately evaluated in the study. However, it would appear that due to the contract’s short timeline, the only way for the Air District to be involved at this point would be to comment on the public draft study report, due to be released for public comment on June 10, 2016. I have asked Heather to add my name to the OBOT interested parties email list to help ensure the Air District receives a copy of the study report in time to provide written comments.	
20		
21		
22		
23		
24		
25	PFF 129. ESA had two meetings with BAAQMD concerning ESA’s review. BAAQMD never indicated that it would not issue a permit to OBOT, <i>i.e.</i> , that a ban was required.	Tr. 112:9-14 (Evans [ESA])
26		
27	PFF 130. No draft of the ESA Report was released to BAAQMD or the public until the final ESA Report was disseminated on June 24,	Tr. 476:15-22 (Cappio)
28		

1	2016.	
2	PFF 131. ESA did not find that if BAAQMD issued a permit, operations at the Terminal would still be dangerous.	Tr. 112:6-8, 15-21 (Evans [ESA])
3	PFF 132. The SOW attached to the contract between ESA and the City states the following:	TX0062.0028 (May 4, 2016 Contract and Final SOW)
4	This is not a CEQA review, and is not limited to CEQA topics or the use of regulatory standards as significance criteria, but rather will consider the public comments as they may apply to health and/or safety effects, regardless of whether the mechanisms for these effects, are fully understood or documented in peer-reviewed scientific sources.	
5		
6		
7		
8	PFF 133. Ms. Cappio did not “like” the foregoing language because “substantial evidence required expert analysis that is based on evidence and data so that the mechanisms are appropriately documented and peer reviewed.”	Tr. 474:6-19 (Cappio)
9		
10		
11	5. The City Council votes to pass the Ordinance three days after the ESA Report is released.	
12		
13	PFF 134. Simultaneously with the approval of the ESA contract, Oakland City Council Member Rebecca Kaplan initiated a process that resulted in the scheduling of a “special” City Council meeting on Monday, June 27, 2016.	Tr. 474:20-475:8 (Cappio)
14		
15	PFF 135. This schedule permitted the ESA Report to be made public only three calendar days before the meeting, on Friday, June 24, 2016.	Tr. 475:2-8 (Cappio)
16		
17	PFF 136. In reaction to the three day notice, ESA employee Ms. Brown wrote to her colleagues: “The City is not leaving a public comment period other than those 3 days. Yep..that’s crazy to do, but the opponents and Council are MORE interested in getting the report done so the Council can ACT/VOTE (BAN).”	TX0042.0001 (May 4, 2016 internal ESA email); Tr. 99:7-21 (Brown [ESA])
18		
19		
20		
21	PFF 137. Sabrina Landreth, the Oakland City Administrator, was responsible for approving the June 23, 2016 Agenda Report, which the City Clerk then disseminated to the City Council and public. That Agenda Report attached, among other things, the ESA Report and a report by Dr. Zoe Chafe prepared for Councilmember Dan Kalb.	Landreth Dep. 5:18-20, 76:10-17
22		
23		
24	PFF 138. City Administrator Landreth is unfamiliar with BAAQMD and the role it will play with respect to the Terminal, and she had no knowledge of the contents of the Chafe report.	Landreth Dep. 84:2-11, 118:4-13, 119:19-23
25		
26	PFF 139. On June 24, 2016, the City Council received the June 23, 2016 Agenda Report and its corresponding attachments, including the ESA Report, Chafe report, and drafts of the Ordinance and	Tr. 476:15-477:2 (Cappio); Landreth Dep. 128:8-15,
27		
28		

1	Resolution. June 24, 2016 was a Friday, and June 27, 2016 was a Monday.	129:4-11, 130:3-11
2	PFF 140. The HDR Report, which was prepared for and submitted to the City by OBOT, was not provided to the City Council.	Landreth Dep. 128:8-15, 129:4-11, 130:3-11
3		
4	PFF 141. ESA received no questions from City Staff or the City Council after it submitted its report on June 23, 2016.	Tr. 118:1-3 (Evans [ESA])
5	PFF 142. A public hearing was held on June 27, 2016. The City Council did not ask any questions about Table 5-7 in the ESA Report, or its analog in the June 24, 2016 Agenda Report, during the hearing.	TX0640, AR0030 (June 27, 2016 Transcript)
6		
7		
8	PFF 143. OBOT was allotted 1-2 minutes of time to speak at the June 27, 2016 hearing.	Tr. 284:4-19 (McClure)
9		
10	PFF 144. Gregory McConnell spoke on behalf of OBOT, stating that OBOT was “disappointed” that the ESA Report was not made public until Friday, June 24, and that the June 23, 2016 Agenda Report recommending a coal ban was drafted and dated “the same day” as ESA’s report. He stated: “we don’t know how you received the report and studied the report and made recommendations on a report if you got it all at the same time.”	TX0640, AR0030 at OAK033675-77 (June 27, 2016 Transcript)
11		
12		
13		
14	PFF 145. On June 27, 2016, three calendar days after receiving the June 23, 2016 Agenda Report and attachments (including the ESA Report, Chafe report and draft Ordinance and Resolution), the City Council voted to pass the Ordinance and ban coal at the Terminal.	TX0004.0001 (Ordinance)
15		
16	PFF 146. On June 27, 2016, the City Council passed the Resolution applying the Ordinance to the Terminal.	TX0598.0001 (Resolution)
17		
18	PFF 147. No changes to the draft Ordinance and Resolution that were circulated to the City Council on June 24, 2016 were made by the City Council.	<i>Compare</i> TX0976.0210 (draft Ordinance) <i>with</i> TX0004.0001 (Ordinance); <i>Compare</i> TX0976.0200 (draft Resolution) <i>with</i> TX0598.0001 (Resolution)
19		
20		
21		
22		

There was No Finding that Pre-Existing Laws were Inapplicable or Insufficient to Prevent a Substantial Danger

OBOT Proposed Finding of Fact (“PFF”)	Supporting Evidence
PFF 148. The only “finding” in the Ordinance regarding pre-existing local, state and federal laws is the following “whereas” clause on page two:	TX0004.0002 (Ordinance)

1	“WHEREAS, based upon its independent evaluation of the	
2	evidence, the City has determined that pre-existing local, state	
3	and/or federal laws are inapplicable and/or insufficient to protect	
4	and promote the health, safety and/or general welfare of citizens,	
	residents, workers, employers and/or visitors (hereafter called	
	“Constituents’’) . . .”	
5	PFF 149. The only “finding” in the Resolution regarding pre-	TX0598.0005
6	existing local, state and federal laws is the following “whereas”	(Resolution)
7	clause on page five:	
8	“WHEREAS, based upon its independent evaluation of the	
9	evidence, the City has determined that pre-existing local, state	
10	and/or federal laws are inapplicable and/or insufficient to protect	
11	and promote the health and safety of the City’s citizens, residents,	
	workers, employers and/or visitors (hereafter called	
	“Constituents”), and for such reasons (among others) has	
	introduced the Coal-Coke Ordinance and, by the adoption of this	
	Resolution resolves to apply the Coal-Coke Ordinance to the	
	Project Facilities and Tenants . . .”	
12	PFF 150. Neither the Ordinance nor the Resolution stated that pre-	TX0004.0002
13	existing local, state and federal laws were inapplicable or	(Ordinance);
14	insufficient to prevent a substantial danger to the health and safety	TX0598.0005
	of adjacent neighbors of the OBOT terminal.	(Resolution)
15	PFF 151. Neither the Ordinance, the Resolution, the June 23, 2016	TX0004.0002
16	Agenda Report, the ESA Report, or Chafe Report state that	(Ordinance);
17	regulation by BAAQMD and/or OSHA of the Terminal would	TX0598.0005
18	permit a substantial danger to the health and safety of adjacent	(Resolution);
19	neighbors.	TX0976.0001 (June 23,
20		2016 Agenda Report);
21		Tr. 112:15-21, 115:16-23
		(Evans [ESA]);
		TX0596.0020 (ESA
		Report)
22	PFF 152. At least one existing manufacturing facility in Oakland	Tr. 39:20-24 (Cashman);
23	burns and handles coal and petcoke. The petcoke arrives at this	TX0976.0004 (June 23,
	facility via railcar.	2016 Agenda Report)
24	PFF 153. The Ordinance exempts manufacturing “facilities” that	TX0004.0010 at
25	“consume[]” coal or petcoke so long as they are “operated pursuant	8.60.040(C) (Ordinance)
26	to, and consistent with, permits granted by [BAAQMD].”	
27	PFF 154. The manufacturing facility exemption required a	Tr. 481:18-482:21
28	BAAQMD permit to make sure that public health and safety were	(Cappio);
	protected.	TX0004.0010 at
		8.60.040(C) (Ordinance)

1	PFF 155. Nothing in the record before the City Council or at trial established that BAAQMD could safely regulate manufacturing facilities that store, handle and consume coal and petcoke but could not safely regulate a terminal handling coal or petcoke.	
2		
3		
4	PFF 156. The ESA Report did not address BAAQMD permitting requirements.	Tr. 235:22-236:24 (Evans [ESA])
5		
6	PFF 157. The June 23, 2016 Agenda Report noted that BAAQMD was considering additional regulations regarding particulate matter from coal and coke, but did not find the adoption of such new regulations was required to prevent a substantial danger to adjacent neighbors.	TX0976.0005, n. 1 (June 23, 2016 Agenda Report)
7		
8	PFF 158. Neither ESA nor Dr. Chafe compared the potential PM2.5 concentration levels that could be caused by the Terminal to regulatory thresholds set by CEQA, BAAQMD, or EPA.	Tr. 624:24-625:8 (Chafe); Tr. 210:10-211:18 (Evans [ESA])
9		
10		
11	PFF 159. Ms. Cappio did not reach a determination that BAAQMD's rules and regulations were inadequate to ensure adequate air quality with respect to the Terminal.	Tr. 478:8-12 (Cappio)
12		
13	PFF 160. Ms. Cappio had no reason to think that BAAQMD would enforce EPA standards in a way that would permit a substantial danger to the people of the City of Oakland.	Tr. 478:13-16 (Cappio)
14		
15	PFF 161. Ms. Cappio had no answer for why the City did not adopt an ordinance with PM limits in it, as opposed to imposing a complete ban on coal transport.	Tr. 478:17-20 (Cappio)
16		
17	PFF 162. Ms. Cappio did not reach a determination that OSHA's rules and regulations would be inadequate to ensure worker's safety at the Terminal.	Tr. 481:1-4 (Cappio)
18		
19	PFF 163. Compliance with OSHA standards, which will be required at the Terminal, will protect workers. No contrary evidence was submitted to the City or presented during trial.	TX0149.0007 (Oct. 6, 2015 OBOT Response to City Questions); Tr. 398:16-399:10 (Maier [OBOT expert])
20		
21		
22		
23	PFF 164. The June 23, 2016 Agenda Report recited that the City Council adopted the 2012 Initial Study/Addendum and SCA/MMRPs.	TX0976.0002 (June 23, 2016 Agenda Report); Tr. 50:1-10 (Ranelletti)
24		
25	PFF 165. The BAAQMD thresholds used by the City for the 2012 2012 Initial Study/Addendum were the same (and only) thresholds the City used in the June 23, 2016 Agenda Report.	TX0976.0012 at n. 9 (June 23, 2016 Agenda Report)
26		
27	PFF 166. Neither the Ordinance, Resolution, June 23, 2016 Agenda Report, ESA Report, or Chafe Report states that compliance with	TX0004.0001 (Ordinance);
28		

<p>1 BAAQMD thresholds would result in a substantial danger to the 2 health and safety of adjacent neighbors.</p>	<p>TX0598.0001 (Resolution); TX0976.0001 (June 23, 2016 Agenda Report); TX0596.0001 (ESA Report)</p>
<p>5 PFF 167. Neither the Ordinance, Resolution, June 23, 2016 Agenda 6 Report, ESA Report, or Chafe Report addresses the requirements of 7 the SCA/MMRPs in the context of substantial danger.</p>	<p>TX0004.0001 (Ordinance); TX0598.0001 (Resolution); TX0976.0001 (June 23, 2016 Agenda Report); TX0596.0001 (ESA Report); Tr. 627:2-6, 628:4-11, (Chafe)</p>
<p>12 PFF 168. Neither the Ordinance, Resolution, June 23, 2016 Agenda 13 Report, or the ESA Report contained a finding that the City's review 14 and approval rights with respect to the SCA/MMRPs required 15 criteria pollutant reduction program were insufficient to protect 16 against a substantial danger to the health and safety of adjacent 17 neighbors.</p>	<p>TX0004.0001 (Ordinance); TX0598.0001 (Resolution); TX0976.0001 (June 23, 2016 Agenda Report); TX0596.0001 (ESA Report)</p>
<p>17 PFF 169. After OBOT's statement that it would agree to be 18 contractually bound to the restrictions in SCAMD Rule 1158 and 19 that these restrictions could be implemented in a building permit, the 20 City never pursued the possibility of regulating the terminal in 21 conformance with Rule 1158.</p>	<p>TX0149.0008 (Oct. 6, 2015 OBOT Response to City Questions); Tr. 480:7-25 (Cappio)</p>
<p>21 PFF 170. Ms. Cappio did not discuss Rule 1158 with anyone after 22 September 2015, including the City Council.</p>	<p>Tr. 480:7-25 (Cappio)</p>
<p>22 PFF 171. The ESA Report did not mention anything in its report 23 about Rule 1158, including OBOT's offer to be bound contractually 24 or in a building permit to Rule 1158's restrictions.</p>	<p>Tr. 112:4-8 (Evans [ESA]); TX0596.0001 (ESA Report)</p>
<p>25 PFF 172. Neither the Ordinance, Resolution, June 23, 2016 Agenda 26 Report, ESA Report, or Chafe Report states that compliance with 27 SCAMD Rule 1158 would result in a substantial danger to the health 28 and safety of adjacent neighbors.</p>	<p>TX0004.0001 (Ordinance); TX0598.0001 (Resolution); TX0976.0001 (June 23, 2016 Agenda Report);</p>

TX0596.0001 (ESA Report)

No Air Modeling Was Performed Despite Being Required to Assess the Risk of Potential Adverse Health Effects Associated with the Terminal

OBOT Proposed Finding of Fact (“PFF”)	Supporting Evidence
PFF 173. A “risk assessment” is the standard method used in the scientific community to evaluate potential health risks of exposure to PM2.5 coal emissions.	Tr. 388:7-14 (Maier [OBOT expert])
PFF 174. A risk assessment is necessary to make judgments about the level of potential risk of adverse health effects associated with exposure to PM2.5 coal emissions.	Tr. 390:20-391:21 (Maier [OBOT expert])
PFF 175. A risk assessment of potential health effects associated with the proposed Terminal <i>requires</i> consideration of the “dose,” <i>i.e.</i> the PM2.5 air concentration levels, that adjacent neighbors of the Terminal could be exposed to.	Tr. 601:6-9 (Moore [City expert]); Tr. 391:22-392:7 (Maier [OBOT expert])
PFF 176. There are two basic steps necessary to determine air concentration levels of PM2.5 adjacent neighbors of the Terminal could be exposed to: (1) emissions estimates; then (2) air quality modeling based on those emissions estimates.	Tr. 321:2-12 (Chinkin [OBOT expert])
PFF 177. Air quality modeling is required to determine that potential “dose” of exposure to PM2.5 air concentrations.	Tr. 322:19-323:6 (Chinkin [OBOT expert])
PFF 178. As Mr. Chinkin explained: [I]f you put your mouth on the tail pipe [of a car] and you just breathe all that air in, that’s the emissions coming out of the tail pipe. But if you move 10 feet away or 100 feet way or a mile away, you’re breathing air quality concentrations, and the only way to know how much you’re breathing would be to model how much of those emissions got to where you were and breathe that air.	Tr. 320:23-321:25 (Chinkin [OBOT expert])
PFF 179. No air quality modeling was presented in the June 23, 2016 Agenda Report, the ESA Report, the Chafe report, or in any other materials submitted to the City in connection with the passage of the Ordinance.	TX0596.0001 (ESA Report); TX0976.0001 (June 23, 2016 Agenda Report); Tr. 231:22-232:2 (Evans [ESA]); Tr. 624:2-10, 629:3-7 (Chafe); Tr. 601:20-25 (Moore

	[City expert]; Tr. 391:11-21 (Maier [OBOT expert])
--	--

BAAQMD is Tasked with Ensuring PM Emissions Are Within “Safe Limits.”

OBOT Proposed Finding of Fact (“PFF”)	Supporting Evidence
PFF 180. BAAQMD is tasked with ensuring any PM emissions from any facility in the Bay Area are within what it deems “safe limits.”	Tr. 30:13-23 (Cashman)
PFF 181. There are BAAQMD air monitors that do and will continue to measure PM _{2.5} concentrations in West Oakland. The data from those monitors is sent to EPA.	Tr. 593:15-594:7 (Moore [City expert])
PFF 182. There are air monitors at the West Gateway that measure on a daily basis PM emissions, including from nearby rail operations, which will continue to operate for the life of the 66-year ground lease.	Tr. 31:3-13, 33:7-13 (Cashman); Cole Dep. 196:11-18; TX1267.0006-7 (LDDA)
PFF 183. Trains carrying coal pass by the West Gateway on the nearby rail.	TX0848.0001 (Photo of coal trains near West Gateway); Tr. 281:8-17 (McClure); TX0098.0001 (Sept. 24, 2015 internal City email)
PFF 184. None of the trains carrying coal that passed by have caused an exceedance of the BAAQMD PM levels at the air monitors on the West Gateway.	TX0098.0001 (Sept. 24, 2015 internal City email); Cole Dep. 199:23-200:9
PFF 185. Before the construction and before the operation of the Terminal, an Authority to Construct and a Permit to Operate from BAAQMD must be obtained.	TX0149.0007 (Oct. 6, 2015 OBOT Response to City Questions); Tr. 60:17-22, 83:6-84:9 (Tagami); Tr. 235:22-236:16 (Evans [ESA]); Tr. 477:3-19 (Cappio); Tr. 332:23-333:3, 337:21-339:1, 339:12- 340:4 (Chinkin [OBOT expert])

1	PFF 186. Any new “stationary source” of air pollution, including the Terminal, is required to present emissions estimates to BAAQMD. BAAQMD compares these estimates to the CEQA thresholds.	Tr. 335:8-12 (Chinkin [OBOT expert])
2		
3		
4	PFF 187. If the emissions estimates are below the CEQA thresholds, the project is permitted to proceed. If the estimates exceed the CEQA thresholds, the applicant must submit air quality modeling to BAAQMD.	Tr. 335:13-18 (Chinkin [OBOT expert])
5		
6	PFF 188. BAAQMD will consider all potential emissions at or around the Terminal, irrespective of the specific source of emission.	Tr. 276:25-277:7 (McClure);
7		Tr. 324:16-21 (Chinkin [OBOT expert])
8		
9	PFF 189. BAAQMD uses the air quality modeling in two ways. First, the modeling results will be used to determine if the NAAQS may be exceeded due to the introduction of a new stationary source of air pollution.	Tr. 335:16-336:2, 336:13-17 (Chinkin [OBOT expert])
10		
11		
12	PFF 190. BAAQMD will not issue a permit to a facility whose operation would result in air concentration levels that exceed the NAAQS.	Tr. 332:17-22, 336:8-17, 340:17-343:14 (Chinkin [OBOT expert])
13		
14	PFF 191. There was no finding by the City that compliance with NAAQS would result in a substantial danger to the health and safety of adjacent neighbors of the Terminal.	TX0004.0001 (Ordinance);
15		TX0598.0001 (Resolution);
16		TX0976.0001 (June 23, 2016 Agenda Report)
17		
18	PFF 192. There is a threshold level for PM2.5 below which exposure will not cause harm to human health.	Tr. 604:22-605:1 (Moore [City expert]);
19		Tr. 396:13-397:17 (Maier [OBOT expert])
20		
21	PFF 193. While that “discernible” threshold is not currently known, EPA used the best scientific approach available to analyze PM2.5 and set NAAQS at a level which, if attained and maintained, will protect the public health, including sensitive sub-populations, with an adequate margin of safety.	TX0466.0006 (EPA’s NAAQS Federal Register);
22		Tr. 603:5-9, 605:10-16 (Moore [City expert])
23		Tr. 393:12-394:1, 394:9-18, 396:4-12 (Maier [OBOT expert])
24		
25		
26	PFF 194. In setting NAAQS for PM2.5, EPA performed a comprehensive and reliable risk assessment, taking into account (1) the potential health effects of PM2.5 exposure identified in the Ordinance; (2) the protection of sensitive subpopulations such as the	Tr. 575:11-19, 577:6-21, 584:12-585:15, 603:17-25, 604:1-6, 605:17-21 (Moore [City expert]);
27		
28		

1	elderly and children in West Oakland; and (3) the potential for adverse health effects at levels lower than the current standard.	Tr. 394:9-395:16, 397:18-398:15 (Maier [OBOT expert])
2		
3	PFF 195. If EPA later determines that a lower NAAQS for PM2.5 is appropriate, facilities including the Terminal would then be required to adhere to the new standard.	Tr. 605:22-25 (Moore [City expert]); Tr. 399:18-400:6 (Maier [OBOT expert])
4		
5		
6	PFF 196. The second way that BAAQMD uses air quality modeling results will be to determine if the new source would cause an unacceptable “increment” in pollution, irrespective of NAAQS.	Tr. 336:13-337:3 (Chinkin [OBOT expert])
7		
8	PFF 197. BAAQMD will not issue a permit to a facility that would cause an unacceptable increment in pollution.	Tr. 336:8-337:8, 340:17-343:14 (Chinkin [OBOT expert])
9		
10	PFF 198. The permitting process is an iterative, cooperative process between BAAQMD and an applicant, which starts with the presentation of a conceptual design for a facility to BAAQMD.	Tr. 333:24-334:11, 339:4-340:4 (Chinkin [OBOT expert])
11		
12	PFF 199. The applicant and BAAQMD then typically “have a dialogue” to discuss the design and construction aspects before a permit is issued or any development takes place.	Tr. 337:21-340:16 (Chinkin [OBOT expert])
13		
14	PFF 200. BAAQMD may condition the issuance of a permit on an applicant’s compliance with various restrictions, the simplest of which is a limitation on throughput.	Tr. 337:9-18, 344:4-23 (Chinkin [OBOT expert]) Tr. 236:15-24 (Evans [ESA])
15		
16		
17	PFF 201. ESA assumed a throughput of 5 million tons of coal annually.	Tr. 177:25-178:5 (Evans [ESA])
18		
19	PFF 202. At present, OBOT anticipates shipping 1 to 3 million metric tons of coal in the first few years of operation.	Tr. 68:12-17 (Tagami)
20		
21	PFF 203. If OBOT’s throughput were cut in half, its emissions would correspondingly be cut in half.	Tr. 337:13-18 (Chinkin [OBOT expert])
22		
23	PFF 204. If a BAAQMD construction or operation permit were issued, and the Terminal violated the terms of that permit, BAAQMD could shut down construction or operations.	Tr. 343:20-344:2 (Chinkin [OBOT expert]); Tr. 62:23-63:4 (Tagami)
24		
25		
26		
27		
28		

The City's PM2.5 Emissions Calculations Were Flawed

OBOT Proposed Finding of Fact ("PFF")	Supporting Evidence
1. The City's only contemporaneous estimate of PM2.5 emissions appears in Table 5-7 in the ESA Report.	
PFF 205. Table 5-7 in the ESA Report is the only quantification of purported PM2.5 emissions that may be caused by handling coal at the Terminal which appear in the ESA Report and in the Agenda Report sent to the City Council on June 24, 2016.	TX0596.0001 (ESA Report); TX0976.0001 (June 23, 2016 Agenda Report); Tr. 628:23-629:2 (Chafe)
PFF 206. Table 5-7 purports to estimate PM2.5 emissions associated with the Terminal. It appears at page 5-17 of the ESA Report, and is reprinted with no material variation in the Agenda Report sent to the City Council on June 24, 2016.	TX0596.0087 (ESA Report); TX0976.0012 (June 23, 2016 Agenda Report)
2. It is unclear what geographic region ESA considered in its emissions estimate.	
PFF 207. Table 5-7 is divided into two portions. The top portion purports to estimate emissions from "Rail Transport". The bottom portion relates to emissions estimates from "OBOT Operations". The rows in the top portion of Table 5-7 relate to purported emission estimates for various geographical areas: BAAQMD, Oakland, South Emeryville, and San Leandro.	TX0596.0087 (ESA Report)
PFF 208. The City Council was not instructed about which rows in Table 5-7, or which geographical areas, it should consider in evaluating "substantial danger" to "adjacent neighbors."	Tr. 482:23-483:2 (Cappio)
PFF 209. The "BAAQMD" geographic region accounts for the greatest amount of estimated emissions from Rail Transport in Table 5-7.	TX0596.0087 (ESA Report)
PFF 210. The "BAAQMD" district includes nine different counties within the Bay Area, and these nine counties cannot be considered "adjacent neighbors" of the Terminal.	Tr. 326:21-327:2, 335:21-336:4 (Chinkin [OBOT expert])
PFF 211. The record before the City Council did not reveal whether the geographic region called "Oakland" in Table 5-7 refers to neighborhoods adjacent of the Terminal, or some larger geographical area. ESA representative Ms. Evans testified that the "Oakland" region encompassed "about a mile and a half" of rail line, while the ESA Report states it is "about 3 miles" of rail line.	Tr. 198:18-199:14 (Evans [ESA]); TX0596.0074 (ESA Report)
3. ESA's estimate of PM2.5 emissions associated with "Rail Transport" was flawed.	
PFF 212. ESA's estimates for PM2.5 emissions associated with Rail Transport in "Oakland" were based on an assumption of a "constant rate" of emission from the mine in Utah until the coal is transferred	Tr. 200:7-11, 202:3-9 (Evans [ESA]); Tr. 544:8-16 (Sahu [City

1	to the dump pits in the Terminal at the West Gateway.	expert])
2	PFF 213. The only justification for this “constant rate” assumption offered at trial by ESA was that there was no other data available.	Tr. 202:3-204:4 (Evans [ESA])
3	PFF 214. The rate of emissions ESA assumed was a constant one pound per car per mile.	Tr. 177:12-178:8 (Evans [ESA])
4	PFF 215. This assumption was based on a 1993 article.	Tr. 177:12-178:8 (Evans [ESA]);
5		TX0440.0050, n.55
6		(Sept. 21, 2015
7		EarthJustice submission)
8		Tr. 346:1-4 (Chinkin [OBOT expert])
9	PFF 216. City expert Dr. Sahu also used a constant (although higher than ESA’s) rate of emissions when estimating PM2.5 emissions for Rail Transport in Oakland.	Tr. 567:23-568:2 (Sahu [City expert])
10	PFF 217. The rate of emissions varies. The rate varies depending on a variety of factors, including wind, mechanical stress, vibration stress, movement of the coal and train speed.	Tr. 567:8-22 (Sahu [City expert]);
11		Tr. 345:14-25 (Chinkin [OBOT expert]);
12		TX0596.0032, n.40
13		(ESA Report citing 2010 BNSF Study);
14		TX0516.0002 (2010 BNSF Study)
15	PFF 218. Ms. Evans testified that ESA did not have information regarding train speed or other factors (such as conditions during other portions of the trip from Utah) impacting potential emissions at the Terminal.	Tr. 202:15-23) (Evans [ESA])
16	PFF 219. The planned maximum speed for trains pulling rail cars containing coal at the Oakland Army Base is ten miles per hour.	Tr. 275:17-19 (McClure)
17	PFF 220. The RETAC minutes on which Dr. Sahu based his Rail Transport estimates do not refer to a constant rate of emissions.	Tr. 566:17-20 (Sahu [City expert])
18	PFF 221. The RETAC minutes on which Dr. Sahu based his Rail Transport calculations do not provide a sufficient basis to assess potential emissions for rail transport. The RETAC minutes refer to Powder River Basin coal, which is acknowledged to be dustier than the western bituminous coal that may be handled at the Terminal.	Tr. 566:17-23 (Sahu [City expert]);
19		Tr. 176:14-19, 179:8-180:5 (Evans [ESA])
20	PFF 222. The RETAC minutes on which Dr. Sahu based his Main Line Rail Transport calculations do not provide a sufficient basis to assess potential emissions at the Terminal because the loss of coal	Tr. 566:24-567:7 (Sahu [City expert])
21		
22		
23		
24		
25		
26		
27		
28		

1	reported in the RETAC minutes was for total weight lost, not coal	
2	dust emissions such as PM2.5 or PM10. There was no evidence	
3	presented that total weight loss is proportionate or bears any	
4	particular relationship to the rate of emissions.	
5	PFF 223. ESA also assumed that coal dust was being regenerated	Tr. 346:5-17 (Chinkin
6	during the entire 700 mile trip.	[OBOT expert])
7	PFF 224. This is contradicted by a BNSF study, cited in the ESA	TX0596.0032, n.40
8	Report, which stated after 500 miles of rail transport there were no	(ESA Report);
9	additional measurable emissions.	TX0516.0002 (2010
10		BNSF Study);
11		Tr. 346:18-347:9
12		(Chinkin [OBOT
13		expert])
14	PFF 225. The trip from Utah to Oakland is over 700 miles.	TX0596.0039 (ESA
15		Report)
16	4. ESA's estimate of PM2.5 emissions associated with "Staging" was flawed.	
17	PFF 226. Aside from the emissions estimate for the entire	TX0596.0087 (ESA
18	BAAQMD region, ESA's largest emissions estimate for PM2.5 for	Report)
19	Rail Transport are those for "Staging at the Port Railyard."	
20	PFF 227. Staging, in the context of the Terminal, involves breaking	Tr. 80:10-17 (Tagami);
21	up rail cars into four segments when they arrive at the site, and	TX0596.0080-81 (ESA
22	transporting those rail cars to the Terminal storage facility for	Report)
23	unloading.	
24	PFF 228. Staging associated with coal transport at the Terminal will	Tr. 276:21-24 (McClure)
25	be done on a combination of property owned by the Port of Oakland,	
26	and property leased from the City by OBOT.	
27	PFF 229. The entire area in which staging is done is subject to	Tr. 276:25-277:7
28	BAAQMD regulation.	(McClure);
		Tr. 324:16-21 (Chinkin
		[OBOT expert])
	PFF 230. ESA's PM2.5 emissions estimate in Table 5-7 for Staging	TX0596.0087 (ESA
	was "18" tons per year and "67" pounds per day.	Report)
	PFF 231. The "18" tons per year figure in Table 5-7 is a "typo"; the	Tr. 257:15-23 (Evans
	number should have been 11.7 according to ESA.	[ESA]);
		Tr. 366:23-367:5
		(Chinkin [OBOT
		expert])
	PFF 232. No explanation for this "typo" was offered at trial. There	
	is no evidence any City Staff or Councilmember asked about, or was	
	informed about, this "typo," or otherwise was made aware of this	

1	error in Table 5-7.	
2	PFF 233. City expert Dr. Sahu reached the exact same estimate as ESA for PM2.5 emissions from Staging, although he fixed ESA's "typo."	Tr. 559:16-21 (Sahu [City expert])
3		
4	PFF 234. Dr. Sahu attached the ESA spreadsheet for Staging to his own expert report in this litigation, and he did not change a single one of ESA's assumptions for estimating PM2.5 emissions from Staging.	Tr. 560:22-561:1 (Sahu [City expert])
5		
6	4(a). ESA's Use of EPA AP 42, and Section 13.2.5 therein, was flawed.	
7	PFF 235. ESA and Dr. Sahu used Section 13.2.5 of EPA's AP-42 to estimate PM2.5 emissions for Staging.	Tr. 352:13-353:7 (Chinkin [OBOT expert]); Tr. 563:9-11 (Sahu [City expert]);
8		
9		
10		
11	PFF 236. Evans offered no testimony regarding the reasons, if any, ESA used AP-42 Section 13.2.5 to make calculations for emissions during Staging.	
12		
13	PFF 237. Section 13.2.5 should not have been used to estimate emissions from Staging because it measures emissions from one wind gust, not for estimates of continuous, hour after hour emissions. Section 13.2.5 itself states: Calculated emissions represent intermittent events and should not be input directly into dispersion models that assume steady-state emission rates.	TX0435.0003 (13.2.5 Industrial Wind Erosion); Tr. 352:13-353:7 (Chinkin [OBOT expert]); Tr. 563:9-11 (Sahu [City expert])
14		
15		
16		
17		
18	PFF 238. Mr. Chinkin testified 13.2.5 of AP-42 should not be used to make calculations for emissions during Staging based on the foregoing reasons.	Tr. 351:3-352:1 (Chinkin [OBOT expert])
19		
20	PFF 239. Dr. Sahu testified under oath that AP-42 should not be used to estimate emissions for non-stationary, <i>i.e.</i> , moving, piles. During Staging, the rail cars are moving.	Tr. 563:12-17 (Sahu [City expert]); Tr. 80:18-81:5 (Tagami)
21		
22		
23	PFF 240. Nonetheless, like ESA, Dr. Sahu used AP-42 to calculate the emissions from Staging.	Tr. 564:9-11 (Sahu [City expert])
24	4(b). The inputs ESA used for Section 13.2.5 of EPA AP 42 were flawed.	
25	PFF 241. ESA and Dr. Sahu used a number of incorrect inputs in its application of Section 13.2.5 of EPA AP-42.	Tr. 354:8-14 (Chinkin [OBOT expert])
26		
27	PFF 242. The input that "drives", <i>i.e.</i> , has the largest impact on, the EPA Section 13.2.5 calculation for emissions from staging is "Threshold Friction Velocity."	Tr. 558:24-559:15 (Sahu [City expert]); Tr. 262:21-25 (Evans)
28		

	[ESA]	
1 2 3	PFF 243. “Threshold Friction Velocity” measures the minimum wind speed required, <i>i.e.</i> how hard you need to blow on a particle, in order to make it start moving.	Tr. 355:17-356:1 (Chinkin [OBOT expert])
4 5	PFF 244. A low threshold friction velocity means lower wind speeds are needed to start the particles of a material to move. A higher Threshold Friction Velocity means a higher wind speed is required to move the particles.	Tr. 356:3-13 (Chinkin [OBOT expert])
6 7 8 9	PFF 245. Table 13.2.5-2 provides several possible inputs for an emissions estimate made pursuant to AP 42, Section 13.2.5, including a number of choices for Threshold Friction Velocity.	TX0435.0005 (13.2.5 Industrial Wind Erosion); Tr. 357:5-13 (Chinkin [OBOT expert])
10 11 12	PFF 246. One choice in the Section 13.2.5 table for Threshold Friction Velocity is “uncrusted coal pile.” Another choice is “fine coal dust on a concrete pad.”	TX0435.0005 (13.2.5 Industrial Wind Erosion); Tr. 357:14-25 (Chinkin [OBOT expert])
13 14 15	PFF 247. “Uncrusted” in the context of Section 13.2.5 means a coal pile that was “active” in the sense that the material is being vibrated, shaken, added to, and subtracted from such that it never has a chance to form a crust.	Tr. 357:17-25 (Chinkin [OBOT expert])
16	PFF 248. An uncrusted coal pile is more susceptible to wind erosion than a crusted coal pile.	Tr. 358:1-5 (Chinkin [OBOT expert])
17 18 19 20	PFF 249. A Sept. 21, 2015 submission to the City by EarthJustice on behalf of the Sierra Club, submitted prior to and cited in the ESA Report, contained an emissions estimate for Staging.	TX0440.0072 (Sept. 21, 2015 Letter from EarthJustice); Tr. 191:2-11 (Evans [ESA])
21 22 23	PFF 250. The submission by EarthJustice used the Threshold Friction Velocity for “fine coal dust” – 0.54 – from Section 13.2.5 for its Staging emissions estimate.	TX0440.0072 (Sept. 21, 2015 Letter from EarthJustice); Tr. 133:10-22 (Evans [ESA])
24 25 26 27	PFF 251. In May 2016, prior to submitting the ESA Report to the City, Ms. Evans wrote that ESA was “nervous” using the EarthJustice emissions estimate and, further, she acknowledged that ESA did not have a sufficiently “detailed project description to use to even make revisions to these emissions estimates.”	TX0047.0001 (May 24, 2016 internal ESA email); Tr. 130:2-11 (Evans [ESA])

28

1	PFF 252. ESA nevertheless proceeded to make revisions to the emissions estimates submitted by EarthJustice.	Tr. 130:12-14 (Evans [ESA])
2	PFF 253. Ms. Evans asked her staff at ESA to “deconstruct” the air quality estimates contained in the EarthJustice submission, which had been done by Dr. Neimayer.	Tr. 132:21-133:7 (Evans [ESA]); TX0431.0001 (May 27, 2016 internal ESA email)
3		
4		
5	PFF 254. In response, ESA employees Tim Rimpo and Daniel Sloat informed Ms. Evans that the Threshold Friction Velocity for uncrusted coal pile was the “better choice” than the Threshold Friction Velocity for fine coal powder, which EarthJustice had used.	Tr. 258:15-259:8 (Evans [ESA])
6		
7		
8	PFF 255. Ms. Evans agreed and instructed her colleagues that the Threshold Friction Velocity for fine coal powder on a concrete pad should not be used, and that the uncrusted coal pile Threshold Friction Velocity should be used.	Tr. 134:14-135:8 (Evans [ESA])
9		
10		
11	PFF 256. Ms. Evans testified in her deposition that it was “obvious” to use the Threshold Friction Velocity values for uncrusted coal rather than the fine coal powder on a concrete pad.	Tr. 259:9-260:5 (Evans [ESA]) Evans Dep. 263:8-20
12		
13	PFF 257. Exhibit 432 is a June 6, 2016 ESA spreadsheet.	TX0432.0016 (June 6, 2016 ESA Emissions Calculations); Tr. 135:17-20 (Evans [ESA])
14		
15		
16	PFF 258. At page 432.0016, there are emissions estimates. ESA used “1.12” for the Threshold Friction Velocity, the value for uncrusted coal pile in Section 13.2.5. This resulted in an emissions estimate for Staging of 3.12 pounds of PM2.5 emissions per day.	TX0432.0016 (June 6, 2016 ESA Emissions Calculations); Tr. 253:10-15 (Evans [ESA])
17		
18		
19		
20	PFF 259. Because of a computation error in converting this 3.12 pounds per day to tons per year, ESA’s June 6, 2016 spreadsheet incorrectly reflects over 13 tons per year of PM2.5. If the conversion to tons per year is corrected in the June 6 spreadsheet, the correct value would be approximately 0.68 tons of PM2.5 emissions per year.	TX0432.0016 (June 6, 2016 ESA Emissions Calculations); Tr. 363:14-365:24 (Chinkin [OBOT expert])
21		
22		
23		
24	PFF 260. Ms. Evans wrote on June 6, 2016 that she was “going to incorporate” the emissions estimates from the June 6 spreadsheet – which used “1.12” for the Threshold Friction Velocity and resulted in 0.68 tons of PM2.5 emissions per year – into the “health section” of the ESA Report.	TX0432.0001 (June 6, 2016 ESA Emissions Calculations); Tr. 252:23-253:1 (Evans [ESA])
25		
26		
27		
28		

<p>PFF 261. Had the Threshold Friction Velocity input for uncrusted coal pile been used, the emissions estimates in ESA Table 5-7 would have been those from the June 6, 2016 spreadsheet: 3.12 pounds per day and 0.68 tons per year.</p>	<p>Tr. 262:5-25 (Evans [ESA])</p>
<p>PFF 262. Exhibit 433 is an excel spreadsheet produced by ESA in this litigation. The metadata for this spreadsheet shows that it was created on June 21, 2016.</p>	<p>TX0433.0003 (June 21, 2016 ESA Emissions Calculations); Tr. 252:23-253:1, 256:15-257:7 (Evans [ESA])</p>
<p>PFF 263. Exhibit 433 appears to be the latest spreadsheet produced by ESA in this litigation.</p>	
<p>PFF 264. The June 21, 2016 ESA spreadsheet assigns a Threshold Friction Velocity of “0.54” – the value assigned to fine coal dust on a concrete pad in the table in Section 13.2.5 – as contrasted with the Threshold Friction Velocity of the June 6, 2016 spreadsheet (Exhibit 432) of “1.12” – the value assigned to uncrusted coal powder in the table in Section 13.2.5.</p>	<p>TX0433.0006 (June 21, 2016 ESA Emissions Calculations); Tr. 257:5-7 (Evans [ESA]); Tr. 366:3-22 (Chinkin [OBOT expert]) TX0432.0016 (June 6, 2016 ESA Emissions Calculations)</p>
<p>PFF 265. Using the Threshold Friction Velocity for fine coal dust on a concrete pad, ESA arrived at the staging values contained in Table 5-7, namely 66.69 pounds of PM2.5 a day, and 11.67 tons of PM2.5 per year (after correction for a typographical error).</p>	<p>TX0433.0006 (June 21, 2016 ESA Emissions Calculations); Tr. 257:8-19 (Evans [ESA]); Tr. 366:23-367:5 (Chinkin [OBOT expert])</p>
<p>PFF 266. The emissions calculations in the June 21, 2016 spreadsheet are the same as the emissions estimates in Table 5-7.</p>	<p>TX0433.0006 (June 21, 2016 ESA Emissions Calculations); TX0596.0087 (ESA Report); Tr. 257:20-23 (Evans [ESA])</p>
<p>PFF 267. Neither Ms. Evans nor the City Ms. Evans offered any meaningful explanation to account for the decrease in the Threshold Friction Velocity from 1.12 on June 6, 2016 to 0.54 on June 21, 2016, and the corresponding increase in emissions from 0.68 tons of PM2.5 on June 6, 2016 to 11.67 tons of PM2.5 on June 21, 2016 and</p>	<p>Tr. 260:6-261:16 (Evans [ESA])</p>

1	in Table 5-7 of final ESA Report.	
2	PFF 268. As discussed in Section H(7), below, the City has asserted attorney client privilege and work product protections regarding	<i>Supra</i> Section H(7);
3	ESA's communications with City representatives, including during	D.E. 204
4	the June 6 to June 21, 2016 timeframe when ESA changed its emissions estimates.	
5	PFF 269. Dr. Sahu accepted and used ESA's values for Threshold Friction Velocity (0.54), wind, and all other inputs used by ESA.	Tr. 559:16-21 (Sahu [City expert])
6	PFF 270. Dr. Sahu did not address Threshold Friction Velocity in any of his expert reports, despite Mr. Chinkin's opening report	Tr. 561:7-14 (Sahu [City expert])
7	having been served on the same day as Dr. Sahu's opening report and, therefore, prior to Dr. Sahu's rebuttal report.	
8	PFF 271. Dr. Sahu testified that he made no comment on Threshold Friction Velocity in this Report because he only commented on ESA inputs where he "disagreed" with ESA.	Tr. 561:10-14 (Sahu [City expert])
9	PFF 272. Contrary to this testimony by Dr. Sahu, there are at least three places in Dr. Sahu's opening report in which he commented on	Tr. 562:6-563:4 (Sahu [City expert])
10	ESA inputs that he agreed with.	
11	PFF 273. It was incorrect for ESA to use the Threshold Friction Velocity for fine coal dust on a concrete pad when estimating PM2.5 emissions associated with Staging at the Terminal.	Tr. 358:10-16, 359:17-25 (Chinkin [OBOT expert]).
12	PFF 274. Coal piled in a rail car is not like the fine coal dust on a concrete pad evaluated in the "Reference" for fine coal dust on a concrete pad in Section 13.2.5.	Tr. 358:14-25 (Chinkin [OBOT expert]).
13	PFF 275. The "Reference" listed for fine coal dust on a concrete pad in Section 13.2.5 is a study by Greg Muleski.	TX0435.0005, 0014 (13.2.5 Industrial Wind Erosion); TX1085.0001 (Muleski Midwest Research Institute Report); Tr. 359:5-18 (Chinkin [OBOT expert])
14	PFF 276. A review of the Muleski study, and a conversation with Mr. Muleski, informed Mr. Chinkin's opinion that the use of the Threshold Friction Velocity for fine coal dust on a concrete pad was incorrect.	Tr. 360:1-12 (Chinkin [OBOT expert])
15	PFF 277. The Muleski study was a "wind tunnel experiment," in which a small cage is placed over a substance and wind is blown across it. The amount of material that is lofted is then measured.	Tr. 361:1-7 (Chinkin [OBOT expert])
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		

<p>PFF 278. To obtain the Threshold Friction Velocity for fine coal dust on a concrete pad, Muleski did a wind tunnel experiment on fine coal dust that had fallen from a conveyor system, and then had been crushed under heavy equipment.</p>	<p>TX1085.0001 (Muleski Midwest Research Institute Report); Tr. 360:13-25 (Chinkin [OBOT expert])</p>
<p>PFF 279. The Threshold Friction Velocity for fine coal dust on a concrete pad that resulted from the foregoing experiment was the lowest Muleski had ever seen in his career.</p>	<p>Tr. 361:8-11 (Chinkin [OBOT expert])</p>
<p>PFF 280. The “Reference” listed for uncrusted coal pile in Section 13.2.5 is a study by Kenneth Axtell, Jr.</p>	<p>TX0435.0005, 0014 (13.2.5 Industrial Wind Erosion); TX0982.0001 (Axtell Industrial Environmental Research Lab Report); Tr. 361:12-24 (Chinkin [OBOT expert])</p>
<p>PFF 281. The authors of the Axtell study were specifically trying to understand emissions from an active moving pile which was being moved, subtracted from and added to.</p>	<p>TX0982.0001 (Axtell Industrial Environmental Research Lab Report); Tr. 361:22-362:12 (Chinkin [OBOT expert])</p>
<p>PFF 282. Because the substance supporting the Threshold Friction Velocity for uncrusted coal pile was an “active” coal pile, it is most representative of the coal piled onto a rail car.</p>	<p>TX0982.0001 (Axtell Industrial Environmental Research Lab Report); Tr. 361:22-362:16 (Chinkin [OBOT expert])</p>
<p>PFF 283. Mr. Chinkin’s review of the Muleski and Axtell references, and his conversation with Mr. Muleski, informed his opinion that the Threshold Friction Velocity for uncrusted coal pile was the correct choice for evaluating the proposed Terminal.</p>	<p>Tr. 361:22-362:5 (Chinkin [OBOT expert])</p>
<p>PFF 284. The Threshold Friction of Velocity value for uncrusted coal powder in the Table in Section 13.2.5 is 1.12.</p>	<p>TX0435.0005 (13.2.5 Industrial Wind Erosion)</p>
<p>PFF 285. The Threshold Friction of Velocity value for fine coal dust in the Table in Section 13.2.5 is 0.54.</p>	<p>TX0435.0005 (13.2.5 Industrial Wind Erosion); Tr. 366:9-18 (Chinkin [OBOT expert])</p>

<p>PFF 286. If the Threshold Friction Velocity for uncrusted coal pile were used instead of fine coal dust on a concrete pad, ESA Table 5-7's values for "staging" would be 3.12 pounds per day of PM2.5 instead of 67 pounds per day, and 0.68 tons per year of PM2.5 instead of 18 tons per year (which, when corrected for a "typo," should have read 12 tons per year).</p>	<p>TX0596.0087 (ESA Report); TX0432.0016 (June 6, 2016 ESA Emissions Calculations); Tr. 366:23-367:5 (Chinkin [OBOT expert]); Tr. 256:11-14, 257:15-19 (Evans [ESA])</p>
<p>PFF 287. Neither ESA nor the City took into account that surfactant could be applied to the trains as they entered the Port Railyard, which would have further reduced the emissions estimates for Staging (<i>i.e.</i>, 11.67 tons of PM2.5 in the June 21 spreadsheet and the Final ESA Report [after the typo is corrected] or .68 tons of PM2.5 in the June 6 spreadsheet [after the calculation error is corrected]).</p>	<p>Tr. 129:13-20, 185:14-186:8 (Evans [ESA])</p>
<p>PFF 288. OBOT and TLS stated they would agree to be contractually bound by SCAQD Rule 1158, which contemplates the application of surfactants during the transport and handling of coal.</p>	<p>TX0149.0008 (Oct. 6, 2015 OBOT Response to City Questions); TX0453.0005, ¶ (d)(2)-(4) (SCAQD Rule 1158); Tr. 277:21-278:2 (McClure)</p>
<p>PFF 289. Bowie is willing to apply surfactant to the rail cars it uses to ship coal to the Terminal.</p>	<p>Wolff Tr. 247:13-18</p>
<p>PFF 290. Bowie "contours" coal on rail cars to have a "profile" to prevent coal from falling off of its rail cars, and has experienced no material loss during its transport of coal.</p>	<p>Wolff Tr. 222:18-19, 222:23-223:3, 253:5-8, 253:12-13, 253:17-20, 253:23-254:1; Tr. 303:1-7 (Buccolo [OBOT expert])</p>
<p>PFF 291. The City's railroad expert confirmed that shaping coal in "bread loafing" form, and applying surfactants, can mitigate coal dust emissions.</p>	<p>Tr. 667:13-668:7 (Sullivan [City expert])</p>
<p>PFF 292. Repeat applications of surfactant over the course of coal transport have been used elsewhere.</p>	<p>TX0596.0036-39 (ESA Report)</p>
<p>PFF 293. ESA chose not to apply any suppression rate for surfactant in Table 5-7, even though Ms. Evans testified that ESA had no basis to disagree with a BNSF study cited in the ESA Report that found a 75-93% suppression rate from surfactant at the time of application.</p>	<p>TX0596.0039-40 (ESA Report); Tr. 118:12-18 (Evans [ESA])</p>
<p>PFF 294. Had these rates for surfactant at the time of applications</p>	<p>TX0596.0087 (ESA</p>

1 2 3 4 5 6	<p>been used for Staging at the Port Railyard, it would have resulted in emissions estimates of:</p> <ul style="list-style-type: none"> • 2.92 tons of PM2.5 per year (11.67 x 25%); • 0.82 tons of PM2.5 per year (11.67 x 7%); • 0.17 tons of PM2.5 per year (0.68 x 25%); • 0.05 tons of PM2.5 per year (0.68 x 7%) 	<p>Report); Tr. 256:11-14, 257:15-19 (Evans [ESA]) TX0432.0016 (June 6, 2016 ESA Emissions Calculations); Tr. 366:23-367:5 (Chinkin [OBOT expert])</p>
7 8 9	<p>PFF 295. In Table 5-5 of the ESA Report, ESA used an assumed value of 85% for the efficacy of surfactant. This resulted in a value of 2 tons of PM2.5 annually for Staging (based on the 11.67 tons that ESA calculated for uncontrolled Staging emissions).</p>	<p>TX0281.0081 (ESA Report); Tr. 119:3-14 (Evans [ESA])</p>
10 11	<p>PFF 296. ESA did not reflect this 2 ton per year value in its Table 5-7, nor was this value reflected in the June 24, 2016 Agenda Report sent to the City Council.</p>	<p>TX0596.0087 (ESA Report); TX0976.0012 (June 23, 2016 Agenda Report)</p>
12 13	<p>PFF 297. OBOT testified that it would be willing to agree to only accept coal arriving in covered rail cars at the Terminal.</p>	<p>Tr. 65:24-66:3 (Tagami)</p>
14 15	<p>PFF 298. Bowie is willing to install cover for rail cars used to ship coal to the Terminal.</p>	<p>Wolff Tr. 222:6-7, 222:10-11</p>
16 17	<p>PFF 299. Such an agreement would be enforceable through a contractual arrangement between OBOT and the City.</p>	<p>Tr. 66:4-11 (Tagami); TX0149.0008-09 (Oct. 6, 2015 OBOT Response to City Questions)</p>
18 19	<p>PFF 300. SCAMD Rule 1158 contemplates covering rail cars containing coal.</p>	<p>TX0453.0008, ¶ 12 (SCAQD Rule 1158)</p>
20 21	<p>PFF 301. The City's railroad expert assumed rail cars carrying coal would be covered in assessing anticipated rail operations at or near the Terminal.</p>	<p>Tr. 664:1-6 (Sullivan [City expert])</p>
22 23 24	<p>PFF 302. Covered rail cars are currently used to transport lignite coal.</p>	<p>Tr. 663:21-25 (Sullivan [City expert]); Tr. 296:18-297:9, 298:8-299:3 (Buccolo [OBOT expert]);</p>
25 26 27	<p>PFF 303. ESA acknowledges that only a small amount of dust is expected to escape from covered rail cars.</p>	<p>Tr. 120:18-121:19 (Evans [ESA]); Tr. 299:11-22 (Buccolo [OBOT expert])</p>
28	<p>PFF 304. In their October 6, 2015 response to the City, OBOT and</p>	<p>TX0149.0008 (Oct. 6,</p>

1 2	TLS proposed use of third-party “Ecofab” rail car covers for coal. The response listed commodities that Ecofab had provided rail car covers for other than coal.	2015 OBOT Response to City Questions)
3 4	PFF 305. On May 23, 2016, ESA wrote an email to Ecofab, inquiring about the use of Ecofab rail covers for coal cars. Nothing in the email from ESA informed Ecofab why ESA was inquiring.	TX0057.0003 (May 23-24, 2016 email exchange)
5 6 7 8 9	PFF 306. Ecofab responded by email on May 24, 2016, writing: Our covers have not been specifically tested for coal transport, however the same cover has been used to protect the environment from dusty toxic materials for over 40 years. Although there is no hermetic seal our cover effectively contains all dust. Since our inception, our covers have travelled well over a billion miles cover toxic materials.	TX0057.0003 (May 23-24, 2016 email exchange)
10 11 12	PFF 307. The City told ESA to accept Ecofab’s email as evidence that rail covers had not been used for coal cars.	Tr. 123:18-25 (Evans [ESA]); TX0057.0001 (May 23-24, 2016 email exchange)
13 14 15 16 17	PFF 308. On June 20, 2016, Ecofab wrote a lengthier response, in which it stated: Ecofab has provided covers for many commodities over its 40-plus-year tenure, serving customers who ship by rail. Many of these commodities are significantly toxic or radioactive. Yet in the billions of miles traveled, there has never been an incident of dusting reported or radioactive material exposed to the environment or the public.	TX0221.0001-02 (June 20, 2016 email from Ecofab); Tr. 124:1-25 (Evans [ESA])
18 19 20	PFF 309. The City never asked ESA to determine whether Ecofab had in fact used covers for the materials listed in OBOT’s October 6, 2015 submission, or whether those materials were similar to coal.	Tr. 483:12-484:6 (Cappio); Tr. 125:1-11 (Evans [ESA])
21 22 23	PFF 310. The ESA Report did not state that Ecofab covers had been used with radioactive or toxic waste for billions of miles of shipments with no dusting occurring.	Tr. 125:12-18 (Evans [ESA]); TX0596.0001 (ESA Report)
24 25	PFF 311. ESA did not conclude that covers for coal cars are not feasible; rather, ESA simply determined that they could not confirm that covers on coal cars would work.	Tr. 125:19-22 (Evans [ESA])

5. ESA's decision not to consider control measures was flawed.	
<p>PFF 312. The calculations at 432.0005 in the June 6, 2016 ESA spreadsheet are divided into two separate portions. The top half states that it represents uncontrolled emissions estimates from OBOT operations. The bottom half states that it represents controlled emissions, showing numbers that are reduced by approximately 90%.</p>	<p>TX0432.0005 (June 6, 2016 ESA Emissions Calculations); Tr. 369:17-370:24 (Chinkin [OBOT expert]); Tr. 135:21-136:12 (Evans [ESA])</p>
<p>PFF 313. Table 5-6 and 5-7 in the ESA Report used the numbers from the top half of 432.0005, which represents ESA's estimates for the uncontrolled emissions from the OBOT operations, that is, the emissions before the application of Best Available Control Technologies," or "BACT".</p>	<p>Tr. 371:12-372:8 (Chinkin [OBOT expert]); TX0596.0083, .0087 (ESA Report)</p>
<p>PFF 314. Table 5-6 in the ESA Report states that it represents "Estimates of Controlled Fugitive Coal Dust Emissions," despite its use of the numbers from the section in from the top half of 432.0005 for uncontrolled emissions from the OBOT operations.</p>	<p>TX0596.0083 (ESA Report); TX0432.0005 (June 6, 2016 ESA Emissions Calculations)</p>
<p>PFF 315. OBOT and TLS intend to develop and construct a state-of-the-art Terminal that will implement BACT, using the newest available technologies and protective measures.</p>	<p>Tr. 76:1-77:11 (Tagami); TX0149.0009 (Oct. 6, 2015 OBOT Response to City Questions); TX0596.0082-84 (ESA Report)</p>
<p>PFF 316. The use of BACT at the Terminal will be required by BAAQMD.</p>	<p>Tr. 344:4-23 (Chinkin [OBOT expert])</p>
<p>PFF 317. Coal would be unloaded from the bottom of the rail cars pulled by OGRE over "dumper pits," and bottom outlet gates will be used on these rail cars to prevent the release of fugitive coal dust.</p>	<p>Tr. 275:20-276:1 (McClure); Wolff Dep. 220:14-17, 220:19-20, 256:11-13, 256:16-17; Tr. 304:14-22 (Buccolo [OBOT expert])</p>
<p>PFF 318. Proper maintenance of the bottom outlet doors on rail cars, use of air brakes, and continuous rail car movement will prevent fugitive coal dust, which City expert Mr. Sullivan did not address.</p>	<p>Tr. 300:8-301:5, 304:23-25 (Buccolo [OBOT expert]); Tr. 665:11-16, 666:10-20 (Sullivan [City expert])</p>

1	PFF 319. City rail expert Mr. Sullivan testified that coal dust “does escape from the top and from the bottom” of rail cars, but Mr. Sullivan admitted that he is not an expert in estimating emissions.	Tr. 657:23-658:6, 664:7-15 (Sullivan [City expert])
2		
3	PFF 320. Mr. Sullivan cited a BNSF Study to support his testimony regarding the escape of coal dust, but the study he relied on evaluated Powder River Basin coal, not bituminous coal, and Mr. Sullivan did not know what type of rail car was studied.	Tr. 664:16-665:4 (Sullivan [City expert])
4		
5		
6	PFF 321. Powder River Basin coal is “much dustier” than the bituminous coal that is going to be handled at the Terminal.	Tr. 179:20-180:5, 251:16-252:3 (Evans [ESA]); Tr. 374:2-19 (Chinkin [OBOT expert])
7		
8		
9	PFF 322. Once unloaded from the rail car, coal would be transferred via covered conveyor into an enclosed dome or shed, depending on the final design.	Tr. 276:2-5, 285:17-23 (McClure)
10		
11	PFF 323. Coal would be transferred from the storage facility to the hull of a ship via another covered conveyance system known as a “ship loader.”	Tr. 276:6-10 (McClure)
12		
13	PFF 324. Under the current plans, rail cars arriving at the Oakland Army Base site would be transported the final distance to the Terminal by OGRE using “Tier 4” locomotives, which are the cleanest available on the market today.	Tr. 277:8-17 (McClure)
14		
15		
16	PFF 325. A draft of the ESA Report stated that BAAQMD had informed ESA that the application of BACT would result in a 90-99% reduction in emissions from the Terminal.	TX1084.0015 (June 17, 2016 ESA email with draft ESA report); Tr. 367:22-368:12 (Chinkin [OBOT expert])
17		
18		
19		
20	PFF 326. This statement did not appear in the final ESA Report.	Tr. 368:13-25 (Chinkin [OBOT expert]); TX0596.0001 (ESA Report)
21		
22		
23	PFF 327. The application of BACT controls would, in fact, have resulted in a reduction in emissions in the range of 90-99 percent.	Tr. 369:1-4 (Chinkin [OBOT expert])
24	6. ESA’s reliance on the 2015 Jaffe study was flawed.	
25	PFF 328. The ESA Report referred to and discussed a study published in 2015 by Daniel Jaffe et al., titled “Diesel particulate matter and coal dust from trains in the Columbia River Gorge.”	TX0596.0036 n.67 (ESA Report); TX0970.0001 (2015 Jaffe Study); Tr. 229:3-7 (Evans
26		
27		
28		

	[ESA]	
1 2 3 4	PFF 329. The 2015 Jaffe study was commented on in 2017 study prepared by ICF titled “Millennium Bulk Terminals—Longview SEPA Environmental Impact Statement,” on which Mr. Chinkin relied.	TX0478.0001 (2017 ICF Study); Tr. 380:12-381:4 (Chinkin [OBOT expert])
5 6 7 8	PFF 330. The Jaffe study evaluated trains carrying Powder River Basin coal.	TX0970.0005 (2015 Jaffe Study) Tr. 251:16-19 (Evans [ESA]); Tr. 374:2-19 (Chinkin [OBOT expert])
9 10 11	PFF 331. Powder River Basin coal is “really dusty” and “creates a lot of dust.”	Tr. 179:8-15 (Evans [ESA]); Tr. 374:2-19 (Chinkin [OBOT expert])
12 13 14	PFF 332. Powder River Basin coal is “much dustier” than the bituminous coal that is going to be handled at the Terminal.	Tr. 179:20-180:5, 251:16-252:3 (Evans [ESA]); Tr. 374:2-19 (Chinkin [OBOT expert])
15 16	PFF 333. Ms. Evans did not know how close the air monitors that took measurements in the Jaffe study were to the rail cars carrying coal.	Tr. 232:19-233:15 (Evans [ESA])
17 18 19	PFF 334. In fact, the Jaffe study states that the instruments were 10 meters above and 20 meters away from the rail line.	TX0970.0002 (2015 Jaffe Study); TX0478.0027 (2017 ICF Study)
20 21 22 23	PFF 335. The measurements from the Jaffe study that Ms. Evans referred to in court appear to have been for a two-minute period.	Tr. 229:20-230:3 (Evans [ESA]); TX0970.0004, Table 2 & Figure 1 (2015 Jaffe Study); TX0478.0027 (2017 ICF Study)
24 25 26 27 28	PFF 336. The highest values of PM2.5 emissions were attributable to high speed trains and winds in excess of 90km/h.	Tr. 374:20-375:6 (Chinkin [OBOT expert]); TX0970.0006-07 (2015 Jaffe study); TX478.0027 (2017 ICF

	Study).
PFF 337. In his PM2.5 estimates, Jaffe did not separate out from his PM2.5 emissions from locomotive engines as compared to PM2.5 coal dust coming off of train cars.	Tr. 375:11-20 (Chinkin [OBOT expert])
7. The City directed the preparation, and revised drafts, of the ESA Report, and has refused to produce communications on the subject claiming they were protected by attorney-client and work-product privileges.	
PFF 338. There were weekly meetings between the City and ESA during May and June, 2016.	Tr. 100:12-101:9 (Brown [ESA]); TX0046.0001 (ESA / City Weekly Invite)
PFF 339. The City and its counsel edited at least two drafts of the ESA Report prior to its release to the City Council and public.	Tr. 155:25-156:1 (Evans [ESA]); Tr. 101:11-17 (Brown [ESA])
PFF 340. Because of the City's assertion of attorney client privilege and work product, no evidence has been offered about the communications between the City and ESA after the June 6, 2016 spreadsheet (TX0432) and the June 21, 2016 spreadsheet (TX0433) discussed above.	D.E. 204

Correcting for City Errors, Even Assuming Uncovered / Uncontrolled Operations Estimated Emissions Will Not Exceed BAAQMD / CEQA Thresholds

OBOT Proposed Finding of Fact ("PFF")	Supporting Evidence
PFF 341. OBOT expert Mr. Chinkin prepared a corrected estimate of the PM2.5 emissions that ESA projected for anticipated operations at the Terminal. Mr. Chinkin's corrected estimate accounted for certain (but not all) of the errors discussed above.	Tr. 375:21-376:21 (Chinkin [OBOT expert])
PFF 342. Like ESA's PM2.5 emissions estimates, Mr. Chinkin's corrected estimate accounted for anticipated emissions from "rail transport," "staging," and "OBOT operations" associated with the Terminal.	Tr. 376:6-21 (Chinkin [OBOT expert]); TX0596.0087 (ESA Report)
PFF 343. For "rail transport," like ESA, Mr. Chinkin assumed that rail cars carrying coal would be uncovered and "unsurfacted."	Tr. 350:5-9 (Chinkin [OBOT expert])
PFF 344. However, for both West Oakland and the entire BAAQMD district, Mr. Chinkin's corrected "rail transport" PM2.5 estimated emissions took into account actual wind speeds and the projected speeds of trains carrying coal through these areas.	Tr. 348:13-349:14 (Chinkin [OBOT expert])
PFF 345. For the portion of the rail transport emissions in ESA Table 5-7 that should be labeled "West Oakland" but is labeled	Tr. 350:5-10 (Chinkin [OBOT expert])

1	“Oakland,” Mr. Chinkin used available wind records for Oakland and average train speeds from Union Pacific Railroad.	
2	PFF 346. Mr. Chinkin relied on the studies that are Exhibits 479 and	Tr. 348:13-349:4
3	968 to derive the formulas he used. These studies, and the formulas	(Chinkin [OBOT
4	Mr. Chinkin used, were cited in Mr. Chinkin’s expert reports in this	expert]);
5	litigation.	TX0479.0001
6		(Queensland Rail Study);
7		TX0968.0001 (Journal of
8	PFF 347. Taking into account this correction, Mr. Chinkin’s	Tr. 376:15-18 (Chinkin
9	estimate for PM2.5 emissions from rail transport, made available	[OBOT expert];
10	during discovery in this suit, was 0.1 tons per year for West	TX0596.0087 (ESA
11	Oakland. This compares to ESA’s estimate of 6 tons per year for	Report)
12	West Oakland.	
13	PFF 348. For “staging,” Mr. Chinkin accepted ESA’s assumptions	Tr. 376:6-11 (Chinkin
14	and emissions estimate (including ESA’s assumption that rail cars	[OBOT expert])
15	would be uncovered), except that Mr. Chinkin used the Threshold	
16	Friction Velocity for uncrusted coal pile as opposed to the Threshold	
17	Friction Velocity for fine coal dust on a concrete pad.	
18	PFF 349. Taking into account this singular adjustment, Mr.	Tr. 376:6-11 (Chinkin
19	Chinkin’s corrected estimate for PM2.5 emissions from staging,	[OBOT expert];
20	made available during discovery in this suit, was 0.69 tons per year.	TX0596.0087 (ESA
21	This compares to an estimate of 11.7 tons per year by ESA.	Report)
22	PFF 350. For “OBOT operations,” Mr. Chinkin accepted ESA’s	Tr. 376:12-14 (Chinkin
23	assumptions and estimate except that he applied a 90% reduction to	[OBOT expert])
24	account for emissions being “controlled” as opposed to	
25	“uncontrolled.”	
26	PFF 351. The 90% reduction figure that Mr. Chinkin applied comes	TX0432.0005 (June 6,
27	directly from ESA’s June 6, 2016 spreadsheet, at 432.0005, which	2016 ESA Emissions
28	shows that “controlled” emissions from OBOT operations were	Calculations);
	reduced by approximately 90% as compared to “uncontrolled”	Tr. 369:17-370:24
	emissions from OBOT operations.	(Chinkin [OBOT
		expert]);
		Tr. 135:21-136:12
		(Evans [ESA])
	PFF 352. Taking into account this singular adjustment, Mr.	Tr. 376:12-14 (Chinkin
	Chinkin’s corrected estimate for PM2.5 emissions from OBOT	[OBOT expert]);
	operations, made available during discovery in this suit, was 0.27	TX0596.0087 (ESA
	tons per year. This compares to an estimate of 2.7 tons per year by	Report)
	ESA.	

<p>PFF 353. Mr. Chinkin’s corrected estimate for PM2.5 emissions from “rail transport,” “staging,” and “OBOT operations” associated with the Terminal, which accepts ESA’s estimates and assumptions except as discussed above, adds up to approximately 1.06 tons per year of PM2.5. This compares to an estimate of approximately 21 tons per year by ESA.</p>	<p>Tr. 375:21-376:21 (Chinkin [OBOT expert]); TX0596.0087 (ESA Report)</p>
<p>PFF 354. Mr. Chinkin’s corrected estimate of 1.06 tons per year for PM2.5 emissions from “rail transport,” “staging,” and “OBOT operations” associated with the Terminal falls well below the BAAQMD threshold of 10 tons of PM2.5 per year, which was used in the 2012 Initial Study/Addendum and was cited by the City in the June 23, 2016 Agenda Report.</p>	<p>Tr. 375:21-376:21 (Chinkin [OBOT expert]); TX0972.0147 (2012 EIR Addendum); TX0976.0012, n. 9 (June 23, 2016 Agenda Report)</p>
<p>PFF 355. There was neither cross examination about Mr. Chinkin’s corrected PM2.5 emissions estimate, nor expert testimony criticizing or otherwise addressing Mr. Chinkin’s corrections to ESA’s estimates.</p>	

The City Made No Credible Assessment of Any Other Potential Risks Associated with the Terminal

OBOT Proposed Finding of Fact (“PFF”)	Supporting Evidence
<p>1. The City made no credible assessment of potential health risks associated with the Terminal.</p>	
<p>PFF 356. The ESA Report concluded only that there “could,” meaning “could possibly,” be health effects associated with exposure to PM10 or PM2.5 caused by coal or petcoke.</p>	<p>Tr. 107:1-22 (Evans [ESA]); TX0014.0011 (ESA Report)</p>
<p>PFF 357. Dr. Chafe testified that her report did not contain a risk assessment for any of the potential health or safety risks that she identified in her report associated with the proposed coal Terminal.</p>	<p>Tr. 624:11-14 (Chafe)</p>
<p>PFF 358. A risk assessment requires consideration of the potential level of exposure a person may face to a particular substance.</p>	<p>Tr. 389:10-18 (Maier [OBOT expert])</p>
<p>PFF 359. The Ordinance, ESA Report, and Chafe report discussed metals contained in coal such as mercury, arsenic and lead. However, there was no evidence before the City that adjacent neighbors of the Terminal would be exposed to these metals through inhalation of coal dust because they are not “bioavailable” – <i>i.e.</i> do not enter the bloodstream – even via the inhalation of coal dust.</p>	<p>TX0004.0005 (Ordinance); TX0596.0054-55 (ESA Report); Tr. 117:12-21 (Evans [ESA]); Tr. 392:12-393:4 (Maier)</p>

1		[OBOT expert])
2	PFF 360. There was no quantification or modeling estimates presented to the City regarding the volume of greenhouse gases or impact on climate change that could potentially be caused by shipment of coal through the Terminal.	Tr. 372:17-373:1 (Chinkin [OBOT expert])
3		
4	PFF 361. Burning of 5 millions tons of coal per year in Asia – which is the volume ESA assumed would be exported from the Terminal – would have a negligibly small amount of impact in Oakland.	Tr. 373:2-11 (Chinkin [OBOT expert])
5		
6		
7	PFF 362. The City requested that ESA address greenhouse gasses and impact on climate change in its report, but an ESA employee commented:	TX0024.0011 (ESA comment on Draft Report);
8	If there is no effect directly or indirectly, why do we study it . . .	Tr. 116:3-117:7 (Evans [ESA])
9	Are we supposed to come up with a proportional analysis of the contribution of this project to global GHG emissions, and then attribute back to it some infinitesimal portion of sea level rise? I don't see how this comes back to human health and safety in any meaningful way.	
10		
11		
12		
13	PFF 363. No evidence was presented that exposure to PM10 is substantially dangerous.	Tr. 602:3-6 (Moore [City expert])
14		
15	PFF 364. The ESA Report discussed past efforts in Oakland to reduce air pollution, but this does not inform the question of whether the transport of coal through an OBOT Terminal poses a risk of adverse health effects.	TX0596.0063-64 (ESA Report)
16		Tr. 604:15-21 (Moore [City expert])
17		
18	PFF 365. The ESA Report and June 23, 2016 Agenda Report incorrectly stated that the Bay Area was in “nonattainment” with EPA’s NAAQS at the time the Ordinance was passed. In fact, air quality in BAAQMD was in attainment with NAAQS standards as of that time.	TX0976.0005 (June 23, 2016 Agenda Report);
19		TX0596.0011 (ESA Report);
20		Tr. 329:2-330:22 (Chinkin [OBOT expert])
21		
22		
23	PFF 366. Neither Dr. Chafe nor ESA compared risks associated with a coal terminal compared to a terminal shipping other bulk goods.	Tr. 624:19-23, 632:14-23 (Chafe);
24		Tr. 206:4-25 (Evans [ESA])
25		
26	PFF 367. According to ESA, considering commodities other than coal or petcoke was outside the “scope” of its review.	Tr. 115:5-12 (Evans [ESA])
27		
28		

1	PFF 368. There was no evidence presented to the City that permitted a comparison of the potential health and safety risks associated with shipping coal or petcoke through the Terminal as compared to any other activity or sources of PM2.5 in Oakland, including the Bay Bridge Toll Plaza, the Port of Oakland, or any other sources emitting PM2.5.	Tr. 207:1-208:14, 240:2-242:16 (Evans [ESA])
2		
3		
4		
5	PFF 369. ESA did not compare the volume of PM2.5 emissions that may be caused by a coal terminal to the emissions that are emitted as a result of any other activities in Oakland, even though this could have “easily” been done.	Tr. 207:1-208:14, 240:2-242:16 (Evans [ESA])
6		
7	PFF 370. Coal is currently handled at terminals in Benicia, Long Beach, Pittsburg, Richmond, and Stockton, California. Nothing in the ESA Report addresses air quality at any of these terminals.	Tr. 108:1-12 (Evans [ESA])
8		
9	PFF 371. The City made no effort to find out about the possible health effects at other coal and coke terminals.	Tr. 478:24-479:5 (Cappio)
10		
11	2. The City made no credible assessment of safety risks associated with coal fires or combustion occurring at the Terminal.	
12		
13	PFF 372. The reports before the City did not quantify the risk of fire associated with the proposed facility.	Tr. 647:14-18 (Pello [City expert]); Tr. 629:19-24 (Chafe)
14		
15	PFF 373. Although there was a reference on Page 5-5 of the ESA Report to “spontaneous combustion” with respect to covered rail cars, Ms. Evans testified only that there “ <i>could</i> be the <i>potential</i> for spontaneous combustion.” (emphasis added).	Tr. 188:22-189:10 (Evans [ESA])
16		
17	PFF 374. The OFD never raised concerns about the potential storage, handling or shipment of coal at the Terminal, despite being involved in discussions regarding those activities in March 2016, and OBOT would be required to obtain a building permit following submission of a fire safety plan before it would be permitted to operate.	Tr. 278:16-279:23 (McClure); Tr. 470:21-471:3 (Cappio)
18		
19		
20		
21	PFF 375. ESA retained a sub-consultant on fire safety, Steve Radis, because he was more knowledgeable on that topic than the members of the ESA team.	Tr. 96:21-97:1 (Brown [ESA])
22		
23	PFF 376. Prior to ESA’s submission of the ESA Report to the City Council, in an email Mr. Radis wrote, among other things: “Major fires at coal terminals are not common or widespread, but have happened in the past.”	TX0048.0001 (June 15, 2016 internal ESA email); Tr. 127:20-128:17 (Evans [ESA])
24		
25		
26	PFF 377. ESA copied the entirety of Mr. Radis’s email directly into the ESA Report <i>except</i> they removed the statement: “Major fires at coal terminals are not common or widespread.”	Tr. 128:2-20 (Evans [ESA]) TX0048.0001 (June 15,
27		
28		

1		2016 internal ESA email);
2		TX0596.0093-95 (ESA Report)
3		
4	PFF 378. There are no documented incidents of bituminous coal dust explosions or spontaneous combustion of bituminous coal at any coal facilities.	Tr. 419:17-25 (Rangwala [OBOT expert]);
5		Tr. 648:13-15, 650:18-651:2 (Pello [City expert])
6		
7	PFF 379. On June 20, 2016, the City (through ESA) asked Mr. Radis whether there were “documented fire hazards / combustion hazards for enclosed rail cars?” Mr. Radis responded:	TX0058.0001 (June 21, 2016 internal ESA email);
8		Tr. 126:16-127:16 (Evans [ESA])
9	I have not seen any documentation that would indicate that fire and combustion hazards would be any higher in a covered versus an open rail car. I think some people are speculating that there could be an increased hazard, but there isn’t any data to support that finding.	
10		
11		
12	PFF 380. Mr. Radis’s response to the City’s question was not included in the ESA Report.	Tr. 127:5-19 (Evans [ESA])
13		
14	PFF 381. The June 23, 2016 Agenda Report discussed “spontaneous combustion” and “dust explosions” of coal, but did not contain either of the statements above from Mr. Radis that were in his June 15 or June 20, 2016 emails to ESA.	TX0976.0014 (June 23, 2016 Agenda Report)
15		
16	PFF 382. There is no increased risk of fire or combustion through the use of covered rail cars.	Tr. 424:14-425:16 (Rangwala [OBOT expert]);
17		Tr. 276:17-20 (McClure);
18		TX0058.0001 (June 21, 2016 internal ESA email)
19		
20		
21	PFF 383. Having reviewed the record, the City’s fire safety expert is not aware of any documented incidents of explosions involving bituminous coal in rail cars.	Tr. 648:10-12 (Pello [City expert])
22		
23	PFF 384. The fire and explosion risks associated with bituminous coal are low.	Tr. 414:2-20, 415:2-7 (Rangwala [OBOT expert])
24		
25	PFF 385. Coal is a low hazard class commodity.	Tr. 415:15-416:9 (Rangwala [OBOT expert]);
26		TX0900.0070 (National Fire Protection
27		
28		

	Association Standard)
1	
2	PFF 386. The BoD includes protections against fire or explosion risk by incorporating various safety codes such as those set by the National Fire Protection Association (“NFPA”) and the Mining Safety and Hazard Administration (“MSHA”).
3	Tr. 419:5-16 (Rangwala [OBOT expert]); TX1261.0001 (BoD NFPA Section)
4	
5	PFF 387. The BoD disclosed that coal has a rating of 1, 1, and 0 for “health,” “fire,” and “reactivity,” respectively, as rated in the NFPA’s scale of 0 (being the safest) to 4 (being the most dangerous).
6	TX1261.0004 (BoD NFPA Discussion); Tr. 280:12-24 (McClure); Tr. 468:20-469:471:1 (Cappio)
7	
8	
9	PFF 388. Coal has the same rating on the NFPA’s “health,” “fire,” and “reactivity” scale as ground corn.
10	TX1261.0004 (BoD NFPA Discussion); Tr. 280:25-281:5 (McClure)
11	
12	PFF 389. The City’s September 10, 2015 Agenda Report stated: The TLS Letter indicates the coal TLS is considering handling through the Break Bulk Terminal is bituminous coal. It is a commodity that has a NFPA rating of one (1) for health risks and a rating of one (1) for fire risks as there are no reactivity or low fire risks associated with that commodity.
13	TX0213.0005 (Sept. 10, 2015 Agenda Report)
14	
15	PFF 390. In August or September 2015, OFD Fire Marshall Miguel Trujillo stated to the City that the NFPA rating assigned to coal was 1, which is a “low rating” meaning “low risk.”
16	Tr. 468:20-469:4 (Cappio)
17	
18	PFF 391. The OFD Fire Marshall stated that the OFD uses the NFPA rating to evaluate materials that may be stored, managed or handled in Oakland, and that the NFPA is used to evaluate materials that could be stored in Oakland in connection with responding to emergencies.
19	Tr. 469:5-21 (Cappio)
20	
21	PFF 392. The City’s railroad expert took training courses in connection with his work for the Short Line Railroad Association, and neither coal nor petcoke were addressed as hazardous materials.
22	Tr. 668:12-19 (Sullivan [City expert])
23	
24	PFF 393. Bituminous coal is high ranking and less prone to self heating than lower rank coals.
25	Tr. 639:3-11 (Pello [City expert])
26	
27	PFF 394. Bituminous coal requires very high temperature for spontaneous combustion, and there are no documented cases of spontaneous combustion of bituminous coal.
28	Tr. 421:12-17, 424:8-11 (Rangwala [OBOT expert])
	PFF 395. Bituminous coal will not spontaneously combust where properly compacted.
	Tr. 422:25-423:14, 423:25-424:7 (Rangwala [OBOT expert]);

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

	TX0930.0002 (NFPA Handbook Ch. 1)
PFF 396. Bituminous coal is not prone to self-heating, and even if not compacted properly, is expected to reach a self-heating temperature that may cause combustion only after being stored for 300 days.	Tr. 432:2-17 (Rangwala [OBOT expert])
PFF 397. In total, it is anticipated that coal will be stored at the West Gateway site for approximately three to six days.	Tr. 276:11-14 (McClure)
PFF 398. The City’s litigation fire safety expert testified that he believed the “chances of a fire or explosion happening at the proposed” Terminal were “high,” but then conceded that did not “quantify the actual risk of fire at the anticipated OBOT” Terminal, and that he did not have the expertise to do so.	Tr. 645:22-24, 647:19-21, 651:3-18 (Pello [City expert])

Dated: February 9, 2018

Respectfully submitted,

/s/ Robert Feldman
Robert P. Feldman

Attorneys for Plaintiff
OAKLAND BULK & OVERSIZED TERMINAL, LLC